

France

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

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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: 2

France has in place a national plan for the surveillance, detection, and reporting of priority antimicrobial resistant (AMR) pathogens. France developed a national Interministerial Roadmap for Controlling AMR in 2016, which covers everything including raising awareness among the public, educating healthcare professionals for the correct use of antimicrobials, research on AMR, and monitoring of AMR. [1] In addition, France has set up and is implementing a national collaboration for the surveillance, detection, and reporting of AMR pathogens. The French branch of the European Antimicrobial Resistance Surveillance Network (EARS-Net), EARS-Net France, coordinates the three main bodies responsible for human AMR surveillance, detection, monitoring, and data collection: Public Health France (Santé publique France), the Pneumococcus National Reference Centre (Centre national de référence des pneumocoques or "CNRP"), and the National Observatory of Antibiotic Resistance (Observatoire National de la Résistance aux Antibiotiques or "Onerba"). [2] And the French Agency for Food, Environmental and Occupational Health and Safety (ANSES) is responsible for coordinating two networks that detect, monitor, and characterise AMR in bacteria of non-human origin: RESAPATH, and the Salmonella Network. [3] The national surveillance plan involves monitoring AMR pathogens isolated from patients, hospitals, or laboratories, and sending the data resulting from this surveillance every year to the European Centres for Disease Control and Prevention (ECDC). The surveillance network monitors the proportion of resistant strains of bacteria among all strains identified, and for some antibiotics, also keeps track of the proportion of strains with reduced sensitivity to the antibiotics. [2]

[1] Interministerial Committee on Health. 17 November 2016. "Interministerial Roadmap for Controlling Antimicrobial Resistance". [https://solidarites-sante.gouv.fr/IMG/pdf/interministerial_amr_roadmap_en.docx.pdf]. Accessed 25 November 2020

[2] Institut de Veille Sanitaire. 15 November 2017. "EARS-Net France". [<http://invs.santepubliquefrance.fr/Dossiers-thematiques/Maladies-infectieuses/Resistance-aux-anti-infectieux/Contexte-enjeux-et-dispositif-de-surveillance/Reseaux-et-partenaires/EARS-Net-France>]. Accessed 25 November 2020

[3] French Agency for Food, Environmental and Occupational Health and Safety (ANSES). 27 October 2017. "Antimicrobial Resistance". [<https://www.anses.fr/en/content/antimicrobial-resistance>]. Accessed 25 November 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

France has in place a national laboratory system, the National Reference Centres (Centres Nationaux de Référence or "CNR"), which tests for antimicrobial resistance (AMR) for all 7+1 priority pathogens as defined by the World Health Organisation (WHO).

The National Observatory for Antimicrobial Resistance (Observatoire National de la Résistance aux Antibiotiques or "Onerba") comprises three networks of laboratories, that performs testing for AMR in *Streptococcus pneumoniae* and *Staphylococcus aureus* since 1999, in *Escherichia coli* since 2001, and in *Klebsiella pneumoniae* since 2005. [1, 2]

The National Reference Centre for mycobacteria and mycobacteria resistance (Centre National de Référence des Mycobactéries et de la Résistance des Mycobactéries aux Antituberculeux) tests for primary and secondary AMR in *Mycobacterium tuberculosis*. [3]

The National Reference Centre for *Escherichia coli*, *Shigella*, and *Salmonella* and the "Salmonella Network" tests for AMR in *Salmonella* species. [4, 5] The National Reference Centre for Sexually Transmitted Infections (STIs) and its associated laboratory tests for AMR in *N. gonorrhoeae*. [6]

France has even made public a full list of National Reference Centres. [7]

[1] Institut de Veille Sanitaire. 15 November 2017. "EARS-Net France". [<http://invs.santepubliquefrance.fr/Dossiers-thematiques/Maladies-infectieuses/Resistance-aux-anti-infectieux/Contexte-enjeux-et-dispositif-de-surveillance/Reseaux-et-partenaires/EARS-Net-France>]. Accessed 25 November 2020

[2] ONERBA. "Missions". [<http://onerba.org/onerba1/missions/>]. Accessed 25 November 2020

[3] National Reference Centre for mycobacteria and mycobacteria resistance (Centre National de Référence des Mycobactéries et de la Résistance des Mycobactéries aux Antituberculeux). "The missions of the CNR (Les missions du CNR)". [<http://cnrmctb.free.fr/spip.php?rubrique5>]. Accessed 25 November 2020

[4] National Agency for Food Health Safety, the Environment, and Employment (Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail). "The Salmonella Network (Le réseau Salmonella)". [<https://www.anses.fr/fr/content/le-r%C3%A9seau-salmonella>]. Accessed 25 November 2020

[5] Institut Pasteur. "Escherichia coli, Shigella, Salmonella". [<https://www.pasteur.fr/fr/sante-publique/CNR/les-cnr/escherichia-coli-shigella-salmonella>]. Accessed 25 November 2020

[6] Institut Alfred Fournier. 6 September 2018. "Laboratory associated with the NRC STI (Laboratoire associé au CNR IST)". [<http://www.institutfournier.org/articlesprevention/66-preventionarticle7/57-cnr-gonocoques>]. Accessed 25 November 2020

[7] Institut de Veille Sanitaire. 23 April 2018. "National Reference Centres." [<http://invs.santepubliquefrance.fr/Espace-professionnels/Centres-nationaux-de-reference/Liens-vers-les-sites-des-CNR>]. Accessed 25 November 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: 1

The French government conducts environmental surveillance activities to detect antimicrobial resistant (AMR) organisms or residues in soil since at least 2012. [1]

The French Ministry of Agriculture and Food is responsible for coordinating these surveillance and sampling activities. Given the mounting threat of AMR and the World Health Organisation's (WHO) introduction of a "One Health" policy linking

human, animal, and environmental health, it strengthened in 2016 its environmental AMR surveillance networks, and created a pan-ministerial programme, the Inter-ministerial Committee for Health (Comité Interministériel pour la Santé or "CIS") to reinforce surveillance and aid in the development of new indicators for AMR across all health sectors. [3]

The Ministry of Agriculture oversees the environmental aspect of monitoring for AMR includes surveillance of the environment for traces of AMR or other dangerous organisms in its plan for biological monitoring of soil and land, and specifically states that the reason for this surveillance is to better the response to, and track the spread of, AMR organisms. [1]

[1] Ministry of Agriculture and Food (Ministère de l'Agriculture et de l'Alimentation). 18 April 2017. "Annual report on the biological surveillance of the land (Rapport annuel de Surveillance biologique du territoire)".

[<http://agriculture.gouv.fr/rapport-annuel-de-surveillance-biologique-du-territoire>]. Accessed 25 November 2020

[2] Ministry of Agriculture and Food (Ministère de l'Agriculture et de l'Alimentation). 17 November 2016. "Containing antimicrobial resistance: launching an interministerial programme (Maîtrise de l'antibiorésistance : lancement d'un programme interministériel)". [<http://agriculture.gouv.fr/maitrise-de-lantibioresistance-lancement-dun-programme-interministeriel>]. Accessed 25 November 2020

[3] Ministry of Solidarities and Health. 2018. "Fight and prevention in France (Lutte et prévention en France)". [<https://solidarites-sante.gouv.fr/prevention-en-sante/les-antibiotiques-des-medicaments-essentiels-a-preserver/des-politiques-publiques-pour-preserver-l-efficacite-des-antibiotiques/article/lutte-et-prevention-en-france>]. Accessed 25 November 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

France has in place legislation establishing that a prescription is required for all antibiotic use in humans, in its Code of Public Health (Code de la Santé Publique).

The legislation further states that pharmacists may only deliver antibiotics upon presentation of a prescription less than 3 months old, as antibiotics feature on the list of medications that require a medical prescription (médicaments à prescription médicale obligatoire), though the full list of medications requiring prescription is not available. There is no evidence of any gaps in implementation. [1, 2]

[1] Sorbonne University - Medicine (Université Sorbonne Médecine). "Chapter 3 - Prescriptions and the rules of medication prescriptions (Chapitre 3 - L'ordonnance et les règles de prescription des médicaments)".

[<http://www.chups.jussieu.fr/polys/pharmaco/poly/ordonnance.html>] Accessed 25 November 2020

[2] BFMTV. 27 October 2018. "Pharmacists will not be able to prescribe medication (Les pharmaciens ne pourront pas prescrire des médicaments)". [<https://www.bfmtv.com/economie/en-2019-les-pharmaciens-pourront-prescrire-certains-medicaments-1553402.html>]. Accessed 25 November 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

France has in place legislation stipulating that a prescription is required for all antibiotics use in animals.

This legislation, the Decree of 16 March 2016 relative to the prescription and delivery of medication used in veterinary medicine containing one or more antibiotic substances, states that medication containing one or more antibiotic substances must legally be prescribed by a doctor in veterinary medicine; it also sets out guidelines for testing animal pathogens to determine bacterial sensitivity before prescribing antibiotics, and lists antibiotics of "critical importance" which must be prescribed sparingly to minimise the risk of antimicrobial resistance (AMR) emerging. There is no evidence of any gaps in enforcement.[1, 2, 3]

[1] Ministry of Solidarity and Health (Ministère des Solidarités et de la Santé). 14 June 2018. "Reference texts (Textes de référence)". [<https://solidarites-sante.gouv.fr/prevention-en-sante/les-antibiotiques-des-medicaments-essentiels-a-preserver/professionnels-de-sante/article/textes-de-reference>]. Accessed 25 November 2020

[2] Ministry of Social Affairs, Health, and Women's Rights (Ministère des Affaires Sociales, de la Santé et des Droits des Femmes). 10 September 2015. "Decree of 22 July 2015 concerning the best practice use of medication containing one or more antibiotic substances in veterinary medicine (Arrêté du 22 juillet 2015 relatif aux bonnes pratiques d'emploi des médicaments contenant une ou plusieurs substances antibiotiques en médecine vétérinaire)". [https://solidarites-sante.gouv.fr/IMG/pdf/arrete_22072015.pdf]. Accessed 25 November 2020

[3] Ministry of Agriculture, Food, and Forestry (Ministère de l'Agriculture, de l'Agroalimentaire et de la Forêt). 18 March 2016. "Decree n° 2016-317 of 16 March 2016 concerning the prescription et delivery of medication used in veterinary practice containing one or more antibiotics of critical importance (Décret no 2016-317 du 16 mars 2016 relatif à la prescription et à la délivrance des médicaments utilisés en médecine vétérinaire contenant une ou plusieurs substances antibiotiques d'importance critique)". [https://solidarites-sante.gouv.fr/IMG/pdf/decret_160316.pdf]. Accessed 25 November 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

Although France does not have in place a generic, all-encompassing national plan on zoonoses, the country has in place national plans for individual zoonoses.

The Ordinance n°2011-862 established in July 2011 establishes the measures taken on a national level for surveillance, prevention, and control of animal and plant diseases to minimise the potential risk to humans. [1] Zoonoses surveillance and response are inscribed in the missions and the action themes of Public Health France (Santé Public France), previously the Health Surveillance Institute (Institut de Veille Sanitaire or "InVS"), as of 1999. Public Health France is in charge of the national surveillance for zoonoses since 1999, of defining priorities based on the results of this surveillance, of revising the national zoonoses plan based on these data, and of coordinating a response to any zoonotic events. [2, 3] Public Health France also makes available information on specific zoonoses included on its website. [4] France has in place a French

National Bovine Tuberculosis Action Plan 2017-2022 which specifically mentions the threat to humans. [5]

[1] Ministry of Agriculture (Ministère de l'Agriculture). 22 July 2011. "Ordnance n° 2011-862 of the 22 of July 2011 concerning the organisation of epidemiological surveillance, prevention, and control of animal and plant diseases, and the conditions for attribution of certain tasks linked to health and plant health control (Ordonnance n° 2011-862 du 22 juillet 2011 relative à l'organisation de l'épidémiosurveillance, de la prévention et de la lutte contre les maladies animales et végétales et aux conditions de délégation de certaines tâches liées aux contrôles sanitaires et phytosanitaires)".

[<https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=LEGITEXT000024390360>]. Accessed 25 November 2020

[2] Health Surveillance Institute (Institut de Veille Sanitaire). 29 December 1999. "The Health Surveillance Institute (Institut de Veille Sanitaire)".

[<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=5&cad=rja&uact=8&ved=2ahUKEwjx84WDxY3eAhXJ3KQKHQC7D9wQFjAEegQIABAC&url=https%3A%2F%2Fwww.hcsp.fr%2FExplore.cgi%2FTelecharger%3FNomFichier%3Dad298081.pdf&usg=AOvVaw0MM6X3raZRbYmxLck-nQwa>]. Accessed 25 November 2020

[3] Health Surveillance Institute (Institut de Veille Sanitaire). 4 July 2006. "Zoonoses in France (Les zoonoses en France)".

[http://opac.invs.sante.fr/doc_num.php?explnum_id=4718]. Accessed 25 November 2020

[4] Health Surveillance Institute (Institut de Veille Sanitaire). 29 October 2014. "Zoonoses".

[<http://invs.santepubliquefrance.fr/fr/Dossiers-thematiques/Maladies-infectieuses/Zoonoses>]. Accessed 25 November 2020

[5] Ministry of Agriculture and Food (Ministère de l'Agriculture et de l'Alimentation). "French National Bovine Tuberculosis Action Plan 2017-2022". [file:///C:/Temp/1804_plantuberculose_bro_ang3.pdf]. Accessed 25 November 2020

1.2.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that France has in place a plan which includes measures for risk identification and reduction for zoonotic spillover events from animals to humans.

However, the department for Health and Safety in the Workplace has a sub-department, Health and Safety in Agriculture, which produced a "Health and Safety Plan 2016-2020 for the Agricultural World" ("Plan santé sécurité 2016-2020 du monde agricole"). This plan, while not publicly available, covers risk evaluation to minimize the potential risk of zoonoses to humans, how to develop a culture of prevention in the workplace, how to improve risk recognition, anticipation, and prevention, and how to define priorities given the nature of the risks, the anticipated consequences and the size of the population at risk, given the risk zoonoses pose to human health. [1, 2] There is no additional evidence from the Ministry of Health or the Ministry of Agriculture. [3, 4]

[1] Health and Safety at the workplace in Agriculture. 2020. "The MSA" [<https://ssa.msa.fr/a-propos/>]. Accessed 26 November 2020

[2] Health and Safety at the workplace in Agriculture. 2020. "Biological risks and zoonoses" [<https://ssa.msa.fr/risque/risques-biologiques-et-zoonoses/>]. Accessed 26 November 2020

[3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)".

[<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[4] Ministry of Agriculture. 2020. "Research and innovation (Recherche et innovation)". [<http://agriculture.gouv.fr/recherche-et-innovation/recherche-et-innovation>]. Accessed 25 November 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 insufficient evidence that France has in place national plans, laws or guidelines for the surveillance and control of multiple zoonotic pathogens of public health concern.

While surveillance is well addressed, there is no evidence of control plans. Public Health France (Santé Publique France), previously the Health Surveillance Institute (Institut de Veille Sanitaire or "InVS"), is in charge since 1999, as per its missions statement, of drawing up and regularly updating, a national surveillance and control strategy for multiple zoonotic pathogens, but there is no evidence that this is formalised into an official plan.

The main zoonotic pathogens and diseases of public health concern are listed on the Public Health France's website, and priorities in terms of dealing with zoonotic pathogens are regularly updated depending on the results of the national surveillance activities. [1, 2] Diseases of ongoing surveillance interest include brucellosis, anthrax, plague, Q-Fever, Hantavirus, Hepatitis B and E, Leptospirosis, and rabies. [3] France also has in place a French National Bovine Tuberculosis Action Plan 2017-2022. [4] The Ordinance n°2011-862 established in July 2011 establishes the measures taken on a national level for surveillance, prevention, and control of animal and plant diseases. [5] There is no additional evidence from the Ministry of Health or the Ministry of Agriculture. [6, 7]

[1] Health Surveillance Institute (Institut de Veille Sanitaire). 29 December 1999. "The Health Surveillance Institute (Institut de Veille Sanitaire)".

[<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=5&cad=rja&uact=8&ved=2ahUKEwjx84WDxY3eAhXJ3KQKHQC7D9wQFjAEegQIABAC&url=https%3A%2F%2Fwww.hcsp.fr%2FExplore.cgi%2FTelecharger%3FNomFichier%3Dad298081.pdf&usg=AOvVaw0MM6X3raZRbYmxLck-nQwa>]. Accessed 25 November 2020

[2] Health Surveillance Institute (Institut de Veille Sanitaire). 4 July 2006. "Zoonoses in France (Les zoonoses en France)".

[http://opac.invs.sante.fr/doc_num.php?explnum_id=4718]. Accessed 25 November 2020

[3] Health Surveillance Institute (Institut de Veille Sanitaire). 29 October 2014. "Zoonoses".

[<http://invs.santepubliquefrance.fr/fr/Dossiers-thematiques/Maladies-infectieuses/Zoonoses>]. Accessed 25 November 2020

[4] Ministry of Agriculture and Food (Ministère de l'Agriculture et de l'Alimentation). "French National Bovine Tuberculosis Action Plan 2017-2022". [file:///C:/Temp/1804_plantuberculose_bro_ang3.pdf]. Accessed 25 November 2020

[5] Ministry of Agriculture (Ministère de l'Agriculture). 22 July 2011. "Ordnance n° 2011-862 of the 22 of July 2011 concerning the organisation of epidemiological surveillance, prevention, and control of animal and plant diseases, and the conditions for attribution of certain tasks linked to health and plant health control (Ordonnance n° 2011-862 du 22 juillet 2011 relative à l'organisation de l'épidémiosurveillance, de la prévention et de la lutte contre les maladies animales et végétales et aux conditions de délégation de certaines tâches liées aux contrôles sanitaires et phytosanitaires)".

[<https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=LEGITEXT000024390360>]. Accessed 25 November 2020

[6] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)".

[<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[7] Ministry of Agriculture. 2020. "Research and innovation (Recherche et innovation)". [<http://agriculture.gouv.fr/recherche-et-innovation/recherche-et-innovation>]. Accessed 25 November 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 specific department dedicated to zoonotic disease that functions across ministries. France's approach to zoonotic disease is made up of a collaboration between several different units that tie together different government bodies. The French Agency for Food, Environmental and Occupational Health and Safety, which is responsible for the human health side of zoonotic disease, have set up a tight collaboration with the National Office for Hunting and Wildlife (ONCFS), which specialises in the wildlife health side of zoonoses, and together they have at their disposal a network of laboratories, and thus support the French Ministry of Agriculture. [1] There is no evidence from the Ministries of Health or Agriculture, or from Public Health France (Santé Publique France), previously the Health Surveillance Institute (Institut de Veille Sanitaire or "InVS"), that any department or unit dedicated to zoonoses exists across ministries. [2, 3]

[1] French Agency for Food, Environmental and Occupational Health & Safety. 26 February 2018. "Wildlife surveillance: ANSES and the ONCFS consolidate their partnership". [<https://www.anses.fr/en/content/wildlife-surveillance-anses-and-oncfs-consolidate-their-partnership-0>]. Accessed 25 November 2020

[2] Ministry of Agriculture (Ministère de l'Agriculture). 2020. "Directions and services". [<http://agriculture.gouv.fr/directions-et-services>]. Accessed 25 November 2020

[3] Health Surveillance Institute (Institut de Veille Sanitaire or "InVS"). 25 November 2010. "Zoonoses: for an integrated approach to health at the human-animal interface (Zoonoses : pour une approche intégrée de la santé à l'interface Homme-Animal)". [[http://invs.santepubliquefrance.fr/pmb/invs/\(id\)/PMB_543](http://invs.santepubliquefrance.fr/pmb/invs/(id)/PMB_543)]. Accessed 25 November 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

France has in place a national mechanism for owners of livestock and other animal-related professionals to report on disease surveillance, for all types of livestock as well as poultry, bees, seafood, and wildlife. The data collected via this online platform, the ESA Platform (or Plateforme ESA - Epidémiosurveillance santé animale) are then sent to Public Health France (Santé Publique France), previously the Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"), and the French Agency for Food, Environmental and Occupational Health & Safety (ANSES), for analysis. The document specifically mentions "breeders" (owners of livestock) can notify for diseases in livestock. [1]

[1] ESA Platform (Plateforme ESA - Epidémiosurveillance santé animale). 2020. "Missions and organisation of the ESA Platform (Missions et organisation de la Plateforme ESA)". [<https://www.plateforme-esa.fr/plateforme-esa-missions-et-organisation>]. Accessed 25 November 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

France has in place regulations stipulating that only people with the necessary authorisations may access data gathered as part of animal disease surveillance.

The national platform for reporting of animal disease cases, the Animal Health Epidemiological Surveillance platform (Epidémiosurveillance Santé Animale or "ESA" platform), stipulates that only certain authorities and people within certain organisations have access to the data entered into this database. While there is no explicit information as to who these authorities and organisations are, it is evident that different authorities have access to the data at different stages within the collection process, to safeguard the confidentiality of the data. [1] The ESA platform's description of its data collection mechanism stipulates that a confidentiality clause prevents data from being shared outside the technical team and decision-makers, although certain sensitive documents can be submitted to an evaluation team in case of need, upon their signing a confidentiality agreement. Furthermore, any data sharing with a wider audience and any use of the data for scientific publication must be de-identified, in accordance with the confidentiality clause. [2]

[1] Animal Health Epidemiological Surveillance platform (Epidémiosurveillance Santé Animale). "The CSD-ESA". [https://www.platforme-esa.fr/node/35442]. Accessed 25 November 2020

[2] Animal Health Epidemiological Surveillance platform (Epidémiosurveillance Santé Animale). "Evaluation procedure of the OASIS tool's surveillance dispositions, within the framework of the ESA Platform's activities (Procédure d'évaluation des dispositifs de surveillance avec l'outil OASIS, dans le cadre des activités de la Plateforme ESA)". [https://www.platforme-esa.fr/sites/default/files/images/documents/oasis/procedure_oasis.pdf]. Accessed 25 November 2020

1.2.2c

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

Yes = 1 , No = 0

Current Year Score: 1

France regularly conducts surveillance of zoonotic diseases and pathogens present in wildlife under the guidance of the National Platform for Epidemiological Surveillance in Animal Health (ESA). The National Office for Hunting and Wildlife (ONCFS) is responsible for this platform involving the surveillance, monitoring, and management of zoonoses present in wildlife and has been so for over 40 years. As such, it oversees several bodies in charge of surveillance of specific wildlife groups, including the Epidemiological surveillance network for wild terrestrial mammals and birds in France (SAGIR), the surveillance network for abnormal bat mortality (SMAC), which monitors lyssaviruses, and the Sylvatub scheme for tuberculosis surveillance in wildlife. [1]

[1] French Agency for Food, Environmental and Occupational Health & Safety. 26 February 2018. "Wildlife surveillance: ANSES and the ONCFS consolidate their partnership". [https://www.anses.fr/en/content/wildlife-surveillance-anses-and-oncfs-consolidate-their-partnership-0]. Accessed 25 November 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: 82.32

2017

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 6.14

2017

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that a 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 in France. France has in place mechanisms for collaboration between the public and private sectors in responding to zoonoses, although these do not take the form of a formalised plan.

The existing mechanisms are not limited to zoonoses, but rather encompass all infectious diseases, and include surveillance, mechanisms of alert, laboratory testing, and management of public health crises, as well as zoonoses. This collaboration has been in place since at least 2008, and while it does not take the form of a formalised set of rules and regulations, it is a fluid agreement that allows the public sector to rely on support from the private sector in all areas of public health, including the control of and response to zoonoses. Private hospitals and other infrastructure and personnel are placed at the disposal of

the government in areas where the private sector has additional expertise, or in cases where public facilities are overrun. In cases of emergencies, including emergencies related to zoonoses, public health facilities and personnel can request specific support from the private sector - either in terms of requiring materials, laboratory space or time, or response expertise. [1]

There is no evidence from the Ministries of Health or Agriculture, nor from Public Health France (Santé Publique France, previously known as the Institut de Veille Sanitaire or InVS), of a detailed formal mechanism for collaboration between the public and private sectors. [2, 3, 4] The Regional Council for the Orientation of Animal and Plant Health Policies (Conseil régional d'orientation de la politique sanitaire animale et végétale or CNOPSAV) includes non-governmental participants and leaders, including from the private sector. [5]

[1] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 2008. "Annual Report 2008".

[<http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/094000304.pdf>]. Accessed 25 November 2020

[2] Ministry of Solidarities and Health. 2020. "Search (Recherche)". [<https://solidarites-sante.gouv.fr/spip.php?page=recherche&recherche=zoonose>]. Accessed 25 November 2020

[3] Ministry of Agriculture (Ministère de l'Agriculture). 2018. "Zoonoses, those diseases transmitted between humans and animals (Les zoonoses, ces maladies transmissibles entre l'homme et l'animal)". [<http://agriculture.gouv.fr/les-zoonoses-ces-maladies-transmissibles-entre-l'homme-et-l'animal>]. Accessed 25 November 2020

[4] Public Health France (Santé Publique France). 2020. "All files (Tous les Dossiers)".

[[http://invs.santepubliquefrance.fr/Dossiers-thematiques/Tous-les-dossiers/\(node_id\)/1303/\(query\)/zoonose](http://invs.santepubliquefrance.fr/Dossiers-thematiques/Tous-les-dossiers/(node_id)/1303/(query)/zoonose)]. Accessed 25 November 2020

[5] Ministry of Agriculture and Food (Ministère de l'Agriculture et de l'Alimentation). 3 July 2013. "General Organisation of the CNOPSAV (Organisation générale du dispositif CNOPSAV)". [<https://agriculture.gouv.fr/organisation-generale-du-dispositif-cnopsav>]. Accessed 25 November 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 no public evidence that France has in place a record of the facilities in which especially dangerous pathogens and toxins are stored or processed.

While it appears that the laboratories in which dangerous pathogens are stored and worked on are known, there is no publicly available evidence of a list of laboratories operating with dangerous pathogens. [1, 2] The Ministries of Health and Agriculture show no evidence of such a record, and neither does the Ministry of Research, nor Public Health France (Santé Publique France), previously the Health Surveillance Institute (Institut de Veille Sanitaire or "InVS"). [3 ,4, 5, 6]

France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [7] France's Micro-organisms and Highly Pathogenic Toxins (Micro-organismes et toxines hautement pathogènes or MOT) regulations, drawn up in 2013, aim to draw up the standard

operating procedures (SOPs) to which all establishments dealing with dangerous pathogens must adhere, but does not explicitly mention any record kept of such facilities. [8] There is no additional evidence from the VERTIC database. [9]

- [1] FranceInter. 11 May 2015. "Dangerous viruses: the P4 Laboratory grows (Virus dangereux : le laboratoire P4 s'agrandit)". [<https://www.franceinter.fr/societe/virus-dangereux-le-laboratoire-p4-s-agrandit>]. Accessed 25 November 2020
- [2] RP Defence (RP Défense). 27 October 2015. "New competencies and new equipment for Bégin (De nouvelles compétences et de nouveaux équipements pour Bégin)". [<http://rpdefense.over-blog.com/tag/laboratoire%20p3/>]. Accessed 25 November 2020
- [3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 25 November 2020
- [4] Ministry of Agriculture (Ministère de l'Agriculture). "Directions and Services". [<http://agriculture.gouv.fr/directions-et-services>]. Accessed 25 November 2020
- [5] Ministry of Higher Education, Research, and Innovation (Ministère de l'Enseignement Supérieur, de la Recherche, et de l'Innovation). "Presentation of Research (Présentation de la Recherche)". [<http://www.enseignementsup-recherche.gouv.fr/pid24889/presentation-de-la-recherche.html>]. Accessed 25 November 2020
- [6] Health Surveillance Institute (Institut de Veille Sanitaire or "InVS"). 21 April 2011. "Professionals' Space (Espace Professionnels)". [<http://invs.santepubliquefrance.fr/Espace-professionnels>]. Accessed 25 November 2020
- [7] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports". [<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 2020
- [8] National Agency for the Safety of Medication and Health Products (Agence nationale de sécurité du médicament et des produits de santé). 23 January 2013. "The Good Practices for Biological Security and Biological Safety (Bonnes pratiques de sécurité biologique et de sûreté biologique)". [https://www.ansm.sante.fr/var/ansm_site/storage/original/application/0fef92e16bb93d269cdc4721d6417c5c.pdf]. Accessed 25 November 2020
- [9] VERTIC. 2020. "France" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/f/>]. Accessed 6 December 2020

1.3.1b

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

Yes = 1 , No = 0

Current Year Score: 1

France has in place regulations which address biosecurity requirements.

France implemented a law in 2001, the Order on the implementation, import, export, possession, transfer free of charge or against payment, acquisition and transport of certain agents which generate infectious diseases, pathogenic micro-organisms and toxins, which dictates how potential biological weapons or other dangerous pathogens must be handled in all facilities dealing with such materials to prevent any possible breach of security. [1]

In addition, the National Centre for Scientific Research (Centre National de Recherche Scientifique or "CNRS") has established regulations for biosecurity, although these are not publicly available in detail, which dictate what measures must be complied with for the containment and storage of dangerous pathogens, genetically modified organisms (GMOs), and human biological materials, depending on their confinement class. The regulations, mentioned in section 3 of the CNRS Prevention Books for Biological Risks, also dictate operational practices for all laboratories as regards the handling and manipulation of dangerous

pathogens to ensure these pathogens are guarded, as well as failure reporting mechanisms. No mention is made in the CNRS regulations of the cybersecurity standards to which facilities dealing with dangerous pathogens must comply. [2]

France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [3]

[1] Minister for Health (Ministre de la Santé). 26 September 2001. "Order of 22 September 2001 n°223 on the implementation, import, export, possession, transfer free of charge or against payment, acquisition and transport of certain agents which generate infectious diseases, pathogenic micro-organisms and toxins (Arrêté du 22 septembre 2001 relatif à la mise en oeuvre, l'importation, l'exportation, la détention, la cession à titre gratuit ou onéreux, l'acquisition et le transport de certains agents responsables de maladies infectieuses, micro-organismes pathogènes et toxines)".

[http://www.vertic.org/media/National%20Legislation/France/FR_Order_223_2001_Pathogens_Toxins.pdf]. Accessed 25 November 2020

[2] National Scientific Research Centre (Centre National de Recherche Scientifique). May 2017. "Biological risks - the prevention books (Risques biologiques - les cahiers de prévention)".

[<http://www.dgdr.cnrs.fr/SST/CNPS/guides/doc/risquebio/Guide%20risques%20biologiques-Edition%20mai%202017.pdf>]. Accessed 25 November 2020

[3] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports".

[<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 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

France has in place an agency responsible for the enforcement of biosecurity regulations.

The French agency for health and health products' safety (Agence française de sécurité sanitaire et des produits de santé or "AFSSAPS") is the national agency responsible for such enforcement. This agency was created by the Law concerning the reinforcement of health surveillance and the control of health security of products destined for humans in 1998, and is under the governance of the Minister of Health. [1] Among its many functions, the AFSSAPS is mandated as per the Decree of 26 September 2001 to take measures on the implementation, import, export, possession, transfer free of charge or against payment, acquisition and transport of certain agents which generate infectious diseases, pathogenic micro-organisms and toxins to ensure the safekeeping of such materials, and to perform controls of laboratories, and checks to ensure that the laboratories correspond to security standards set by the French government in multiple areas including biosecurity. [2]

France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [3]

[1] French Government. Law n°98-535, 1 July 1998. "Law n°98-535 of 1 July 1998 concerning the reinforcement of health surveillance and the control of health safety for products destined for humans (Loi n° 98-535 du 1 juillet 1998 relative au renforcement de la veille sanitaire et du contrôle de la sécurité sanitaire des produits destinés à l'homme)".

[<https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000573437>]. Accessed 25 November 2020

[2] Minister for Health (Ministre de la Santé). 26 September 2001. "Order of 22 September 2001 n°223 on the implementation, import, export, possession, transfer free of charge or against payment, acquisition and transport of certain agents which generate infectious diseases, pathogenic micro-organisms and toxins (Arrêté du 22 septembre 2001 relatif à la

mise en oeuvre, l'importation, l'exportation, la détention, la cession à titre gratuit ou onéreux, l'acquisition et le transport de certains agents responsables de maladies infectieuses, micro-organismes pathogènes et toxines)".

[http://www.vertic.org/media/National%20Legislation/France/FR_Order_223_2001_Pathogens_Toxins.pdf]. Accessed 25 November 2020

[3] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports". [<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 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 explicit evidence that France has sought to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities. The Ministries of Health, Defence, Agriculture, and Research make no mention of any such efforts. [1, 2, 3, 4] The French National Health and Medical Research Institute (Institut national de la santé et de la recherche médicale or INSERM) also does not give any evidence of this, and neither does the national laboratory system, the National Centre for Scientific Research (Centre National de Recherche Scientifique or CNRS). [5, 6] France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [7] There is no additional evidence from the VERTIC database. [8]

[1] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)".

[<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[2] Ministry of Agriculture. 2020. "Research and innovation (Recherche et innovation)". [<http://agriculture.gouv.fr/recherche-et-innovation/recherche-et-innovation>]. Accessed 25 November 2020

[3] Ministry of Defence (Ministère des armées). 2020. "Research and development (Recherche et développement)".

[<https://www.defense.gouv.fr/portail/enjeux2/recherche-et-developpement>]. Accessed 25 November 2020

[4] Ministry of Higher Education, Research, and Innovation (Ministère de l'éducation supérieure, de la recherche, et de l'innovation). 2020. "Research (Recherche)". [<http://www.enseignementsup-recherche.gouv.fr/>]. Accessed 25 November 2020

[5] INSERM. "Fundamental Research (La recherche fondamentale)". [<https://www.inserm.fr/recherche-inserm/recherche-fondamentale>]. Accessed 25 November 2020

[6] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)".

[<http://www.cnrs.fr/fr/la-recherche>]. Accessed 25 November 2020

[7] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports".

[<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 2020

[8] VERTIC. 2020. "France" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/f/>]. Accessed 6 December 2020

1.3.1e

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

Yes = 1 , No = 0

Current Year Score: 1

France can perform polymerase chain reaction (PCR) testing for anthrax and for Ebola virus. The Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS") state that the national reference laboratory, the Pasteur laboratories, can perform PCR testing for anthrax and have results ready within 24 hours. [1] In addition, the National Research Centre for Viral Haemorrhagic Fevers (Centre National de Recherche des Fièvres Hémorragiques Virales or "CNR-FHV") in Lyon can perform PCR testing for Ebola Virus. [2]

- [1] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 1 June 2006. "Anthrax (Charbon)". [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjAicHQy7jtAhXM3mEKHRq6A-EQFjAEegQIChAC&url=http%3A%2F%2Fwww.inrs.fr%2Fdms%2Feficatt%2FFicheEficatt%2FEFICATT_Charbon-2%2FFiche_Charbon.pdf&usg=AOvVaw08xIR3AtsjFg-mxW-OvA1g]. Accessed 25 November 2020
- [2] Pasteur Institute (Institut Pasteur). "Activities of the NRC for Viral Haemorrhagic Fevers (Activités du CNR des Fièvres Hémorragiques Virales)". [<https://www.pasteur.fr/fr/sante-publique/CNR/les-cnr/fievres-hemorragiques-virales/activites>]. Accessed 25 November 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 that France has in place regulations requiring biosecurity training for all personnel dealing with dangerous pathogens, or working in laboratories where dangerous pathogens are housed.

The National Centre for Scientific Research (Centre National de Recherche Scientifique or "CNRS") has drawn up guidelines defining that laboratories of biosafety levels 2 (BSL-2) and above must provide training for their personnel, in order to guarantee the security of the laboratory environment, and that laboratories BSL-2 and above must provide a visible list of what pathogens are contained in the laboratory, but this does not cover biosecurity. [1]

There is no information as to regulations concerning biosecurity training from the Ministries of Health, Agriculture, or Research. [2, 3, 4] France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [5] France's Micro-organisms and Highly Pathogenic Toxins (Micro-organismes et toxines hautement pathogènes or MOT) regulations, drawn up in 2013, aim to draw up the standard operating procedures (SOPs) to which all establishments dealing with dangerous pathogens must adhere, but does not explicitly mention any regulations requiring biosecurity training. [6] There is no additional evidence from the VERTIC database. [7]

- [1] National Scientific Research Centre (Centre National de Recherche Scientifique). May 2017. "Biological risks - the prevention books (Risques biologiques - les cahiers de prévention)". [<http://www.dgdr.cnrs.fr/SST/CNPS/guides/doc/risquebio/Guide%20risques%20biologiques-Edition%20mai%202017.pdf>]. Accessed 25 November 2020
- [2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 25 November 2020
- [3] Ministry of Agriculture (Ministère de l'Agriculture). "Directions and Services". [<http://agriculture.gouv.fr/directions-et>

services]. Accessed 25 November 2020

[4] Ministry of Higher Education, Research, and Innovation (Ministère de l'Enseignement Supérieur, de la Recherche, et de l'Innovation). "Presentation of Research (Présentation de la Recherche)". [<http://www.enseignementsup-recherche.gouv.fr/pid24889/presentation-de-la-recherche.html>]. Accessed 25 November 2020

[5] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports". [<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 2020

[6] National Agency for the Safety of Medication and Health Products (Agence nationale de sécurité du médicament et des produits de santé). 23 January 2013. "The Good Practices for Biological Security and Biological Safety (Bonnes pratiques de sécurité biologique et de sûreté biologique)".

[https://www.ansm.sante.fr/var/ansm_site/storage/original/application/0fef92e16bb93d269cdc4721d6417c5c.pdf].

Accessed 25 November 2020

[7] VERTIC. 2020. "France" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/f/>]. Accessed 6 December 2020

1.3.3 Personnel vetting: regulating access to sensitive locations

1.3.3a

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

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

Current Year Score: 0

France's regulations on biosecurity make no mention of background checks being conducted on personnel working in laboratories with especially dangerous pathogens. The National Centre for Scientific Research (Centre National de Recherche Scientifique or "CNRS") guidelines covering biosafety and biosecurity for laboratories of biosafety levels 2 (BSL-2) and above lists a series of procedures with which laboratories must comply in order to uphold biosecurity standards, but while these guidelines include a section on potential health checks personnel may be required to submit to, there is no mention of background checks on personnel's psychological state, mental fitness, or drug history. [1] There is no evidence of background checks from the Ministries of Health, Agriculture, Research, or Defence, nor from Public Health France. [2, 3, 4, 5, 6] France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [7] There is no additional evidence from the VERTIC database. [8]

[1] National Scientific Research Centre (Centre National de Recherche Scientifique). May 2017. "Biological risks - the prevention books (Risques biologiques - les cahiers de prévention)".

[<http://www.dgdr.cnrs.fr/SST/CNPS/guides/doc/risquebio/Guide%20risques%20biologiques-Edition%20mai%202017.pdf>].

Accessed 25 November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)".

[<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 25 November 2020

[3] Ministry of Agriculture (Ministère de l'Agriculture). "Directions and Services". [<http://agriculture.gouv.fr/directions-et-services>]. Accessed 25 November 2020

[4] Ministry of Higher Education, Research, and Innovation (Ministère de l'Enseignement Supérieur, de la Recherche, et de l'Innovation). "Presentation of Research (Présentation de la Recherche)". [<http://www.enseignementsup-recherche.gouv.fr/pid24889/presentation-de-la-recherche.html>]. Accessed 25 November 2020

[5] Ministry of Defence (Ministère de la Défense). "Research and Development".

[<https://www.defense.gouv.fr/portail/enjeux2/recherche-et-developpement>]. Accessed 25 November 2020

[6] Public Health France (Santé Publique France). 3 May 2016. "Scientific Training (Formation Scientifique)".

[<https://www.santepubliquefrance.fr/Sante-publique-France/Formation-scientifique>]. Accessed 25 November 2020

[7] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports".

[<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 2020

[8] VERTIC. 2020. "France" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/f/>]. Accessed 6 December 2020

1.3.4 Transportation security

1.3.4a

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

Yes = 1 , No = 0

Current Year Score: 1

France has publicly available official regulations on the transport of category A and category B substances.

The National Centre for Scientific Research (Centre National de Recherche Scientifique or "CNRS") and the National Institute of Health and Medical Research (Institut national de la santé et de la recherche médicale or "Inserm") have published the national regulations on the safe transport of infectious substances as well as genetically modified organisms (GMOs), stem cells, and human biological materials. [1, 2] These regulations list procedures that must be adhered to for the safe packaging of category A and B substances, as well as what documents and authorisations must accompany the package. They also list any specific procedures to follow for each separate category of infectious substances, as well as for GMOs. [2]

France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [3]

[1] National Scientific Research Centre (Centre National de Recherche Scientifique). May 2017. "Biological risks - the prevention books (Risques biologiques - les cahiers de prévention)".

[<http://www.dgdr.cnrs.fr/SST/CNPS/guides/doc/risquebio/Guide%20risques%20biologiques-Edition%20mai%202017.pdf>]. Accessed 25 November 2020

[2] National Institute of Health and Medical Research (Institut national de la santé et de la recherche médicale). 2018. "The transport of biological samples (Le transport des échantillons biologiques)". [https://intranet.inserm.fr/quotidien/sante-securite/Documents%20externes/3_PreventionRisques/3_Biologique/Inserm_DrhBCPR_EchantillonsBiologiques_Transport_Guide.pdf]. Accessed 25 November 2020

[3] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports". [<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 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

France has national regulations to oversee the cross-border transfer and end-user screening of dangerous pathogens. According to the Regulations on the Transport of Biological Samples set out by the National Institute of Health and Medical Research (Institut national de la santé et de la recherche médicale or "Inserm"), the cross-border sending of dangerous pathogens, infectious substances, genetically modified organisms (GMOs), or human biological materials requires specific authorisations from the Ministry of Health, which must be included in the package, along with complete details as to the sender and receiver of the pathogens. [1] France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [2] 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 France. [3]

[1] National Institute of Health and Medical Research (Institut national de la santé et de la recherche médicale). 2018. "The transport of biological samples (Le transport des échantillons biologiques)". [https://intranet.inserm.fr/quotidien/sante-securite/Documents%20externes/3_PreventionRisques/3_Biologique/Inserm_DrhBCPR_EchantillonsBiologiques_Transport_Guide.pdf]. Accessed 25 November 2020

[2] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports". [<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 2020

[3] 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

France has in place biosafety laws and legislation, both national and conforming to European Union (EU) guidelines.

The "Memo concerning the precautions which must be adhered to in anatomy and pathological cytology services, autopsy rooms, mortuaries, and biology laboratories given the risk of transmission of conventional infectious agents and unconventional infectious agents", and the "Decree fixing technical measure of prevention (including confinement), which must be implemented in research, teaching, analysis, anatomy, and pathological cytology laboratories, autopsy rooms, and industrial and agricultural establishments where workers could be exposed to pathogens" both cover biosafety measure that must be adhered to by all establishments working with pathogens, in order to minimise the risk of accidents and exposure. [1, 2, 3]

In addition, the National Centre for Scientific Research (Centre National de Recherche Scientifique or "CNRS") has established regulations for biosafety as well, although these are not publicly available in detail, which establish operational practices as regards the handling and manipulation of dangerous pathogens, as well as failure reporting mechanisms. [1]

France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [4]

[1] National Scientific Research Centre (Centre National de Recherche Scientifique). May 2017. "Biological risks - the prevention books (Risques biologiques - les cahiers de prévention)".

[<http://www.dgdr.cnrs.fr/SST/CNPS/guides/doc/risquebio/Guide%20risques%20biologiques-Edition%20mai%202017.pdf>].

Accessed 25 November 2020

[2] Director of hospitalisation and organisation of healthcare, Director of work relations, Director General of health (Direction de l'hospitalisation et de l'organisation des soins, Direction des relations du travail, Direction générale de la santé). 30 July 2004. "Memo DGS/SD5C/DHOS/E2/DRT/CT1/CT2 n° 2004-382 of 30 July 2004 concerning the precautions which must be adhered to in anatomy and pathological cytology services, autopsy rooms, mortuaries, and biology laboratories given the risk of transmission of conventional infectious agents and unconventional infectious agents (Circulaire

DGS/SD5C/DHOS/E2/DRT/CT1/CT2 n° 2004-382 du 30 juillet 2004 relative aux précautions à observer dans les services d'anatomie et cytologie pathologiques, les salles d'autopsie, les chambres mortuaires et les laboratoires de biologie « spécialisés ATNC », vis-à-vis du risque de transmission des agents transmissibles conventionnels (ATC) et non conventionnels (ATNC))". [<https://solidarites-sante.gouv.fr/fichiers/bo/2004/04-34/a0342429.htm>]. Accessed 25 November 2020

[3] French Parliament and Council. 16 July 2007. "Decree of 16 July 2007 fixing technical measure of prevention (including confinement), which must be implemented in research, teaching, analysis, anatomy, and pathological cytology laboratories, autopsy rooms, and industrial and agricultural establishments where workers could be exposed to pathogens (Arrêté du 16 juillet 2007 fixant les mesures techniques de prévention, notamment de confinement, à mettre en oeuvre dans les laboratoires de recherche, d'enseignement, d'analyses, d'anatomie et cytologie pathologiques, les salles d'autopsie et les établissements industriels et agricoles où les travailleurs sont susceptibles d'être exposés à des agents biologiques pathogènes)".

[<https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000465273&fastPos=1&fastReqId=288363184&categorieLien=id&oldAction=rechTexte>]. Accessed 25 November 2020

[4] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports".

[<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 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

France has established agencies for the enforcement of biosafety legislation and regulations. The National Institute for Scientific Research (Institut National de Recherche Scientifique or INRS) is responsible for enforcing the extensive biosafety legislation put in place by the French government to safeguard personnel who work in a biological risk environment. [1]

France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [2]

[1] National Institute for Scientific Research (Institut National de Recherche Scientifique). 2017. "Biological Risks - Regulations (Risques biologiques - réglementations)". [<http://www.inrs.fr/risques/biologiques/reglementation.html>]. Accessed 25 November 2020

[2] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports". [<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 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: 1

France requires biosafety training, using a standardized, required approach or personnel working in facilities housing or working with dangerous pathogens.

The National Centre for Scientific Research (Centre National de Recherche Scientifique or "CNRS") stipulates in section 2 of its Prevention Books for biological risks that a specific training with a standardised curriculum must be administered to all personnel working with biological agents before they begin their work with the pathogens. Section 4 of the Prevention Books defines this curriculum as comprising safety training about the health risks and precautions to take given the risks, the correct wearing and use of personal protective equipment (PPE), the correct manner of collection, stocking, transport, and elimination of pathogens, and what behaviour to adopt in case of accidents. This training must be regularly repeated, and must be adapted to the risks the personnel is exposed to. In addition, specific training must be administered to personnel working in specific environments or with specific pathogens. [1]

While the National Institute for Research and Security for the prevention of work accidents and diseases (Institut national de recherche et de sécurité pour la prévention des accidents du travail et des maladies professionnelles or INRS) has a set of training curricula, there is no evidence of a biosafety training programme. [2] France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [3]

[1] National Scientific Research Centre (Centre National de Recherche Scientifique). May 2017. "Biological risks - the prevention books (Risques biologiques - les cahiers de prévention)". [<http://www.dgdr.cnrs.fr/SST/CNPS/guides/doc/risquebio/Guide%20Risques%20biologiques-Edition%20mai%202017.pdf>]. Accessed 25 November 2020

[2] INRS. "Trainings and workshops (Formations et stages)". [<http://www.inrs.fr/services/formation.html>]. Accessed 25 November 2020

[3] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports". [<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 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 France regularly assesses whether ongoing research is being conducted on dangerous pathogens.

The National Centre for Scientific Research (Centre National de Recherche Scientifique or "CNRS") legally requires all laboratories or institutes intending to work with dangerous pathogens to submit an authorisation request form to the CNRS, detailing which pathogens will be used there, and what procedures they will be submitted to.

The National Agency for the security of medication and health products (Agence nationale de sécurité du médicament et des produits de santé or "ANSM") is the body responsible for authorising the use of the pathogen and the research as proposed in the request, and for inspecting the facilities before the work begins. [1] The Ministries of Health, Defence, Agriculture, and Research make no mention of any regular assessments of ongoing research on dangerous pathogens. [2, 3, 4, 5] The French National Health and Medical Research Institute (Institut national de la santé et de la recherche médicale or INSERM) does not give any evidence of this either. [6]

France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [7] There is no additional evidence from the VERTIC database. [8]

[1] National Scientific Research Centre (Centre National de Recherche Scientifique). May 2017. "Biological risks - the prevention books (Risques biologiques - les cahiers de prévention)".

[<http://www.dgdr.cnrs.fr/SST/CNPS/guides/doc/risquebio/Guide%20Risques%20biologiques-Edition%20mai%202017.pdf>]. Accessed 25 November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)".

[<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[3] Ministry of Agriculture. 2020. "Research and innovation (Recherche et innovation)". [<http://agriculture.gouv.fr/recherche-et-innovation/recherche-et-innovation>]. Accessed 25 November 2020

[4] Ministry of Defence (Ministère des armées). 2020. "Research and development (Recherche et développement)".

[<https://www.defense.gouv.fr/portail/enjeux2/recherche-et-developpement>]. Accessed 25 November 2020

[5] Ministry of Higher Education, Research, and Innovation (Ministère de l'éducation supérieure, de la recherche, et de l'innovation). 2020. "Research (Recherche)". [<http://www.enseignementsup-recherche.gouv.fr/>]. Accessed 25 November 2020

[6] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)".

[<http://www.cnrs.fr/fr/la-recherche>]. Accessed 25 November 2020

[7] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports".

[<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 2020

[8] VERTIC. 2020. "France" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/f/>]. Accessed 6 December 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 public evidence that France has in place a national policy for overseeing dual use research. The National Consultative Council for Biosecurity (Conseil National Consultatif pour la Biosécurité or CNCB) drew up in 2015 a series of measures to take in order to avoid the possibility of pathogens being used as biological weapons, and although the full report

was not published, one of the recommendations listed involves increased surveillance of both the establishments performing dual use research and the research itself, as well as the creation of algorithms to detect patterns around researchers ordering pathogens considered as potential biological weapons but this is not yet in place as legislation in the public eye. [1] The Ministries of Health, Defence, Agriculture, and Research make no mention of a national policy for overseeing dual use research. [2, 3, 4, 5] The French National Health and Medical Research Institute (Institut national de la santé et de la recherche médicale or INSERM) also does not give any evidence of this, and neither does the national laboratory system, the National Centre for Scientific Research (Centre National de Recherche Scientifique or CNRS). [6, 7] France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [8] There is no additional evidence from the VERTIC database. [9]

[1] Paul Conge, EducPros. 15 March 2017. "Fight against terrorism: research under surveillance (Lutte contre le terrorisme : la recherche sous surveillance)". [<https://www.letudiant.fr/educpros/enquetes/lutte-contre-le-terrorisme-la-recherche-sous-surveillance.html>]. Accessed 25 November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)". [<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[3] Ministry of Agriculture. 2020. "Research and innovation (Recherche et innovation)". [<http://agriculture.gouv.fr/recherche-et-innovation/recherche-et-innovation>]. Accessed 25 November 2020

[4] Ministry of Defence (Ministère des armées). 2020. "Research and development (Recherche et développement)". [<https://www.defense.gouv.fr/portail/enjeux2/recherche-et-developpement>]. Accessed 25 November 2020

[5] Ministry of Higher Education, Research, and Innovation (Ministère de l'éducation supérieure, de la recherche, et de l'innovation). 2020. "Research (Recherche)". [<http://www.enseignementsup-recherche.gouv.fr/>]. Accessed 25 November 2020

[6] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)". [<http://www.cnrs.fr/fr/la-recherche>]. Accessed 25 November 2020

[8] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports". [<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 2020

[9] VERTIC. 2020. "France" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/f/>]. Accessed 6 December 2020

1.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that France has an agency responsible for the oversight of research with dangerous pathogens as well as insufficient evidence of dual use oversight legislations in the country although oversight of facilities conducting biological pathogens is in place.

The National Agency for the security of medication and health products (Agence nationale de sécurité du médicament et des produits de santé or "ANSM"), to whom the National Scientific Research Centre (Centre National de Recherche Scientifique or CNRS) also answers, is responsible both for certifying the authorisations for laboratories or institutes to work with dangerous pathogens or to conduct dual-use research, and for approving the work on the pathogens as requested by the laboratory. The ANSM is also responsible for inspecting the facilities before the work begins and for follow-up inspections and checks of the facilities in which the research is conducted. Finally, the ANSM fixes any necessary conditions in order for research to be allowed to continue in these facilities . [1]

In addition, the National Consultative Council for Biosecurity (Conseil National Consultatif pour la Biosécurité or CNCB) drew up in 2015 a series of measures to take in order to avoid the possibility of pathogens being used as biological weapons, and although the full report was not published, one of the recommendations listed involves increased surveillance of both the establishments performing dual use research and the research itself, as well as the creation of algorithms to detect patterns around researchers ordering pathogens considered as potential biological weapons, but it does not mention who would be responsible for such surveillance. [2]

France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however, these reports are locked and not able to be viewed publicly. [3] There is no additional evidence from the VERTIC database. [4]

[1] National Scientific Research Centre (Centre National de Recherche Scientifique). May 2017. "Biological risks - the prevention books (Risques biologiques - les cahiers de prévention)".

[<http://www.dgdr.cnrs.fr/SST/CNPS/guides/doc/risquebio/Guide%20risques%20biologiques-Edition%20mai%202017.pdf>].

Accessed 25 November 2020

[2] Paul Conge, EducPros. 15 March 2017. "Fight against terrorism: research under surveillance (Lutte contre le terrorisme : la recherche sous surveillance)". [<https://www.letudiant.fr/educpros/enquetes/lutte-contre-le-terrorisme-la-recherche-sous-surveillance.html>]. Accessed 25 November 2020

[3] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports".

[<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 2020

[4] VERTIC. 2020. "France" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/f/>]. Accessed 6 December 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 insufficient publicly available evidence that France has legislation and/or regulation requiring the screening of synthesized DNA against lists of known pathogens and toxins before it is sold. France has in place regulations requiring that synthetic DNA be screened before it is sold or transferred to different facilities. However, it is unclear if the screening of synthesized DNA against lists of known pathogens and toxins before it is sold is required.

These regulations are set out by the National Centre for Scientific Research (Centre National de Recherche Scientifique or "CNRS"), and include synthetic DNA in their section on genetically modified organisms (GMOs) and human cells. This section describes the classification of GMOs and synthetic DNA depending on the threat it poses to human health, as well as the confinement facilities to which each class must be restricted, and that screening procedures must be completed and certificates filled out to accompany any sending or selling, however, the details of the screening procedures and certificates are not publicly available. [1] The Ministries of Health, Defence, Agriculture, and Research make no mention of any regulation requiring the screening of synthesized DNA against lists of known pathogens and toxins before it is sold. [2, 3, 4, 5]

France has submitted Confidence Building Measures for 2019 and 2020 under the Biological Weapons Convention; however,

these reports are locked and not able to be viewed publicly. [6] There is no additional evidence from the VERTIC database. [7]

[1] National Scientific Research Centre (Centre National de Recherche Scientifique). May 2017. "Biological risks - the prevention books (Risques biologiques - les cahiers de prévention)".

[<http://www.dgdr.cnrs.fr/SST/CNPS/guides/doc/risquebio/Guide%20Risques%20biologiques-Edition%20mai%202017.pdf>].

Accessed 25 November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)".

[<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[3] Ministry of Agriculture. 2020. "Research and innovation (Recherche et innovation)". [<http://agriculture.gouv.fr/recherche-et-innovation/recherche-et-innovation>]. Accessed 25 November 2020

[4] Ministry of Defence (Ministère des armées). 2020. "Research and development (Recherche et développement)".

[<https://www.defense.gouv.fr/portail/enjeux2/recherche-et-developpement>]. Accessed 25 November 2020

[5] Ministry of Higher Education, Research, and Innovation (Ministère de l'éducation supérieure, de la recherche, et de l'innovation). 2020. "Research (Recherche)". [<http://www.enseignementsup-recherche.gouv.fr/>]. Accessed 25 November 2020

[6] BWC Electronic Confidence Building Measures Portal. 2020. "France - Available Confidence Building Measures Reports".

[<https://bwc-ecbm.unog.ch/state/france>]. Accessed 25 November 2020

[7] VERTIC. 2020. "France" [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/f/>]. Accessed 6 December 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: 1

2019

World Health Organization

1.6.1b

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

Yes = 1, No = 0

Current Year Score: 1

2020

OIE WAHIS database

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

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a

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

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

Current Year Score: 2

France has the in-country capacity to perform 6 of the 10 World Health Organisation-defined (WHO) core tests.

The two National Reference Centres (Centres Nationaux de Référence or "CNR") for influenza, the Pasteur Institute in Paris and the laboratory associated with the Civil Hospice in Lyon (CNR-HCL), both have the capacity to perform polymerase chain reaction (PCR) testing for influenza (flu). [1]

The CNR for enteroviruses can perform viral culture testing for polio virus (polio). [2]

Public Health France (Santé Publique France) has a network of laboratories for the screening of Human Immunodeficiency Virus (HIV) across the country, all of which are able to perform serology testing for HIV infections. [3]

The CNR for mycobacteria and mycobacterial resistance to antituberculosis medications can perform microscopy testing for tuberculosis (TB). [4]

Several Tropical Health Institutes can perform rapid diagnostic testing (RDT) for malaria. [5]

The CNR for E. coli, Shigella, and Salmonella, based at the Pasteur Institute, can conduct bacterial culture testing for Salmonella typhi (Typhoid fever). [6]

There is no evidence from the Ministry of Health, the Ministry of Research, or the National Centre for Scientific Research (Centre National de Recherche Scientifique or CNRS) that France has announced its four specific tests. [7, 8, 9]

[1] Van der Werf S. 2015. "Influenza virological surveillance: 2014-2015 season". [http://invs.santepubliquefrance.fr/beh/2015/32-33/2015_32-33_2.html]. Accessed 25 November 2020

[2] Pasteur Institute. 2016. "Polio (La Poliomyélite)". [<https://www.pasteur.fr/fr/centre-medical/fiches-maladies/poliomyelite#a-linstitut-pasteur>]. Accessed 25 November 2020

[3] Cazein F, La Strat Y, Sarr A, Ramus C, Bouche N, Comboroure J-C, Lot F. 2017. "HIV testing in France, 2016". [http://invs.santepubliquefrance.fr/beh/2017/29-30/2017_29-30_2.html]. Accessed 25 November 2020

[4] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 20 March 2017. "Tuberculosis". [<http://invs.santepubliquefrance.fr/Dossiers-thematiques/Maladies-infectieuses/Maladies-a-declaration-obligatoire/Tuberculose/Aide-memoire>]. Accessed 25 November 2020

- [5] Institute of Tropical Medicine Bordeaux (Institut de médecine tropicale Bordeaux). 23 January 2018. "Rapid Diagnostic Testing by immunochromatography in tropical areas (Tests de diagnostic rapide par immunochromatographie en zones tropicales)". [<http://medecinetropicale.free.fr/cours/testrapide.pdf>]. Accessed 25 November 2020
- [6] Pasteur Institute. "Typhoid and paratyphoid fevers (Fièvres typhoïde et paratyphoïde)". [<https://www.pasteur.fr/fr/centre-medical/fiches-maladies/fievres-typhoide-paratyphoide#a-linstitut-pasteur>]. Accessed 25 November 2020
- [7] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)". [<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020
- [8] Ministry of Higher Education, Research, and Innovation (Ministère de l'éducation supérieure, de la recherche, et de l'innovation). 2020. "Research (Recherche)". [<http://www.enseignementsup-recherche.gouv.fr/>]. Accessed 25 November 2020
- [9] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)". [<http://www.cnrs.fr/fr/la-recherche>]. Accessed 25 November 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 France has in place a plan or strategy for conducting testing during a public health emergency.

Neither the Ministry of Health, the Ministry of Agriculture, the National Centre for Scientific Research, nor the Institute for Health Surveillance make any mention of such a plan generally, and there are no publicly available details of France's COVID testing strategy. [1, 2, 3, 4] The "French National Reference Centre for Hepatitis B, C, and D" mentions that it is involved in "ensuring the development and/or validation of diagnostic techniques for emerging pathogens requiring urgent measures to control outbreaks", but there is no mention of specific measures for conducting testing in the event of a public health emergency, nor of defining goals or scaling capacity. [5] France's Strategy for Global Health, developed in 2017, also does not make any mention of such measures. [6]

- [1] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 26 November 2020
- [2] Ministry of Agriculture (Ministère de l'Agriculture). "Directions and Services". [<http://agriculture.gouv.fr/directions-et-services>]. Accessed 26 November 2020
- [3] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)". [<http://www.cnrs.fr/fr/la-recherche>]. Accessed 26 November 2020
- [4] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 9 December 2015. "Surveillance plan (Dispositif de Surveillance)". [<http://invs.santepubliquefrance.fr/Espace-professionnels/Maladies-a-declaration-obligatoire/Dispositif-de-surveillance>]. Accessed 25 November 2020
- [5] National Reference Centre for Hepatitis B, C, and Delta. "Mission of Public Service" [<https://www.vhc-henrimondor.com/en/french-national-reference-center-for-viral-hepatitis-b-c-and-delta/mission-of-public-service/>]. Accessed 26 November 2020
- [6] French Ministry for Europe and Foreign Affairs. 2017. "France's Strategy for Global Health"

[https://www.diplomatie.gouv.fr/IMG/pdf/sante_mondiale_en_web_cle4c7677-1.pdf]. Accessed 26 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

The national laboratory network of laboratories, which includes all laboratories that serve as national reference facilities and perform testing for the World Health Organisation (WHO) recommended diseases, operates under the umbrella of the Pasteur Institut (Institut Pasteur) and the National Centre for Scientific Research (Centre National de Recherche Scientifique or CNRS), and is accredited according to the norm ISO 15189. [1, 2]

[1] Institut Pasteur. "Escherichia coli, Shigella, Salmonella". [<https://www.pasteur.fr/fr/sante-publique/CNR/les-cnr/escherichia-coli-shigella-salmonella>]. Accessed 25 November 2020

[2] Institut Pasteur. "Viruses of respiratory infections". [<https://www.pasteur.fr/fr/sante-publique/centres-nationaux-reference/cnr/virus-infections-respiratoires-dont-grippe>]. Accessed 25 November 2020

2.1.2b

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

Yes = 1, No = 0

Current Year Score: 1

The national laboratory network of laboratories in France, which includes all laboratories that serve as national reference facilities and perform testing for the World Health Organisation (WHO) recommended diseases, operates under the umbrella of the Pasteur Institut (Institut Pasteur) and the National Centre for Scientific Research (Centre National de Recherche Scientifique or CNRS), and is subject to the external quality assurance review known as Quality-Environment-Sustainable Development (Qualité-Environnement-Développement Durable or "QEDD"). This service is responsible for ensuring standardised quality across all facilities that have received the accreditation ISO 15189 of a Multisite Reference and Expertise Laboratory (Laboratoire de Référence et d'Expertise Multisite or "LRE-MS") network. [1]

[1] Pasteur Institute. 13 January 2017. "System for the management of the quality of Reference and Expertise Laboratories (LRE) (Système de management de la qualité des laboratoires de référence et d'expertise (LRE))".

[<https://www.pasteur.fr/fr/sante-publique/CNR/management-de-la-qualite>]. Accessed 25 November 2020

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system?

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that France has in place a nationwide system for specimen transport.

The country does have in place guidelines covering specimen transport by all means of transport, but this does not take the form of a nationwide transport system. According to official guidelines published by the National Scientific Research Centre (Centre National de Recherche Scientifique or "CNRS"), France's system for specimen transport is based on United Nations guidelines, and adheres to the regulations that govern different types of transport. Air transport of specimens follow International Air Transport Association (IATA) regulations, maritime transport of specimens follow International Maritime Dangerous Goods (IMDG) regulations. [1] Railway transport of specimens follow Regulations on the railway transport of dangerous goods (RID) according to the Decree of 7 July 2003 on Railway Transport of Dangerous Goods. [1, 2] River and waterway transport of specimens follow the regulations agreed upon in the European Agreement for the international transport of goods by interior waterways (Accord européen relatif au transport international des marchandises par voies de navigation intérieures or "ADN"). [1] And road transport of specimens is dictated by the European Agreement concerning international transport of dangerous goods by road (Accord européen relatif au transport international des marchandises dangereuses par route or "ADR"). [1]

There is no evidence from the Ministries of Health or Agriculture, nor from the National Centre for Scientific Research (Centre National de Recherche Scientifique or CNRS) that a nationwide specimen transport system exists. [3, 4, 5] The European Centre for Disease Prevention and Control has issued recommendations on COVID-19 specimen transport, but there is no evidence that France has instated a nation-wide specimen transport for such samples. [6]

[1] National Scientific Research Centre (Centre National de Recherche Scientifique). May 2017. "Biological risks - the prevention books (Risques biologiques - les cahiers de prévention)".
[<http://www.dgdr.cnrs.fr/SST/CNPS/guides/doc/risquebio/Guide%20risques%20biologiques-Edition%20mai%202017.pdf>]. Accessed 25 November 2020

[2] Le Monde. 5 September 2003. "Transport of dangerous goods by railway (called 'Decree RID') (Transport des marchandises dangereuses par chemin de fer (dit « arrêté RID »))". [<https://www.lemoniteur.fr/article/transport-des-marchandises-dangereuses-par-chemin-de-fer-dit-arrete-rid.418144>]. Accessed 25 November 2020

[3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 25 November 2020

[4] Ministry of Agriculture (Ministère de l'Agriculture). "Directions and Services". [<http://agriculture.gouv.fr/directions-et-services>]. Accessed 25 November 2020

[5] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)". [<http://www.cnrs.fr/fr/la-recherche>]. Accessed 25 November 2020

[6] European Centres for Disease Control and Prevention. "Laboratory support for COVID-19 in the EU/EEA". [<https://www.ecdc.europa.eu/en/novel-coronavirus/laboratory-support>]. Accessed 25 November 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 that France has a plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak.

The Regional Agency for Health (Agence Régionale de Santé) has a page detailing the steps to request authorisation of a medical biology laboratory, but there is no mention here of any special considerations in case of an outbreak or a public health emergency. [1] There is no further information from the Ministries of Health and Agriculture, from the National Centre for Scientific Research, or from the Institute for Health Surveillance. [2, 3, 4, 5]

The French Republic passed a decree on the 5th of April 2020 enabling the Head of each Department to authorise medical analysis laboratories, research laboratories, and laboratories accredited to the norms ISO/CEI 17025 to perform tests for COVID-19, even if these laboratories were not initially intended for medical testing. However, there is no evidence that these measures will apply to other diseases or in case of other outbreaks, outside of COVID-19. [6]

[1] Agence Régionale de Santé. 6 July 2017. "Request for authorising the opening of a site or the modification of a medical biology laboratory (Demande d'autorisation d'ouverture d'un site ou de modification d'un laboratoire de biologie médicale)" [<https://www.paca.ars.sante.fr/demande-dautorisation-douverture-dun-site-ou-de-modification-dun-laboratoire-de-biologie-medicale?parent=5686>]. Accessed 26 November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)".

[<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 26 November 2020

[3] Ministry of Agriculture (Ministère de l'Agriculture). "Directions and Services". [<http://agriculture.gouv.fr/directions-et-services>]. Accessed 26 November 2020

[4] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)".

[<http://www.cnrs.fr/fr/la-recherche>]. Accessed 26 November 2020

[5] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 9 December 2015. "Surveillance plan (Dispositif de Surveillance)". [<http://invs.santepubliquefrance.fr/Espace-professionnels/Maladies-a-declaration-obligatoire/Dispositif-de-surveillance>]. Accessed 25 November 2020

[6] French Republic. 5 April 2020. "Decree of 5 April 2020 completing the decree of 23 March 2020 setting out the organisational and functioning measures of the health system necessary to confront the COVID-19 in the case of a health emergency (Arrêté du 5 avril 2020 complétant l'arrêté du 23 mars 2020 prescrivant les mesures d'organisation et de fonctionnement du système de santé nécessaires pour faire face à l'épidémie de covid-19 dans le cadre de l'état d'urgence sanitaire)" [<https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000041782869/>]. Accessed 26 November 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: 1

France conducts ongoing event-based surveillance (EBS) and analysis of surveillance data for infectious diseases, but it is not clear if this is analysed on a daily basis.

France has an EBS system that gathers information from the early warning systems of the Ministry of Health as well as from informal sources including social networks and internet searches. The information thus collated is analysed, and communicated to relevant national and international authorities by Public Health France. The European Commission's Joint Research Centre (JRC) runs a health surveillance system which analyses and produces up-to-date reports and maps of public health events based on data provided by countries who share their health surveillance data with the JRC, but it is not explicitly stated that France analyses its surveillance data on a daily basis. [1, 2]

[1] World Health Organisation (WHO). March 2013. "WHO Technical consultation on event-based surveillance". [http://www.episouthnetwork.org/sites/default/files/meeting_report_ebs_march_2013_final.pdf]. Accessed 25 November 2020

[2] Hartley DM, Nelson NP, Walters R, Arthur R, Yangarber R, Madoff L, Linge JP, Mawudeku A, Collier N, Brownstein JS, Thinus G, Lightfoot N. 2010. "Landscape of international event-based biosurveillance". [https://www.researchgate.net/publication/223989161_Landscape_of_international_event-based_surveillance]. Accessed 25 November 2020

2.3.1b

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

Yes = 1 , No = 0

Current Year Score: 1

There is publicly available evidence that the country reported a potential public health emergency of international concern (PHEIC) to the WHO within the last two years. France reported its first cases of COVID-19 to the WHO on 24 January 2020, at the very beginning of the pandemic, and has officially reported cases regularly since then. [1]

[1] WHO. 2020. "France: the Current COVID-19 Situation"[<https://www.who.int/countries/fra/>]. Accessed 25 November 2020

2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a

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

Yes = 1 , No = 0

Current Year Score: 1

France operates electronic reporting surveillance at the national and sub-national levels, although this does not take the form of a publicly accessible system. Cases of infectious diseases are reported to the regional or local public health officials or institution by the notifier by telephone, by paper-based notification forms, or by email. [1] Thereafter, communication regarding the case report from the local public health officials up to the national level occurs through electronic case reporting systems. This system is in place since 2007. [2] The data collected are compounded, de-identified, via the National Epidemiology Portal (Portail Epidémiologie France). [3]

[1] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 9 December 2015. "Surveillance plan (Dispositif de Surveillance)". [<http://invs.santepubliquefrance.fr/Espace-professionnels/Maladies-a-declaration-obligatoire/Dispositif-de-surveillance>]. Accessed 25 November 2020

[2] Reintjes R, Thelen M, Reiche R, Csohán A. 1 August 2007. "Benchmarking national surveillance systems: a new tool for the

comparison of communicable disease surveillance and control in Europe". European Journal of Public Health 17 [4] : 375-380. [<https://academic.oup.com/eurpub/article/17/4/375/501787>]. Accessed 25 November 2020

[3] National Epidemiology Portal (Portail Epidémiologie France). "The National Epidemiology Portal (Portail Epidémiologie France)". [<https://epidemiologie-france.aviesan.fr/>]. Accessed 25 November 2020

2.3.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that real-time laboratory data is gathered by France's electronic reporting system. As the information required by the electronic surveillance reporting system is not made publicly available, it is not possible to establish exactly what information is available in or required by the system. [1, 2] There is no evidence that real-time laboratory data is gathered from the Ministry of Health, from the National Centre for Scientific Research (Centre National de Recherche Scientifique, nor from Public Health France. [3, 4, 5]

[1] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 9 December 2015. "Surveillance plan (Dispositif de Surveillance)". [<http://invs.santepubliquefrance.fr/Espace-professionnels/Maladies-a-declaration-obligatoire/Dispositif-de-surveillance>]. Accessed 25 November 2020

[2] Reintjes R, Thelen M, Reiche R, Csohán A. 1 August 2007. "Benchmarking national surveillance systems: a new tool for the comparison of communicable disease surveillance and control in Europe". European Journal of Public Health 17 [4] : 375-380. [<https://academic.oup.com/eurpub/article/17/4/375/501787>]. Accessed 25 November 2020

[3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "e-Health (e-Santé)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/e-sante/>]. Accessed 25 November 2020

[4] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)". [<http://www.cnrs.fr/fr/la-recherche>]. Accessed 25 November 2020

[5] Public Health France (Santé Publique France). 3 May 2016. "Missions and Actions". [<https://www.santepubliquefrance.fr/Sante-publique-France/Qui-sommes-nous/Missions-et-actions>]. Accessed 25 November 2020

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

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

Current Year Score: 2

There is evidence that France has in place electronic health records (EHRs) and that these are commonly in use. The French national system for electronic health data (National System of Health Data, Système National des Données de Santé or SNDS) was rolled out in 2018, and now covers approximately 98.8% of the French population. These data are part of nationwide data platform called 'Health Data Hub' [HDH], which was set up in order to "facilitate healthcare big data sharing and

exploitation in high-level security conditions." [1]

[1] Health Advances Blog. 24 March 2020. "e-Health in France: Spotlight on the National Healthcare Digitalisation Strategy" [<https://healthadvancesblog.com/2020/03/24/e-health-in-france/>]. Accessed 25 November 2020

2.4.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that France has in place a system whereby the national public health system has access to electronic health records (EHRs) of individuals.

The EHRs system rolled out in 2018, the National System of Health Data (Système National des Données de Santé or SNDS) is part of nationwide data platform called 'Health Data Hub' [HDH], which was set up in order to "facilitate healthcare big data sharing and exploitation in high-level security conditions", but there is no evidence that this sharing of data is already happening, nor that the public health system has access to the data. [1]

The implementation of the French Shared Medical File (Dossier Médical Partagé or "DMP"), is governed by the Ministry of Social Affairs and Health, and the Agency of Shared Health Systems (Agence des Systèmes d'Information Partagés en Santé or "ASIP Santé") is responsible for running the DMP programme. [2] Patients can control the access rights to their DMP, and can authorise healthcare professionals and the national public health system to access and to edit it. There is no evidence of any exemptions from this need for authorisation to access the DMP in case of health emergencies. [4]

The concept of EHRs was introduced in France in December 2010, and was initially slow to take hold in the population - 5 years after their introduction, EHRs covered only 1.5% of the population. [4]

There is no additional information from the Ministry of Health, nor from the national laboratory system, the National Centre for Scientific Research (Centre National de Recherche Scientifique or CNRS). [5, 6]

[1] Health Advances Blog. 24 March 2020. "e-Health in France: Spotlight on the National Healthcare Digitalisation Strategy" [<https://healthadvancesblog.com/2020/03/24/e-health-in-france/>]. Accessed 25 November 2020

[2] Epidemiology Portal France (Portail Epidémiologie France) - Health Databases. 14 September 2014. "DMP - Electronic Health Records Database". [<https://epidemiologie-france.aviesan.fr/en/epidemiology/records/electronic-health-records-database>]. Accessed 25 November 2020

[3] Ministry of Solidarity and Health (Ministère des Solidarités et de la Santé). 13 March 2017. "Shared Medical File (Dossier Médical Partagé - DMP)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/e-sante/article/dossier-medical-partage-dmp>]. Accessed 25 November 2020

[4] Séroussi B, Bouand J. 2017. "Adoption of a Nationwide Shared Medical Record in France: Lessons Learnt after 5 Years of Deployment". AMIA Annual Symposium Proceedings Archive 2016:1100-1109.

[<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5333332/>]. Accessed 25 November 2020

[5] Ministry of Solidarity and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)".

[<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[6] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)".

[<http://www.cnrs.fr/fr/la-recherche>]. Accessed 25 November 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 evidence that France's electronic health records (EHRs) adhere to data standards to ensure data is comparable. No explicit mention of adherence to data standards is made on the Ministry of Health's National Epidemiology Portal; on the description of the EHRs or of the Shared Medical File (Dossier Médical Partagé or "DMP") by the Ministry of Solidarity and Health; on the official Social Security Health Insurance page on the DMP; nor in the Regional Health Agency's National e-Health strategy. [1, 2, 3, 4, 5] There is no evidence of this from the National Centre for Scientific Research (Centre National de Recherche Scientifique or CNRS) either. [6]

[1] Epidemiology Portal France (Portail Epidémiologie France). 14 September 2016. "DMP - Electronic Health Records Database". [https://epidemiologie-france.aviesan.fr/en/epidemiology/records/electronic-health-records-database#tab_4]. Accessed 25 November 2020

[2] Ministry of Solidarity and Health (Ministère des Solidarités et de la Santé). 13 March 2017. "Shared Medical File (Dossier médical partagé (DMP))". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/e-sante/article/dossier-medical-partage-dmp>]. Accessed 25 November 2020

[3] Health Advances Blog. 24 March 2020. "e-Health in France: Spotlight on the National Healthcare Digitalisation Strategy" [<https://healthadvancesblog.com/2020/03/24/e-health-in-france/>]. Accessed 25 November 2020

[4] Social Security Health Insurance (Sécurité Sociale Assurance Maladie). "Discover the DMP (Découvrir le DMP)". [<https://www.dmp.fr/ps/je-decouvre>]. Accessed 25 November 2020

[5] Regional Health Agency (Agence Régionale de Santé). 21 February 2018. "The National e-Health Strategy 2020 (La stratégie nationale e-santé 2020)". [<https://www.ars.sante.fr/la-strategie-nationale-e-sante-2020>]. Accessed 25 November 2020

[6] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)". [<http://www.cnrs.fr/fr/la-recherche>]. Accessed 25 November 2020

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

2.4.2a

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

Yes = 1 , No = 0

Current Year Score: 1

There is evidence to show that France has in place mechanisms to share surveillance data between the animal and human health agencies.

As the agencies responsible for surveillance of zoonotic infectious diseases and of human infectious diseases are grouped under the authority of Public Health France (Santé Public France), previously the Health Surveillance Institute (Institut de Veille Sanitaire or "InVS"), data on events of public health concern collected as part of surveillance activities are fluidly and consistently shared between agencies during meetings, shared databases, and joint surveillance programmes. [1, 2]

In addition, an accord was signed between the French Agency for Food, Environmental and Occupational Health & Safety

(ANSES) and the National Office for Hunting and Wildlife (ONCFS) in February 2018 to further facilitate responsibility and data sharing, although what form this sharing takes is not explicit. [3] There is no explicit evidence from the Ministries of Health or Agriculture of such a mechanism. [4, 5]

[1] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). May 2005. "Health Alert in France (l'Alerte sanitaire en France)". [http://opac.invs.sante.fr/doc_num.php?explnum_id=5562]. Accessed 25 November 2020

[2] Health Surveillance Institute (Institut de Veille Sanitaire). 29 December 1999. "The Health Surveillance Institute (Institut de Veille Sanitaire)".

[<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=5&cad=rja&uact=8&ved=2ahUKEwjx84WDxY3eAhXJ3KQKHQC7D9wQFjAEegQIABAC&url=https%3A%2F%2Fwww.hcsp.fr%2FExplore.cgi%2FTelecharger%3FNomFichier%3Dad298081.pdf&usg=AOvVaw0MM6X3raZRbYmxLck-nQwa>]. Accessed 25 November 2020

[3] French Agency for Food, Environmental and Occupational Health & Safety. 26 February 2018. "Wildlife surveillance: ANSES and the ONCFS consolidate their partnership". [<https://www.anses.fr/en/content/wildlife-surveillance-anses-and-oncfs-consolidate-their-partnership-0>]. Accessed 25 November 2020

[4] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Signalement-sante.gouv.fr".

[<https://solidarites-sante.gouv.fr/soins-et-maladies/signalement-sante-gouv-fr/>]. Accessed 25 November 2020

[5] Ministry of Agriculture (Ministère de l'Agriculture). "Health alerts (Alertes sanitaires)". [<http://agriculture.gouv.fr/alerte-alimentation>]. Accessed 25 November 2020

2.4.3 Transparency of surveillance data

2.4.3a

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

Yes = 1, No = 0

Current Year Score: 1

France makes available surveillance data on infectious disease outbreaks publicly via reports on the website of Public Health France (Santé Public France), previously the Health Surveillance Institute (Institut de Veille Sanitaire or "InVS").

Public Health France publishes weekly epidemiological reports (Bulletin épidémiologique hebdomadaire or "BEH") which contain de-identified information on any notifiable infectious disease outbreaks, or outbreaks of significant size, reported or registered within the past week in the whole of the country. [1] In addition, France publishes daily updates on various diseases on France's Public Health geo-data for public health (Géo données en santé publique) webpage. [2]

[1] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 24 November 2020. "Weekly Epidemiological Report (BEH - Bulletin épidémiologique hebdomadaire)". [invs.santepubliquefrance.fr/Publications-et-outils/BEH-Bulletin-epidemiologique-hebdomadaire]. Accessed 25 November 2020

[2] Santé Publique France. 24 November 2020. "Geo-data for public health (Géo données en santé publique)". [<https://geodes.santepubliquefrance.fr/#view=map2&c=indicator>]. Accessed 25 November 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

There is evidence that France makes available de-identified COVID-19 surveillance data. The Public Health Department (Santé Publique France) makes available daily de-identified surveillance data on COVID-19, including number of confirmed cases (both daily and in total since the beginning of the epidemic) by PCR and by antigen test, number of deaths in the past 24 hours and since the beginning of the epidemic, number of hospitalisations, number of COVID-19 active clusters, and the overall positivity rate for the country. [1]

[1] Santé Publique France. 25 November 2020. "COVID-19 Epidemic Dashboard in numbers (COVID-19: tableau de bord de l'épidémie en chiffres)" [<https://www.santepubliquefrance.fr/dossiers/coronavirus-covid-19/coronavirus-chiffres-cles-et-evolution-de-la-covid-19-en-france-et-dans-le-monde#block-266151>] Accessed 25 November 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

France has in place a law in place to safeguard the confidentiality of identifiable health information for individuals, including surveillance activities.

The Law concerning the reinforcement of health surveillance and the control of health safety for products destined for humans stipulates that the anonymity of persons for whom health data is collected must be safeguarded, and this includes persons for whom health data is collected as part of epidemiological surveillance. [1]

The French Ministry of Health in conjunction with Public Health France (Santé Public France), previously the Health Surveillance Institute (Institut de Veille Sanitaire or "InVS") established in 2003 a "New Plan for Anonymised Notification of Notifiable Infectious Diseases", which sets out in intricate detail how anonymisation of health data shall be achieved, as well as any special provisions (such as reporting of HIV infection in adolescents). [2] In order to fulfil these legal obligations, Public Health France has implemented a software to anonymise automatically all data obtained as part of routine surveillance and reporting of notifiable diseases. [3]

In addition, the confidentiality of identifiable health information for individuals is safeguarded by the EU's General Data Protection Regulation, which came into force in May 2018. [4]

[1] French Government. Law n°98-535, 1 July 1998. "Law n°98-535 of 1 July 1998 concerning the reinforcement of health surveillance and the control of health safety for products destined for humans (Loi n° 98-535 du 1 juillet 1998 relative au renforcement de la veille sanitaire et du contrôle de la sécurité sanitaire des produits destinés à l'homme)".

[<https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000573437>]. Accessed 25 November 2020

[2] Ministry of Health, Family, and Handicapped People. 25 March 2003. "New Plan for Anonymised Notification of Notifiable Infectious Diseases (Nouveau dispositif de notification anonymisée des maladies infectieuses à déclaration obligatoire)".

[http://opac.santepubliquefrance.fr/doc_num.php?explnum_id=2875]. Accessed 25 November 2020

[3] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 8 September 2018. "Notifiable Diseases (Maladies à déclaration obligatoire)". [<http://invs.santepubliquefrance.fr/Espace-professionnels/Maladies-a-declaration->

obligatoire/Outils-de-la-surveillance]. Accessed 25 November 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 25 November 2020

2.4.4b

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

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that the laws, regulations, or guidelines safeguarding the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, include mention of protections from cyber attacks.

The confidentiality of identifiable health information for individuals is safeguarded by the EU's General Data Protection Regulation (GDPR), 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. [6]

There is no specific mention in other French legislation on the confidentiality of identifiable health information for individuals of protection against cyber attacks. Neither the Law n°98-535 of 1 July 1998 concerning the reinforcement of health surveillance and the control of health safety for products destined for humans, nor the New Plan for Anonymised Notification of Notifiable Infectious Diseases, makes any mention of preparation against cyber attacks. [1, 2]

The Law n°2004-575 of 21 June 2004 on confidence in digital economy mentions the need to ensure digital privacy for electronic communication, but makes no mention of health information specifically. [3] The description of the software developed by the Ministry of Health in conjunction with Public Health France (Santé Public France), previously the Health Surveillance Institute (Institut de Veille Sanitaire or "InVS"), also makes no mention of any defence against cyber attacks. [4]

A newspaper article published in February 2018 mentions that France is trying to improve on cyber security in several departments, both for public and private data ownership, but does not specifically mention health data. [5]

[1] French Government. Law n°98-535, 1 July 1998. "Law n°98-535 of 1 July 1998 concerning the reinforcement of health surveillance and the control of health safety for products destined for humans (Loi n° 98-535 du 1 juillet 1998 relative au renforcement de la veille sanitaire et du contrôle de la sécurité sanitaire des produits destinés à l'homme)".

[<https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000573437>]. Accessed 25 November 2020

[2] Ministry of Health, Family, and Handicapped People. 25 March 2003. "New Plan for Anonymised Notification of Notifiable Infectious Diseases (Nouveau dispositif de notification anonymisée des maladies infectieuses à déclaration obligatoire)".

[http://opac.santepubliquefrance.fr/doc_num.php?explnum_id=2875]. Accessed 25 November 2020

[3] French Government. Law n°2004-575, 21 June 2004. "Law n°2004-575 on confidence in digital economy (Loi n°2004-575 du 21 juin 2004, pour la confiance dans l'économie numérique)".

[<https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000801164>]. Accessed 25 November 2020

[4] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 8 September 2018. "Notifiable Diseases (Maladies à déclaration obligatoire)". [<http://invs.santepubliquefrance.fr/Espace-professionnels/Maladies-a-declaration-obligatoire/Outils-de-la-surveillance>]. Accessed 25 November 2020

[5] Ouest France. 27 February 2018. "France improves on its cyber security plan (La France relève d'un cran son dispositif de cybersécurité)". [<https://www.ouest-france.fr/europe/france/la-france-releve-d-un-cran-son-dispositif-de-cybersecurite-5592551>]. Accessed 30 October 2018

[6] 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 25 November 2020

2.4.5 International data sharing

2.4.5a

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

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

Current Year Score: 2

France has in place a cooperative agreement to share surveillance data during a public health emergency with other countries in the region for more than one disease.

Public Health France (Santé Public France), previously the Health Surveillance Institute (Institut de Veille Sanitaire or "InVS") automatically shares all surveillance data for infectious diseases with the European Centre for Disease Prevention and Control (ECDC) every year. [1] In addition, Public Health France is part of a European-wide network for surveillance and data sharing in case of public health emergencies: all surveillance data for infectious diseases of public health concern are shared immediately with European agencies including the European Food Safety Authority (EFSA), the ECDC, and the Rapid Alert System for Food and Feed (RASFF). [2]

As a member of the European Union, France shares surveillance data during a public health emergency with other countries in the region. All EU and EEA countries are part of the European Centre for Disease Prevention and Control's Early Warning and Response System (EWRS). The EWRS is a platform to "allow exchange of information on risk assessment and risk management for more timely, efficient and coordinated public health action [...] The EWRS is used for notifications on outbreaks, exchanging information and decisions about the coordination of measures among Member States. Over the years, it has played an important role to support health crisis related to severe acute respiratory syndrome (SARS), Ebola virus disease, avian influenza in humans and other communicable diseases." [1]

Article 9 of Chapter IV of the European Union (EU) Decision on Serious Cross-Border Threats to Health notes that the European Commission "shall make available to the national competent authorities through the EWRS any information that may be useful for coordinating the response, including information and public health measures related to serious crossborder threats to health transmitted through rapid alert and information systems established under other provisions of Union law or the Euratom Treaty." [2]

[1] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 9 December 2015. "Surveillance plan (Dispositif de surveillance)". [<http://invs.santepubliquefrance.fr/Espace-professionnels/Maladies-a-declaration-obligatoire/Dispositif-de-surveillance>].

surveillance]. Accessed 25 November 2020

[2] French Agency for Food, Environmental and Occupational Health & Safety. "Surveillance and Vigilance".

[https://www.anses.fr/en/node/79950]. Accessed 25 November 2020

[3] 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 25 November 2020

[4] 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 25 November 2020

2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a

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

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

Current Year Score: 0

There is no evidence that France has in place a system in place to provide support at the sub-national level to conduct contact tracing, either for active or future public health emergencies (covid-19). Neither the Ministry of Health, the National Centre for Scientific Research, or the Institute for Health Surveillance make any mention of such measures. [1, 2, 3] While there is evidence that France instated brigades of contact tracers for COVID-19 throughout the country, there is no evidence that this system involved specific support provided at the sub-national level to conduct the contact tracing. [4, 5]

[1] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)".

[https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/]. Accessed 26 November 2020

[2] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)".

[http://www.cnrs.fr/fr/la-recherche]. Accessed 26 November 2020

[3] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 9 December 2015. "Surveillance plan (Dispositif de Surveillance)". [http://invs.santepubliquefrance.fr/Espace-professionnels/Maladies-a-declaration-obligatoire/Dispositif-de-surveillance]. Accessed 25 November 2020

[4] The Connexion. 1 May 2020. "COVID Contact-tracing brigades in France: what we know"

[https://www.connexionfrance.com/French-news/Covid-19-coronavirus-contact-tracing-brigades-in-France-What-we-know-so-far]. Accessed 26 November 2020

[5] Euronews. 28 May 2020. "Human contact tracing underway in France to stop the spread of COVID-19"

[https://www.euronews.com/2020/05/28/human-contact-tracing-underway-in-france-to-stop-spread-of-covid-19]. Accessed 26 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 France provides wrap-around services to enable infected people and their contacts to self-isolate or quarantine as recommended, including economic support and medical attention.

France has instated some country-wide measures to support individuals who must self-isolate during the 2020 COVID-19, including economic measures such as support for rent payment and a facilitated process for applying for full or partial unemployment benefits, as well as tax reductions, and Daily Indemnities, but there is no evidence that these measures go beyond COVID-19 or are part of a general plan in the event of any public health event. [1, 2]

France committed 733 million euros to support vulnerable people through the COVID-19 pandemic, though the exact measures deployed are not mentioned, and there is again no evidence this support goes beyond COVID-19. [3] There is no information about any wraparound services to enable cases and suspected cases to self-isolate as recommended from the Ministry of Health, nor from the the National Centre for Scientific Research, or the Institute for Health Surveillance. [4, 5, 6]

[1] Ministry of Economy, Finance, and Economic Boost. 2020. "COVID-19: support measures for businesses"

[<https://www.economie.gouv.fr/covid19-soutien-entreprises/les-mesures>]. Accessed 26 November 2020

[2] Previsima.fr 26 November 2020. "COVID-19: Discover the extraordinary social measures implemented by the government" [<https://www.previsima.fr/evenements-speciaux/coronavirus-retrouvez-les-mesures-sociales-exceptionnelles-mises-en-place-par-le-gouvernement.html>]. Accessed 26 November 2020

[3] 20minutes.fr 21 October 2020. "Coronavirus: what are the (rare) support measures for households?"

[<https://www.20minutes.fr/economie/2890443-20201021-coronavirus-rares-mesures-soutien-prevues-menages>]. Accessed 26 November 2020

[4] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)".

[<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 26 November 2020

[5] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)".

[<http://www.cnrs.fr/fr/la-recherche>]. Accessed 26 November 2020

[6] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 9 December 2015. "Surveillance plan (Dispositif de Surveillance)". [<http://invs.santepubliquefrance.fr/Espace-professionnels/Maladies-a-declaration-obligatoire/Dispositif-de-surveillance>]. Accessed 25 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 France makes public de-identified contact tracing data. While France is conducting a serious contact-tracing effort for COVID-19, including through a mobile application and through brigades of contact tracing volunteers and personnel, there is no evidence that the data from these efforts are made public. [1] Neither the Ministry of Health, the Institute of Public Health, the National Centre for Scientific Research, or the Institute for Health Surveillance make any mention of de-identified contact tracing data. [2, 3, 4, 5] France's Public Health Department (Santé Publique France) makes available daily de-identified surveillance data on COVID-19, including number of confirmed cases (both daily and in

total since the beginning of the epidemic) by PCR and by antigen test, number of deaths in the past 24 hours and since the beginning of the epidemic, number of hospitalisations, number of COVID-19 active clusters, and the overall positivity rate for the country, but there is no mention of contacts with cases, or contact tracing efforts, and no data on contacts. [6]

[1] WHO. 16 November 2020. "Policy responses for France"

[<https://www.covid19healthsystem.org/countries/france/livinghit.aspx?Section=1.4%20Monitoring%20and%20surveillance&Type=Section>]. Accessed 26 November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)".

[<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 26 November 2020

[3] Public Health France. 17 August 2020. "COVID-19: our actions"

[<https://www.santepubliquefrance.fr/dossiers/coronavirus-covid-19/covid-19-notre-action>]. Accessed 26 November 2020

[4] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)".

[<http://www.cnrs.fr/fr/la-recherche>]. Accessed 26 November 2020

[5] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 9 December 2015. "Surveillance plan (Dispositif de Surveillance)". [<http://invs.santepubliquefrance.fr/Espace-professionnels/Maladies-a-declaration-obligatoire/Dispositif-de-surveillance>]. Accessed 25 November 2020

[6] Santé Publique France. 25 November 2020. "COVID-19 Epidemic Dashboard in numbers (COVID-19: tableau de bord de l'épidémie en chiffres)" [<https://www.santepubliquefrance.fr/dossiers/coronavirus-covid-19/coronavirus-chiffres-cles-et-evolution-de-la-covid-19-en-france-et-dans-le-monde#block-266151>] Accessed 25 November 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 that France has in place 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 only in response to active public health emergencies (covid-19). Since the onset of the COVID-19 pandemic, travellers arriving in France from certain countries are required to take a COVID-19 test and fill in a contact form so that the border control authorities can contact them and trace all their contacts in case the test is positive, but there is no evidence that this goes beyond COVID-19 or that this is part of a generalised agreement between the border control and health authorities. [1] Neither the Ministry of Health, the National Centre for Scientific Research, or the Institute for Health Surveillance make any mention of such agreements. [2, 3, 4]

[1] France24.com 4 August 2020. "France's airports mandate COVID-19 testing on arrival from 16 countries"

[<https://www.france24.com/en/20200804-france-s-charles-de-gaulle-airport-enforces-covid-19-testing-on-arrival-but-with-no-quarantine>]. Accessed 26 November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)".

[<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 26 November 2020

[3] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)".

[<http://www.cnrs.fr/fr/la-recherche>]. Accessed 26 November 2020

[4] Institute for Health Surveillance (Institut de Veille Sanitaire or "InVS"). 9 December 2015. "Surveillance plan (Dispositif de Surveillance)". [<http://invs.santepubliquefrance.fr/Espace-professionnels/Maladies-a-declaration-obligatoire/Dispositif-de-surveillance>]. Accessed 25 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

France has the capacity to conduct field epidemiology training courses in-country. In addition, there is evidence that the French government has in the past sent its citizens for training in other countries. [1] France takes part in the European Programme for Intervention Epidemiology Training (EPIET) trainings in France. [2] There are multiple EPIET and EUPHEM training sites at Santé Publique France. [3] France also had in the past its own field epidemiology training programme, run by the French Institute for Public Health Surveillance (Institut de Veille Sanitaire or "InVS") and the School of Advanced Studies in Public Health (école des hautes études en santé publique or "EHESP"), but there is evidence this has been discontinued, though no information is available as to when it was discontinued. [3, 4, 5]

[1] European Centre for Disease Prevention and Control (ECDC). March 2009. "Training strategy for intervention epidemiology in the European Union".

[https://ecdc.europa.eu/sites/portal/files/media/en/publications/Publications/0810_MER_Training_Strategy_for_Intervention_Epidemiology.pdf]. Accessed 25 November 2020

[2] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). 2018. "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 25 November 2020

[3] European Centre for Disease Control and Prevention. 2018. "Institutes/Training sites". [<https://ecdc.europa.eu/en/epiet-euphem/institutes>]. Accessed 25 November 2020

[4] Institut de Veille Sanitaire. 7 December 2011. "Field Epidemiology Training Programme".

[http://invs.santepubliquefrance.fr/en/Invs_en/About-InVS/Training]. Accessed 25 November 2020

[5] Institut de Veille Sanitaire. 2011. "Erreur/InVS". [<http://invs.santepubliquefrance.fr/Informations-generales/Erreur-InVS>]. Accessed 25 November 2020

[6] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). 2018. "France Field Epidemiology Program". [<https://www.tephinet.org/training-programs/france-field-epidemiology-program>]. Accessed 25 November 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

France has the capacity to conduct field epidemiology training courses, including for animal health professionals, in-country. In addition, there is evidence that the French government has in the past sent its citizens, including animal health professionals, for training in other countries. [1] France takes part in the European Programme for Intervention Epidemiology Training (EPIET) trainings in France which includes components for animal health professionals. [2] There are multiple EPIET and EUPHEM training sites at Santé Publique France. [3] France also had in the past its own field epidemiology training programme, run by the French Institute for Public Health Surveillance (Institut de Veille Sanitaire or "InVS") and the School of Advanced Studies in Public Health (école des hautes études en santé publique or "EHESP"), but there is evidence this has been discontinued, though no information is available as to when it was discontinued. [3, 4, 5]

[1] European Centre for Disease Prevention and Control (ECDC). March 2009. "Training strategy for intervention epidemiology in the European Union".

[https://ecdc.europa.eu/sites/portal/files/media/en/publications/Publications/0810_MER_Training_Strategy_for_Intervention_Epidemiology.pdf]. Accessed 25 November 2020

[2] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). 2018. "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 25 November 2020

[3] European Centre for Disease Control and Prevention. 2018. "Institutes/Training sites". [https://ecdc.europa.eu/en/epiet-euphem/institutes]. Accessed 25 November 2020

[4] Institut de Veille Sanitaire. 7 December 2011. "Field Epidemiology Training Programme".

[http://invs.santepubliquefrance.fr/en/Invs_en/About-InVS/Training]. Accessed 25 November 2020

[5] Institut de Veille Sanitaire. 2011. "Erreur/InVS". [http://invs.santepubliquefrance.fr/Informations-generales/Erreur-InVS]. Accessed 25 November 2020

[6] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). 2018. "France Field Epidemiology Program". [https://www.tephinet.org/training-programs/france-field-epidemiology-program]. Accessed 25 November 2020

2.6.2 Epidemiology workforce capacity

2.6.2a

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

Yes = 1 , No = 0

Current Year Score: 0

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 1

There is insufficient public evidence that France has in place a publicly available overarching national plan for responding to multiple communicable diseases with pandemic potential.

France has in place an organisational system for agencies responding to communicable diseases: the national public health emergency response plan, the Surveillance and Health Security (Veille et Sécurité Sanitaire or "VSS") plan, is not publicly available, but it involves collaboration between the Regional Intervention Cells (Cellules d'intervention en région or "Cire"), the smallest unit on a regional level, the Regional Health Agency (Agence Régionale de Santé or "ARS"), which coordinates the Cires and liaises with the higher authorities, and the Department of Health Emergencies (Département des urgences sanitaire or "DUS"), which coordinates responses on a national level and defines the roles and responsibilities of each unit in response to a public health emergency, including infectious disease events. [1, 2] However, there is no evidence that the organisational system of these agencies is linked to a formal plan for responding to infectious disease events.

The ARS is in charge of regional health security and of mounting a response in case of public health emergency, even involving multiple infectious diseases, with the support of the DUS. No specific list of diseases of endemic potential for which the country is prepared is mentioned; the description of the plan, however, states that it ensures France is prepared for multiple infectious disease events. [3] There is no additional information from the Ministry of Health or the General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). [4, 5]

[1] Public Health France (Santé Publique France). 3 May 2016. "The activities of Public Health France in regions (L'action de Santé publique France en région)". [<https://www.santepubliquefrance.fr/Sante-publique-France/L-action-de-Sante-publique-France-en-region>]. Accessed 25 November 2020

[2] Ministry of Solidarity and of Health (Ministère des solidarités et de la santé). 25 March 2015. "Organisation of surveillance and health security (Organisation de la veille et sécurité sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/article/organisation-de-la-veille-et-securite-sanitaire-vss>]. Accessed 25 November 2020

[3] Regional Health Agency (Agence Régionale de Santé). 27 January 2017. "Regional plans for surveillance and health security (Les plans régionaux de veille et sécurité sanitaire)". [<https://www.ars.sante.fr/les-plans-regionaux-de-veille-et-securite-sanitaire>]. Accessed 25 November 2020

[4] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)". [<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[5] General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). 24 October 2012. "General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et

de la gestion des crises)". [http://www.herault.gouv.fr/content/download/5120/27010/file/plaquette_dgscgc.pdf]. Accessed 27 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 public evidence that France has in place a publicly available overarching national plan for responding to multiple communicable diseases with pandemic potential that has been updated in the last three years.

An existing organisational system for responding to public health emergencies including infectious disease events is in place, involving the Regional Intervention Cells (Cellules d'intervention en région or "Cire"), Regional Health Agency (Agence Régionale de Santé or "ARS"), and the Department for Health Emergencies (Département des Urgences Sanitaires or "DUS") working together, with the Cire implementing the response at a regional level, the ARS establishing and coordinating the regional response, and the DUS coordinating at a national level. No specific list of diseases of endemic potential for which the country is prepared is mentioned, the description of this system merely stating that it ensures France is prepared for multiple infectious disease events, and there is no evidence that this is part of a plan for responding to multiple infectious disease events. [1, 2, 3]

There is no additional evidence from the Ministry of Health or the General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). [4, 5]

[1] Public Health France (Santé Publique France). 3 May 2016. "The activities of Public Health France in regions (L'action de Santé publique France en région)". [<https://www.santepubliquefrance.fr/Sante-publique-France/L-action-de-Sante-publique-France-en-region>]. Accessed 26 November 2020

[2] Regional Health Agency (Agence Régionale de Santé). 27 January 2017. "Regional plans for surveillance and health security (Les plans régionaux de veille et sécurité sanitaire)". [<https://www.ars.sante.fr/les-plans-regionaux-de-veille-et-securite-sanitaire>]. Accessed 26 November 2020

[3] Ministry of Solidarity and of Health (Ministère des solidarités et de la santé). 25 March 2015. "Organisation of surveillance and health security (Organisation de la veille et sécurité sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/article/organisation-de-la-veille-et-securite-sanitaire-vss>]. Accessed 26 November 2020

[4] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)". [<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[5] General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). 24 October 2012. "General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises)". [http://www.herault.gouv.fr/content/download/5120/27010/file/plaquette_dgscgc.pdf]. Accessed 27 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 public evidence that France has in place a publicly available overarching national plan for responding to multiple communicable diseases with pandemic potential that includes considerations for paediatric or other vulnerable populations. There is no mention of considerations for children or other vulnerable populations on the websites describing the existing national organisational system for responding to public health emergencies including infectious disease events. [1, 2, 3] There is no additional information from the Ministry of Health or the General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). [4, 5]

[1] Public Health France (Santé Publique France). 3 May 2016. "The activities of Public Health France in regions (L'action de Santé publique France en région)". [<https://www.santepubliquefrance.fr/Sante-publique-France/L-action-de-Sante-publique-France-en-region>]. Accessed 26 November 2020

[2] Regional Health Agency (Agence Régionale de Santé). 27 January 2017. "Regional plans for surveillance and health security (Les plans régionaux de veille et sécurité sanitaire)". [<https://www.ars.sante.fr/les-plans-regionaux-de-veille-et-securite-sanitaire>]. Accessed 26 November 2020

[3] Ministry of Solidarity and of Health (Ministère des solidarités et de la santé). 25 March 2015. "Organisation of surveillance and health security (Organisation de la veille et sécurité sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/article/organisation-de-la-veille-et-securite-sanitaire-vss>]. Accessed 26 November 2020

[4] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)". [<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[5] General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). 24 October 2012. "General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises)". [http://www.herault.gouv.fr/content/download/5120/27010/file/plaquette_dgscgc.pdf]. Accessed 27 November 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: 1

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

3.1.2 Private sector involvement in response planning

3.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence to prove that France has in place specific mechanisms for interacting with the private sector, including to assist with outbreak preparedness in the event of public health emergencies. France's healthcare system involves a collaboration between state organisations, non-governmental organisations (NGOs), and the private sector in its dispensing of healthcare and services anyway. [1] However, there are special provisions in place for expanded involvement of the private

sector in case of public health emergencies although details of these provisions are not publicly available, which involve the private sector providing laboratory equipment and space as well as medical countermeasures. [2] There is no additional information from the Ministry of Health, nor from the General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises) . [3, 4]

[1] Nay O, Béjean S, Benamouzig D, Bergeron H, Castel P, Ventelou B. 2016. "Achieving universal health coverage in France: policy reforms and the challenge of inequalities". [<https://www.thelancet.com/journals/lancet/article/PIIS0140-6736>

[16] 00580-8/fulltext?code=lancet-site]. The Lancet 387(10034). Accessed 26 November 2020

[2] Catherine Borretti. 2012. "Chapter 4: The French Vigilance System. Contributing to the Reduction of Disaster Risks in France". In M. Golnarahhi ed. Institutional Partnerships in Multi-Hazard EarlyWarning Systems. Berlin Heidelberg. Springer-Verlag. Accessed 26 November 2020

[3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)". [<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[4] General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). 24 October 2012. "General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises)". [http://www.herault.gouv.fr/content/download/5120/27010/file/plaquette_dgscgc.pdf]. Accessed 27 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: 1

France has in place a plan to implement non-pharmaceutical interventions (NPIs) during an epidemic of influenza. France's Influenza Pandemic National Plan, finalised in 2007, outlines specific situations (e.g. isolated human cases in France without interhuman transmission, large foci of uncontrolled clusters of human cases abroad, ...) and specific production, distribution, and usage goals for non-pharmaceutical interventions, for each of these scenarios. These specific production, distribution, and usage goals include guidelines for when to scale up the production of masks by the French industry in each of the situations described, when to reinforce the stock of health products and protective equipment, identify waste disposal sites and ensure sufficient provisions of disposal materials, as well as which populations are most in need of these NPIs in each scenario (e.g. elderly population in care homes, fragile or handicapped people, children, etc...). While the Influenza Pandemic National Plan states it could be applied to other diseases too, it only outlines a response to one disease at a time, and does not include measures for dealing with multiple infectious diseases. [1]

[1] General Secretariat for National Defence. 9 January 2007. "National Plan for the prevention and control 'Influenza Pandemic'" [https://solidarites-sante.gouv.fr/IMG/pdf/planpandemiegrippale_anglais.pdf]. Accessed 26 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: 0

Although there is evidence through media sources that France has in the past year activated their national emergency response plan for an infectious disease outbreak, there is no publicly available evidence as to which emergency response plan was put into motion. There is no evidence that France has conducted in the past year a national-level biological threat-focused exercise.

France declared a national emergency in response to the COVID-19 pandemic in 2020, but there is no mention of the name of the plan that was implemented to respond to the pandemic, nor of any details of what measures the plan contains. [1] There is no evidence from the WHO that France has completed a biological threat-focused exercise in the past year. [2] There is no additional evidence from the Ministry of Health, nor from the General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). [3, 4]

[1] Reuters. 15 October 2020. "France declares public health state of emergency over COVID-19"

[<https://www.reuters.com/article/us-health-coronavirus-france-emergency-idUSKBN26Z2PQ>]. Accessed 27 November 2020

[2] World Health Organization (WHO). 2020. "Simulation exercise" [<https://extranet.who.int/sph/simulation-exercise>].

Accessed 27 November 2020

[3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)".

[<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[4] General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). 24 October 2012. "General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises)". [http://www.herault.gouv.fr/content/download/5120/27010/file/plaquette_dgscgc.pdf]. Accessed 27 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 evidence that France has within the past year identified or published a list of gaps and best responses in public health response, or developed a plan to improve response capabilities. France has not conducted an After-Action Review, according to the WHO. [1] The last published Health Systems Review France published dates back to 2015. [2] There is no additional evidence from the Ministry of Health or the General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). [3, 4]

[1] WHO. 2020. "After-Action Review" [<https://extranet.who.int/sph/after-action-review>] Accessed 27 November 2020

[2] European Observatory On Health Systems and Policies. 2015. "France: Health Systems Review"

[https://www.euro.who.int/__data/assets/pdf_file/0011/297938/France-HiT.pdf] Accessed 27 November 2020

[3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)".

[<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[4] General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). 24 October 2012. "General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises)". [http://www.herault.gouv.fr/content/download/5120/27010/file/plaquette_dgscgc.pdf]. Accessed 27 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 France has conducted in the past year a national-level biological threat-focused exercise that has included private sector representatives. The WHO shows no evidence that France completed a biological threat-focused exercise in the past year or an After-Action Review. [1, 2, 3] Neither the Ministry of Health, the Ministry of Agriculture, or the Emergency Management Agency (Centre opérationnel de gestion interministérielle des crises or COGIC) make any mention of such an exercise. [4, 5, 6]

[1] WHO. 2020. "Simulation exercise" [<https://extranet.who.int/sph/simulation-exercise>]. Accessed 27 November 2020

[2] WHO. 2020. "After-Action Review" [<https://extranet.who.int/sph/after-action-review>] Accessed 27 November 2020

[3] WHO. 2020. "France" [<https://www.who.int/countries/fra/fr/>] Accessed 27 November 2020

[4] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)".

[<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 27 November 2020

[5] Ministry of Agriculture (Ministère de l'Agriculture). "Directions and Services". [<http://agriculture.gouv.fr/directions-et-services>]. Accessed 27 November 2020

[6] Ministry of Interior. "Emergency Management Agency (Centre opérationnel de gestion interministérielle des crises or COGIC)" [<https://www.interieur.gouv.fr/Archives/Archives-publications/Archives-infographies/Securite-des-biens-et-des-personnes/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/Centre-operationnel-de-gestion-interministerielle-des-crisis-COGIC>]. Accessed 27 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

France has in place an Emergency Operations Centre (EOC), both at national and regional level.

France's Inter-ministerial Emergency Operations Centre (Centre opérationnel de gestion interministérielle des crises or COGIC) is the national emergency operations centre, which is responsible for analysing and managing natural and technological emergencies, including health emergencies, and for coordinating communication between different ministries and EOCs at different levels. It is located in Asnières, just outside of Paris. This EOC centralises all decisions, puts into action rescue or management protocols depending on the emergency, and decides on the sending of human resources and materials to affected areas. [1]

The French states ("départements") have regional EOCs, called Departmental Operational Centres (Centres opérationnels départementaux or CODs), which are at the disposal of the departmental prefects, who can activate them in case of a major event within their department. These CODs are responsible for coordinating activities of civil security, police and other emergency services, any State services involves, as well as representatives of the communities, and liaising with the national EOC. [2]

[1] Ministry of the Interior (Ministère de l'intérieur). 12 February 2018. "Inter-ministerial Emergency Operations Centre (Centre opérationnel de gestion interministérielle des crises or COGIC)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/Centre-operationnel-de-gestion-interministerielle-des-crisis-COGIC>]. Accessed 26 November 2020

[2] Ministry of the Interior (Ministère de l'intérieur). 12 February 2018. "What is a Departmental Operational Centre? (Qu'est-ce qu'un centre opérationnel départemental (COD) ?)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/Qu-est-ce-qu-un-centre-operationnel-departemental-COD>]. Accessed 26 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 evidence that the French Emergency Operation Centres (EOCs), neither at regional nor at national level, are required to carry out annual drills or have carried out such drills. The French government's description of the national Inter-ministerial Emergency Operations Centre (Centre opérationnel de gestion interministérielle des crises or COGIC) and of the Departmental Operational Centres (Centres opérationnels départementaux or CODs), while giving details of the functions of these EOCs, makes no mention of whether they are required to carry out drills. [1, 2] The Government's publicly available information on its response in the event of emergencies also gives no information as to whether drills are required. [3] There

is no evidence of a requirement to carry out drills from the Ministry of Health, and annual reports make no mention of such a requirement. [4, 5]

[1] Ministry of the Interior (Ministère de l'intérieur). 12 February 2018. "Inter-ministerial Emergency Operations Centre (Centre opérationnel de gestion interministérielle des crises or COGIC)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/Centre-operationnel-de-gestion-interministerielle-des-cris-COGIC>]. Accessed 26 November 2020

[2] Ministry of the Interior (Ministère de l'intérieur). 12 February 2018. "What is a Departmental Operational Centre? (Qu'est-ce qu'un centre opérationnel départemental (COD) ?)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/Qu-est-ce-qu-un-centre-operationnel-departemental-COD>]. Accessed 26 November 2020

[3] Ministry of the Interior (Ministère de l'intérieur). 2020. "Mobilisation of the State in case of Emergencies (Mobilisation de l'état en temps de crise)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise>]. Accessed 26 November 2020

[4] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 26 November 2020

[5] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Activity reports of the CEPS (Rapports d'activité du CEPS)". [<https://solidarites-sante.gouv.fr/ministere/acteurs/instances-rattachees/article/rapports-d-activite-du-ceps>]. Accessed 26 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 publicly available evidence to suggest that France's EOC can conduct or has conducted within the last year, an emergency response, or an emergency response exercise, activated within 120 minutes.

The French government's description of the national Inter-ministerial Emergency Operations Centre (Centre opérationnel de gestion interministérielle des crises or COGIC) and of the Departmental Operational Centres (Centres opérationnels départementaux or CODs), while giving details of the functions of these EOCs, makes no mention as to activation times. [1, 2] The Government's publicly available information on its response in the event of emergencies also gives no information as to activation times. [3]

The General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises) published in 2012 a leaflet summing up emergency responder stakeholders, but made no mention of activation times. [4] In 2014, the General Direction of Civil Safety and Crisis Management published a report on National Capabilities for Civil Safety and Arrangements for Engagement in case of Catastrophes (Moyens nationaux de la sécurité civile et modalités d'engagement en situation de catastrophe), which states that activation times for the fire services are of 3 hours, but no mention is made of the activation times for the COGIC, the CODs, or even of other emergency services. [5]

There is no evidence of an emergency response activated within 120 minutes in the last year, even for COVID-19, neither from the Ministry of Health, nor from annual activity reports. [6, 7]

- [1] Ministry of the Interior (Ministère de l'intérieur). 12 February 2018. "Inter-ministerial Emergency Operations Centre (Centre opérationnel de gestion interministérielle des crises or COGIC)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/Centre-operationnel-de-gestion-interministerielle-des-crisis-COGIC>]. Accessed 27 November 2020
- [2] Ministry of the Interior (Ministère de l'intérieur). 12 February 2018. "What is a Departmental Operational Centre? (Qu'est-ce qu'un centre opérationnel départemental (COD) ?)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/Qu-est-ce-qu-un-centre-operationnel-departemental-COD>]. Accessed 27 November 2020
- [3] Ministry of the Interior (Ministère de l'intérieur). 2020. "Mobilisation of the State in case of Emergencies (Mobilisation de l'état en temps de crise)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise>]. Accessed 27 November 2020
- [4] General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). 24 October 2012. "General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises)". [http://www.herault.gouv.fr/content/download/5120/27010/file/plaquette_dgscgc.pdf]. Accessed 27 November 2020
- [5] General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). April 2014. "ational Capabilities for Civil Safety and Arrangements for Engagement in case of Catastrophes (Moyens nationaux de la sécurité civile et modalités d'engagement en situation de catastrophe)". [<http://www.urgences-serveur.fr/IMG/pdf/securitecivile2014.pdf>]. Accessed 27 November 2020
- [6] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 27 November 2020
- [7] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Activity reports of the CEPS (Rapports d'activité du CEPS)". [<https://solidarites-sante.gouv.fr/ministere/acteurs/instances-rattachees/article/rapports-d-activite-du-ceps>]. Accessed 27 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 evidence that France has conducted in the past year at least one exercise to practice responding to potential deliberate biological events, but there are no publicly available guidelines that France has instated to respond to deliberate biological events. There is no evidence that France has made publicly available standard operating procedures or other agreements between the public health and security authorities to respond to a potential deliberate biological event. The most recent exercise by public health officials and national security forces was carried out in October 2019 in the department of Yvelines, in conjunction with the Indian public health officials and security forces, involving a response to a simulated

bioterrorism event by the Directorate General for Civil Security and Crisis Management (DGSCGC), the Paris Fire Brigade (BSPF), the National Gendarmerie's Armoured Division (GBGN), and the Training Centre for Chemical, Biological, Radiological and Nuclear (CBRN). [1] There is no additional information from the Ministry of Health or the General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises) as to the exercise to practice responding to a potential deliberate biological event, nor as to any publicly available agreements between the public health and security authorities. [2, 3]

[1] Business Standard. 30 September 2019. "Indo-French joint exercise on bio-terrorism from Oct 1" [https://www.business-standard.com/article/pti-stories/indo-french-joint-exercise-on-bio-terrorism-from-oct-1-119093001028_1.html]. Accessed 27 November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)". [<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 November 2020

[3] General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises). 24 October 2012. "General Direction of Civil Safety and Crisis Management (Direction générale de la Sécurité civile et de la gestion des crises)". [http://www.herault.gouv.fr/content/download/5120/27010/file/plaquette_dgscgc.pdf]. Accessed 27 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 no publicly available information to suggest that France's public health crisis communication strategy outlines how messages will reach populations and sectors with different communications needs. France's Centre of Health Crisis (Centre de Crise Sanitaire or CSS), activated in case of a public health emergency, is responsible for implementing the Communications Cell (Cellule de Communication), which handles all communication with the population and the media regarding risks, response strategy, and advice. However, there is no public information available from this Cell regarding how messages will reach populations with different communication needs. [1] The Law authorising adherence to the convention on the provision of telecommunication resources to attenuate the effects of emergencies and for rescue operations in case of emergencies, which was adopted in 2007 by the French Senate, detailing how telecommunications will be arranged in the event of any emergency, including public health emergencies, also makes no mention of any provisions for reaching populations with different communication needs. [2, 3] There is no additional information from the Ministry of Health. [4]

[1] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 6 January 2016. "Organisation of crisis management (Organisation de la gestion de crise)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/article/organisation-de-la-gestion-de-crise>]. Accessed 26 November 2020

[2] National Assembly (Assemblée Nationale). 21 August 2007. "Law Project authorising adherence to the convention on the provision of telecommunication resources to attenuate the effects of emergencies and for rescue operations in case of emergencies (Projet de loi autorisant l'adhésion à la convention sur la mise à disposition de ressources de télécommunication pour l'atténuation des effets des catastrophes et pour les opérations de secours en cas de catastrophe)".

[<http://www.assemblee-nationale.fr/13/projets/pl0115.asp>]. Accessed 26 November 2020

[3] Ministry of the Interior (Ministère de l'Intérieur). 13 June 2016. "The SAIP application: Population Alert and Information System (L'application SAIP : Système d'Alerte et d'Information des Populations)".

[<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/L-application-SAIP-Systeme-d-Alerte-et-d-Information-des-Populations>]. Accessed 26 November 2020

[4] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)".

[<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 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: 1

France has in place a set of guidelines detailing a risk communication plan that is specifically intended for use during emergencies, including public health emergencies.

France has a department, the General Direction of Health (Direction Générale de la Santé or DGS), whose responsibility it is to activate the Centre of Health Crisis (Centre de Crise Sanitaire or CSS) in case of a public health emergency. The CSS is responsible for implementing the Communications Cell (Cellule de Communication), which is responsible for risk communication and drawing up a risk communications plan specific to the public health emergency at hand, and as such handles all communication with the population and the media regarding risks, response strategy, and advice. [1]

In addition, France has a law, the Law authorising adherence to the convention on the provision of telecommunication resources to attenuate the effects of emergencies and for rescue operations in case of emergencies, which was adopted in 2007 by the French Senate, detailing how telecommunications will be arranged in the event of any emergency, including a public health emergency. This law set out the legal basis for what parties at the national and regional level will use telecommunications, the setup of telecommunications assistance, and the installation and setup of reliable telecommunications used by relief organisations and human resources involved in responding to the emergency. [2]

[1] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 6 January 2016. "Organisation of crisis management (Organisation de la gestion de crise)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/article/organisation-de-la-gestion-de-crise>]. Accessed 26 November 2020

[2] National Assembly (Assemblée Nationale). 21 August 2007. "Law Project authorising adherence to the convention on the provision of telecommunication resources to attenuate the effects of emergencies and for rescue operations in case of emergencies (Projet de loi autorisant l'adhésion à la convention sur la mise à disposition de ressources de télécommunication pour l'atténuation des effets des catastrophes et pour les opérations de secours en cas de catastrophe)".

[<http://www.assemblee-nationale.fr/13/projets/pl0115.asp>]. Accessed 26 November 2020

[3] Ministry of the Interior (Ministère de l'Intérieur). 13 June 2016. "The SAIP application: Population Alert and Information System (L'application SAIP : Système d'Alerte et d'Information des Populations)".

[<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/L-application-SAIP-Systeme-d-Alerte-et-d-Information-des-Populations>]. Accessed 26 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 insufficient evidence that France's risk communications plan designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. The public health emergency response protocol dictates that in the event of a public health emergency, there will be a communications team set up specifically to communicate to external stakeholders including the general population and the media. [1] However, there is no evidence of a specific position designated as primary spokesperson in the event of a public health emergency, neither by this protocol, nor from the Ministry of Health. [1, 2]

[1] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Public Health warnings and crises management (Gestion des alertes et des crises sanitaires)" [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/article/la-gestion-des-alertes-et-des-crisis-sanitaires>]. Accessed 27 November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 27 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

There is evidence that the French public health system has actively shared messages via online media platforms to inform the public about ongoing public health concerns and to dispel misinformation and disinformation. The French Ministry of Health is very active on social media and shares health-related information daily, on topics such as cancer prevention, HIV/AIDS prevention, influenza vaccination reminders, as well as information about disease symptoms, at-risk groups, and how to seek help, and has also shared advice on how to recognise false information and rumours circulating online, as opposed to real medical facts. [1, 2] The Ministry of Health has been regularly sharing information about COVID-19 throughout the pandemic. [1]

[1] Twitter. 2020 "Ministry of Health"

[https://twitter.com/MinSoliSante?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor] Accessed 27 November 2020

[2] Twitter. 8 December 2018. "Fake news or not, how to tell?"

[<https://twitter.com/MinSoliSante/status/1071326244778721281>] Accessed 27 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 senior leaders in France have shared misinformation or disinformation on infectious diseases within the last two years. There is evidence that major efforts to expose misinformation and disinformation about public health and more general information have not found France's senior leaders to have shared any misinformation or disinformation. [1, 2] The major national news outlets make no mention of any misinformation or disinformation on infectious diseases. [3, 4, 5, 6]

- [1] franceinfo. 4 June 2020. "Coronavirus: which are the false information "super propagator" Twitter accounts in France? (Coronavirus : quels sont les comptes Twitter "super propageurs" de fausses informations en France ?)" [https://www.francetvinfo.fr/sante/maladie/coronavirus/coronavirus-quels-sont-les-comptes-twitter-super-propagateurs-de-fausses-informations-en-france_3982961.html]. Accessed 27 november 2020
- [2] 20minutes.fr 7 June 2020. "Coronavirus: which are the false information "super propagator" Twitter accounts in France? (Coronavirus : quels sont les comptes Twitter "super propageurs" de fausses informations en France ?)" [<https://www.20minutes.fr/high-tech/2793955-20200607-coronavirus-comptes-twitter-super-diffuseurs-fausses-informations-france>]. Accessed 27 November 2020
- [3] Le Monde. "Health (Santé)" [<https://www.lemonde.fr/sante/>]. Accessed 6 December 2020
- [4] Le Figaro. "Health (Santé)" [<https://sante.lefigaro.fr/>]. Accessed 6 December 2020
- [5] Le Parisien. "Health (Santé)" [<https://www.leparisien.fr/societe/sante/>]. Accessed 6 December 2020
- [6] Le Point. "Health (Santé)" [<https://www.lepoint.fr/sante/>]. Accessed 6 December 2020

3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

3.6.1 Internet users

3.6.1a

Percentage of households with Internet

Input number

Current Year Score: 83.34

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: 110.61

2019

International Telecommunication Union (ITU)

3.6.3 Female access to a mobile phone

3.6.3a

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

Input number

Current Year Score: 0

2019

Gallup; Economist Impact calculation

3.6.4 Female access to the Internet

3.6.4a

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

Input number

Current Year Score: 4.0

2019

Gallup; Economist Impact calculation

3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

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

Yes = 0 , No = 1

Current Year Score: 0

There is evidence that France, in the pas year, has issued a restriction, without international/bilateral support, on the export/import of medical goods (e.g. medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak. On 14 March 2020, in light of the pandemic, the European Union (EU), of which France is a member, adopted Regulation 2020/402, under which special authorization was required to export personal protective equipment (masks, gloves, goggles, face shields and overalls) out of the EU. [1] On 23 April 2020 this was superseded by a new regulation, numbered 2020/568, under which authorization was required to export personal protective equipment out of the EU, except to Albania, Andorra, Bosnia, the Faroe Islands, Gibraltar, Iceland, Kosovo, Liechtenstein, Montenegro, Norway, North Macedonia, San Marino, Serbia and Switzerland. [2] However, there is no other evidence of such restrictions either from the Ministry of Health, the Ministry of

Agriculture, or the Customs Agency. [3, 4, 5]

- [1] European Commission. Commission Implementing Regulation (EU) 2020/402 of 14 March 2020. "Making the exportation of certain products subject to the production of an export authorisation." [<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R0402>]. Accessed 7 August 2020.
- [2] European Commission. Commission Implementing Regulation (EU) 2020/568 of 23 April 2020. "Making the exportation of certain products subject to the production of an export authorisation." [<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R0568>]. Accessed 7 August 2020.
- [3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 27 November 2020
- [4] Ministry of Agriculture (Ministère de l'Agriculture). "Directions and Services". [<http://agriculture.gouv.fr/directions-et-services>]. Accessed 27 November 2020
- [5] Customs. 2020. "Circulation restrictions or prohibition of certain wares (Restriction de circulation ou interdiction de certaines marchandises)" [<https://www.douane.gouv.fr/fiche/restriction-de-circulation-ou-interdiction-de-certaines-marchandises>]. Accessed 27 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 France has issued a restriction without international or bilateral support on the import or export of non-medical goods due to an infectious disease outbreak in the past year. There is no evidence of such restrictions either from the Ministry of Health, the Ministry of Agriculture, or the Customs Agency.[1, 2, 3]

- [1] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 27 November 2020
- [2] Ministry of Agriculture (Ministère de l'Agriculture). "Directions and Services". [<http://agriculture.gouv.fr/directions-et-services>]. Accessed 27 November 2020
- [3] Customs. 2020. "Circulation restrictions or prohibition of certain wares (Restriction de circulation ou interdiction de certaines marchandises)" [<https://www.douane.gouv.fr/fiche/restriction-de-circulation-ou-interdiction-de-certaines-marchandises>]. Accessed 27 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

There is evidence that France has implemented a ban on travellers arriving from certain countries in the past year due to an infectious disease outbreak, but there is no evidence this ban was implemented with international or bilateral support. Due to the COVID-19 pandemic, France closed its borders entirely to "all but essential" travel from the 11th of May 2020 until the

15th of June 2020, to reduce the risk of spread. However, there is no evidence that this ban was put in place with international support. [1]

[1] Travelbans. 2020. "France" [<https://travelbans.org/europe/france/>]. Accessed 27 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: 326.72

2018

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 1147.07

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 insufficient evidence that France has in place a workforce strategy to identify fields where there is an insufficient workforce as well as strategies to address these shortcomings that was written in the past five years.

A report written in 2015 by the European Observatory on Health Systems and Policies, "France: Health System Review", states that in France, the health workforce strategy involves planning performed at the national level by taking into account educational capacity, and regulating the number of people trained each year to prevent health workforce shortages or oversupply. This strategy is in place as of 2017. [1] However, this workforce strategy is not publicly available, neither from the Ministry of Education, nor from the Ministries of Health or Labour, both of which merely state that such a strategy exists. [2, 3, 4] Details of this strategy are not publicly available.

[1] European Observatory on Health Systems and Policies and World Health Organisation (WHO). 2015. "France: Health System Review". [http://www.euro.who.int/__data/assets/pdf_file/0011/297938/France-HiT.pdf]. Accessed 26 November 2020

[2] Ministry of Education. 2020. "National Education in Numbers, 2018 (L'éducation nationale en chiffres 2018)". [<http://www.education.gouv.fr/cid57111/l-education-nationale-en-chiffres.html>]. Accessed 26 November 2020

[3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 3 May 2018. "How many doctors in 2040? (Combien de médecins en 2040 ?)". [<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/publications/article/combien-de-medecins-en-2040>]. Accessed 26 November 2020

[4] Ministry of Labour. "Ministry of Labour Workforce". [http://www.financespubliques.fr/glossaire/terme/effectifs_travail/]. Accessed 26 November 2020

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 591

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

France has the capacity to isolate patients with highly infectious diseases, both in high level isolation units (HLIUs) and in patient isolation facilities. The French Ministry of Health has issued guidelines on the isolation of patients with highly infectious diseases within hospital isolation facilities: while the government does not impose a model of isolation facilities at a national level, these guidelines are intended to help hospitals draw up or refresh isolation protocols. [1] France also has 5 hospitals equipped with specific HLIUs, designed for patients infected with particularly dangerous and highly infectious pathogens. [2] These HLIUs contain sealed rooms and are provided with negative pressure as well as high-efficiency particulate air (HEPA) filtration of air to prevent airborne contamination. [3]

[1] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 23 September 2016. "Hospital-acquired infections: recommendations for healthcare establishments (Infections Nosocomiales : recommandations destinées aux établissements de soins)". [<https://solidarites-sante.gouv.fr/soins-et-maladies/qualite-des-soins-et-pratiques/securite/infections-associees-aux-soins-ias/article/infections-nosocomiales-recommandations-destinee-aux-etablissements-de-soins>]. Accessed 26 November 2020

[2] Schilling S, Fusco FM, De Iaco G, Bannister B, Maltezou HC, Carson G, Gottschalk R, Brodt HR, Brouqui P, Puro V, Ippolito G. 2014. "Isolation Facilities for Highly Infectious Diseases in Europe - A Cross-Sectional Analysis in 16 Countries". PLoS One 9 [10] : e100401. [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4211666/>]. Accessed 26 November 2020

[3] Fusco FM, Schilling S, Puro V, Brodt HR, Follin P, Jarhall B, Bannister B, Maltezou HC, Thomson G, Brouqui P, Ippolito G. 2009. "EuroNHID checklists for the assessment of high-level isolation units and referral centres for highly infectious diseases: results from the pilot phase of a European survey". Clinical Microbiology and Infection 15

[8] : 711-719. [<https://www.sciencedirect.com/science/article/pii/S1198743X14604560>]. Accessed 26 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: 1

There is evidence that France has expanded isolation capacity in response to an infectious disease outbreak in the past two years. There is no evidence that France has developed, updated, or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years. According to the WHO, France opened isolation centres in hostels for confirmed or suspected cases of COVID-19 who were not able to self-isolate at home during the pandemic in 2020-2021. [1] Suspected and confirmed cases were encouraged by the French Government to self-isolate at home where possible, so that the expanded isolation facilities were reserved for the isolation of people who were not able to self-isolate (e.g. visitors, tourists). [2, 3] There is no evidence that France has developed, updated, or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years, neither from the Ministry of Health, nor from the national Inter-ministerial Emergency Operations Centre (Centre opérationnel de gestion interministérielle des crises or COGIC) or the Departmental Operational Centres (Centres opérationnels départementaux or CODs). [4, 5, 6]

[1] WHO. "COVID-19 Health System Response Monitor"

[<https://www.covid19healthsystem.org/countries/france/livinghit.aspx?Section=1.3%20Isolation%20and%20quarantine&Type=Section>]. Accessed 30 April 2021

[2] French Government. 3 April 2021. "The Actions of the Government (Les actions du gouvernement)"

[<https://www.gouvernement.fr/info-coronavirus/les-actions-du-gouvernement>]. Accessed 30 April 2021

[3] French Government. 7 January 2021. "Test - Alert - Protect (Tester - Alerter - Protéger)"

[<https://www.gouvernement.fr/info-coronavirus/tests-et-depistage>]. Accessed 30 April 2021

[4] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)".

[<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 30 April 2021

[5] Ministry of the Interior (Ministère de l'intérieur). 12 February 2018. "Inter-ministerial Emergency Operations Centre (Centre opérationnel de gestion interministérielle des crises or COGIC)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/Centre-operationnel-de-gestion-interministerielle-des-cris-COGIC>]. Accessed 30 April 2021

[6] Ministry of the Interior (Ministère de l'intérieur). 12 February 2018. "What is a Departmental Operational Centre? (Qu'est-ce qu'un centre opérationnel départemental (COD) ?)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/Qu-est-ce-qu-un-centre-operationnel-departemental-COD>]. Accessed 30 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

France has in place a national procurement system in place which can be utilised by the Ministries of Health and Agriculture for the acquisition of laboratory and medical supplies.

All procurers, including French hospitals, the Ministry of Health, and the Ministry of Agriculture, must comply with a system of open tenders for procurement for medical and laboratory supplies, equipment, and health products, which follows the following pattern: the end user makes a demand for new equipment to the purchasing department of the hospital, followed by an oral request to the purchasing committee; if this request is approved, it is passed on to the French Department of Health to obtain a national-level authorisation for the purchase of laboratory and medical supplies; if approved, the request is published as a call for public tenders; the winning bidder is determined by a purchasing committee. This procedure is followed for all procurement needs in French hospitals by the Ministry of Health and Ministry of Agriculture. [1]

In addition, the French National Centre for Scientific Research (Centre National de Recherche Scientifique or CNRS) has set out general steps to be followed for procurement by the Ministry of Health and the Ministry of Agriculture, depending on what material needs to be purchased. These steps involve defining the exact need for equipment, planning the purchase, establishing the equipment's specifications, consulting a specialist and researching technical information, selecting the appropriate equipment, verifying the availability of the material, asking for a quote and respecting CNRS's purchasing procedures, submitting the purchase for approval, and formalising the purchase request. [2]

[1] Michael Reiter, Mark Nicholls, Eduardo de la Sota, Jane Mac-Dougall. 12 November 2012. "The needs of European hospitals are similar." [<https://healthcare-in-europe.com/en/news/the-needs-of-european-hospitals-are-similar.html>]. Accessed 27 November 2020

[2] National Centre for Scientific Research (Centre National de Recherche Scientifique. December 2005. "Steps for procurement of new equipment (Démarche d'achat d'un nouvel équipement)". [http://qualite-en-recherche.cnrs.fr/IMG/pdf/beche_guillot_poster_A4.pdf]. Accessed 27 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: 2

France keeps a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency. [1]

Public Health France, the government institution responsible for all public health matters in France, a unit (the Pharmaceutical Establishment Unit) exists to manage the stockpile of medications, medical supplies, and countermeasures for the State, to be prepared in the event of a public health emergency. A constant stockpile is maintained of medications (including antiviral medicines, antibiotics, and antidotes), medical supplies (including surgical masks, personal protective equipment (PPE), pipettes, medical gauze, etc), and medical countermeasures (including vaccines and diagnostic tests). [2]

France also has an agreement in place with manufacturers or distributors to procure medical supplies and countermeasures for national use during a public health emergency, but this appears only to be the case for preparedness in the event of an influenza pandemic. France's National Prevention and Management Plan for Influenza states that a national strategy exists for the procurement of medical supplies and countermeasures in the event of an influenza pandemic, but does not give details of this strategy. [3]

In addition, France is part of the European Union's (EU) Joint Procurement Agreement to procure medical supplies, which enables signatories to conduct a joint procurement procedure with other signatories to purchase vaccines, antiviral medication, and other medical supplies and countermeasures for public health emergencies. [4]

[1] Elbe S, Roemer-Mahler A, Long C. 2015. "Medical countermeasures for national security: A new government role in the pharmaceuticalization of society." *Social Science & Medicine* 131: 263-271.

[<https://www.sciencedirect.com/science/article/pii/S0277953614002664>]. Accessed 27 November 2020

[2] Public Health France (Santé Publique France). 2 July 2018. "Management of strategic stocks of medical countermeasures (Gestion des stocks stratégiques de produits de santé)". [<https://www.santepubliquefrance.fr/Sante-publique-France/Qui-sommes-nous/Organisation/Direction-alerte-et-cries/Etablissement-pharmaceutique/Gestion-des-stocks-strategiques-de-produits-de-sante>]. Accessed 27 November 2020

[3] French Government. October 2011. "National Prevention and Management Plan for Influenza Pandemic (Plan national de prévention et de lutte "Pandémie grippale")". [<http://docplayer.fr/9890318-Plan-national-de-prevention-et-de-lutte-pandemie-document-d-aide-a-la-preparation-et-a-la-decision-n-850-sgdsn-pse-psn-octobre-2011.html>]. Accessed 27 November 2020

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

[https://ec.europa.eu/health/preparedness_response/joint_procurement/jpa_signature_en]. Accessed 27 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: 1

France maintains a stockpile of laboratory supplies for national use during a public health emergency but there is no evidence of what is included. [1]

Public Health France, the government institution responsible for all public health matters in France, a unit (the Pharmaceutical Establishment Unit) exists to manage the stockpile of medical and laboratory supplies (although there are no specific details as to what these supplies are limited to) for the State, to be prepared in the event of a public health emergency. [2]

France also has an agreement in place with manufacturers or distributors to procure laboratory supplies for national use during a public health emergency, but this appears only to be the case for preparedness in the event of an influenza pandemic. France's National Prevention and Management Plan for Influenza states that a national strategy exists for the procurement of laboratory supplies in the event of an influenza pandemic, but does not give details of this strategy. [3]

In addition, France is part of the European Union's (EU) Joint Procurement Agreement to procure laboratory supplies, which enables signatories to conduct a joint procurement procedure with other signatories to purchase laboratory supplies for public health emergencies. [4]

[1] Elbe S, Roemer-Mahler A, Long C. 2015. "Medical countermeasures for national security: A new government role in the pharmaceuticalization of society." *Social Science & Medicine* 131: 263-271.

[https://www.sciencedirect.com/science/article/pii/S0277953614002664]. Accessed 27 November 2020

[2] Public Health France (Santé Publique France). 2 July 2018. "Management of strategic stocks of medical countermeasures (Gestion des stocks stratégiques de produits de santé)". [https://www.santepubliquefrance.fr/Sante-publique-France/Qui-sommes-nous/Organisation/Direction-alerte-et-crisis/Etablissement-pharmaceutique/Gestion-des-stocks-strategiques-de-produits-de-sante]. Accessed 27 November 2020

[3] French Government. October 2011. "National Prevention and Management Plan for Influenza Pandemic (Plan national de prévention et de lutte "Pandémie grippale)". [http://docplayer.fr/9890318-Plan-national-de-prevention-et-de-lutte-pandemie-document-d-aide-a-la-preparation-et-a-la-decision-n-850-sgdsn-pse-psn-octobre-2011.html]. Accessed 27 November 2020

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

[https://ec.europa.eu/health/preparedness_response/joint_procurement/jpa_signature_en]. Accessed 27 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: 0

There is insufficient public evidence that France conducts an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency. The national public health agency, Public Health France (Santé Publique France), mentions that it is responsible for reviewing state health materials and products in case of a public health emergency, but there is no information available as to how often the review is conducted, nor of what specific materials the review assesses stockpiles. [1, 2] There is no further evidence from the Ministry of Health, nor from the national Inter-ministerial Emergency Operations Centre (Centre opérationnel de gestion interministérielle des crises or COGIC) or the Departmental Operational

Centres (Centres opérationnels départementaux or CODs). [3, 4, 5]

- [1] Public Health France. 11 July 2019. "Directorate of warnings and crises (Direction alerte et crises)" [<https://www.santepubliquefrance.fr/a-propos/notre-organisation/une-organisation-au-service-des-programmes/direction-alerte-et-crises>]. Accessed 30 April 2021
- [2] Public Health France. May 2019. "Experts' opinion relating to the strategy of preparing a stock of medical countermeasures in preparation for an influenza pandemic (Avis d'experts relatif à la stratégie de constitution d'un stock de contre-mesures médicales face à une pandémie grippale)" [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKewi3n_bepK_wAhVLCqYKHU59ABEQFjABegQIAxAD&url=https%3A%2F%2Fwww.santepubliquefrance.fr%2Fcontent%2Fdownload%2F186926%2F2320488&usg=AOvVaw3Z7_b0wJVE111Id5ihoYTp] Accessed 30 April 2021
- [3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 30 April 2021
- [4] Ministry of the Interior (Ministère de l'intérieur). 12 February 2018. "Inter-ministerial Emergency Operations Centre (Centre opérationnel de gestion interministérielle des crises or COGIC)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/Centre-operationnel-de-gestion-interministerielle-des-crisis-COGIC>]. Accessed 30 April 2021
- [5] Ministry of the Interior (Ministère de l'intérieur). 12 February 2018. "What is a Departmental Operational Centre? (Qu'est-ce qu'un centre opérationnel départemental (COD) ?)". [<https://www.interieur.gouv.fr/Publications/Nos-infographies/Securite-des-biens-et-des-personnes/Mobilisation-de-l-Etat-en-temps-de-crise/Qu-est-ce-qu-un-centre-operationnel-departemental-COD>]. Accessed 30 April 2021

4.2.3 Manufacturing and procurement for emergencies

4.2.3a

Does the country meet one of the following criteria?

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

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

Current Year Score: 1

There is evidence that France has in place a plan that involves leveraging domestic manufacturing capacity to produce medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency. There is also evidence of a plan/mechanism to procure medical supplies for national use during a public health emergency. France's National Plan for the prevention and control: Pandemic Influenza, drawn up in 2007, specifically states that France can, in the event of a pandemic, leverage national manufacturing capabilities to produce medical countermeasures and supplies such as masks, antiviral drugs, and vaccines. France also has in place an agreement with manufacturers or distributors to procure MCMs for national use during a public health emergency. The plan (which clarifies that it could be used in the events of certain other public health emergencies) states that a national strategy exists for the procurement of MCMs in the event of an influenza pandemic, but does not give details of this strategy. [1] In addition, France is part of the European Union's (EU) Joint Procurement Agreement to procure medical supplies and countermeasures, which enables signatories to conduct a joint procurement procedure with other signatories to purchase medical supplies and countermeasures for public health emergencies. [2]

[1] General Secretariat for National Defence. 9 January 2007. "National Plan for the prevention and control: Pandemic Influenza" [https://solidarites-sante.gouv.fr/IMG/pdf/planpandemiegrippale_anglais.pdf]. Accessed 27 November 2020

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

[https://ec.europa.eu/health/preparedness_response/joint_procurement/jpa_signature_en]. Accessed 27 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: 1

There is evidence to show that France has in place a plan to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency, and that France has in place a mechanism to procure laboratory supplies for national use during a public health emergency. France has in place an agreement in place with manufacturers or distributors to procure laboratory needs for national use during a public health emergency, but this appears only to be the case for preparedness in the event of an influenza pandemic (although the plan states this plan could be used in the events of certain other public health emergencies). France's National Prevention and Management Plan for Influenza states that a national strategy exists for the procurement of laboratory supplies in the event of an influenza pandemic, but does not give details of this strategy. [1] France is part of the European Union's (EU) Joint Procurement Agreement to procure laboratory needs, which enables signatories to conduct a joint procurement procedure with other signatories to purchase such laboratory supplies for public health emergencies. [2]

[1] General Secretariat for National Defence. 9 January 2007. "National Plan for the prevention and control: Pandemic Influenza" [https://solidarites-sante.gouv.fr/IMG/pdf/planpandemiegrippale_anglais.pdf]. Accessed 27 November 2020

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

[https://ec.europa.eu/health/preparedness_response/joint_procurement/jpa_signature_en]. Accessed 27 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: 1

France has a plan in place for dispensing medical countermeasures for national use during a public health emergency.

The Pharmaceutical Establishment Unit within Public Health France, which is responsible for managing the stockpile of medications and medical countermeasures for the State in a public health emergency, has in place a strategy to dispense all

medications and medical countermeasures. Although the details of this strategy are not made public, the Pharmaceutical Establishment Unit describes a health and logistics platform responsible for setting up mobile health posts which can dispense medications and medical countermeasures to the population, and care for 500 patients, including 100 "absolute emergency" cases, and transport methods to distribute the medical countermeasures where they are needed. [1]

In addition, France's National Prevention and Management Plan for Influenza states that a national strategy exists for the distribution of vaccines to the population in case of an influenza public health emergency, but no details are publicly available, beyond the prioritisation of at-risk populations. [2]

[1] Public Health France (Santé Publique France). 2 July 2018. "Management of strategic stocks of medical countermeasures (Gestion des stocks stratégiques de produits de santé)". [<https://www.santepubliquefrance.fr/Sante-publique-France/Qui-sommes-nous/Organisation/Direction-alerte-et-crisis/Etablissement-pharmaceutique/Gestion-des-stocks-strategiques-de-produits-de-sante>]. Accessed 26 November 2020

[2] French Government. October 2011. "National Prevention and Management Plan for Influenza Pandemic (Plan national de prévention et de lutte "Pandémie grippale")". [<http://docplayer.fr/9890318-Plan-national-de-prevention-et-de-lutte-pandemie-document-d-aide-a-la-preparation-et-a-la-decision-n-850-sgdsn-pse-psn-octobre-2011.html>]. Accessed 26 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 that France has a plan in place to receive health personnel in the case of a public health emergency. France has a bilateral agreement in place with Switzerland to provide assistance in response to emergencies. Although the agreement does not specify that health emergencies are included, it does include emergencies where health teams may be necessary for response. Among other logistical details, the agreement includes provisions to facilitate the arrival of relief teams across borders, including details on border crossings and import/export of supplies necessary for response by the relief teams. [1] While France does not have in place an explicit national plan to receive health personnel from other countries in case of public health emergencies, as the country is part of the European Union (EU), it is able to receive healthcare workers from other EU countries. However there are no details to confirm that there are procedures in place to receive personnel. The European Commission's approach to crisis management specifically states that in case of a public health emergency that overwhelms national capacities, all EU countries are able to request assistance from other EU countries according to an already established mechanism, the Community Civil Protection Mechanism, which dictates both how countries can request additional support and how to receive this support. [2] However, evidence suggests France does not have broader logistics details in place. The lack of a national plan to receive health personnel from other countries is specifically mentioned in the situation of a medical staff shortage in the summer of 2018, where French emergency doctors were worried about being short-staffed to respond to the public health situation arising from an unusually hot summer, and some resorted to telecommunication with doctors from other countries to treat all their patients, due to there not being a strategy in place to bring in doctors from other countries. [3] There is no information as to the existence of a formal plan for receiving health personnel from other countries in case of public health emergencies neither from the Ministry of Health or Defence, nor from the Influenza Pandemic Preparedness Plan. [4, 5, 6]

- [1] Swiss Confederation and French Republic. 1987. "Agreement on mutual assistance with disasters or serious accidents." ("Abkommen über die gegenseitige Hilfeleistung bei Katastrophen oder schweren Unglücksfällen.") [<https://www.admin.ch/opc/de/classified-compilation/19870007/index.html>]. Accessed 31 October 2020.
- [2] European Commission. "Crisis Management". [https://ec.europa.eu/health/preparedness_response/crisis_management_en]. Accessed 26 November 2020
- [3] Le Monde. 26 June 2018. "At hospital accident and emergency, an under-staffed summer threatens (Aux urgences hospitalières, la menace d'un été en sous-effectif)". [https://www.lemonde.fr/sante/article/2018/06/25/aux-urgences-hospitalieres-la-menace-d-un-ete-en-sous-effectif_5320627_1651302.html]. Accessed 26 November 2020
- [4] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 26 November 2020
- [5] Ministry of Defence (Ministère de la Défense). "Research and Development". [<https://www.defense.gouv.fr/portail/enjeux2/recherche-et-developpement>]. Accessed 26 November 2020
- [6] French Government. October 2011. "National Plan for Prevention and Control 'Influenza Pandemic' (Plan national de prévention et de lutte 'Pandémie Grippale)". [<https://www.gouvernement.fr/risques/plan-pandemie-grippale>]. Accessed 26 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: 97.4

2016

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

4.4.1c

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

Input number

Current Year Score: 470.26

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

Although the French government has issued guidelines committing to provide priority access to vaccinations during a public health emergency, there is insufficient evidence that the country has committed to providing prioritised health care services to healthcare workers who become sick as a result of responding to a public health emergency.

The French National Prevention and Management Plan for Influenza states that the health and wellbeing of personnel responding to an influenza pandemic must be prioritised above all else, in order to continue the response to the pandemic uninterrupted. However, it makes no mention of treatment of healthcare workers who fall sick in the line of duty. [1]

In addition, France's White Plan for Crisis Management, a generic preparedness plan for emergencies, drawn up in 2006, states that in the event of an extraordinary health event, the health of trained responders must be tended to as a priority, not merely as regards exposure to diseases, but also as regards exhaustion given potential long hours of work. However, this also makes no note of prioritised treatment in case of illness. [2]

The national public health emergency response plan, the Surveillance and Health Security (Veille et Sécurité Sanitaire or "VSS") plan, which is specific for health emergencies, is not publicly available, and as such provides no evidence that health worker health must be prioritised. [3, 4]

There is no additional information from the Ministry of Health. [5]

[1] French Government. October 2011. "National Prevention and Management Plan for Influenza Pandemic (Plan national de prévention et de lutte "Pandémie grippale)"). [<http://docplayer.fr/9890318-Plan-national-de-prevention-et-de-lutte-pandemie-document-d-aide-a-la-preparation-et-a-la-decision-n-850-sgdsn-pse-psn-octobre-2011.html>]. Accessed 27

November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2006. "White Plan for Crisis Management (Plan Blanc de Gestion de Crise)". [https://solidarites-sante.gouv.fr/IMG/pdf/plan_blanc2006-2.pdf]. Accessed 27 November 2020

[3] Public Health France (Santé Publique France). 3 May 2016. "The activities of Public Health France in regions (L'action de Santé publique France en région)". [<https://www.santepubliquefrance.fr/Sante-publique-France/L-action-de-Sante-publique-France-en-region>]. Accessed 27 November 2020

[4] Ministry of Solidarity and of Health (Ministère des solidarités et de la santé). 25 March 2015. "Organisation of surveillance and health security (Organisation de la veille et sécurité sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/article/organisation-de-la-veille-et-securite-sanitaire-vss>]. Accessed 27 November 2020

[5] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 2020. "Research (Recherche)". [<https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/recherche/>]. Accessed 25 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: 1

France has in place a system for public health officials and healthcare workers to communicate during a public health emergency. France's General Direction of Health (Direction Générale de la Santé or DGS), whose responsibility it is to activate the Centre of Health Crisis (Centre de Crise Sanitaire or CSS) in case of a public health emergency, thereby also activates a communications plan between the different levels of responders to a public health crisis. The CSS is responsible for implementing the Communications Cell (Cellule de Communication), which handles all communication between public health officials and healthcare workers by telephone or email, and liaises between the different stakeholders involved in a public health emergency, as well as directing and handling all communication with the public and the media. [1]

[1] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 6 January 2016. "Organisation of crisis management (Organisation de la gestion de crise)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/article/organisation-de-la-gestion-de-crise>]. Accessed 26 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 insufficient evidence that France's system for public health officials and healthcare workers to communicate during an emergency encompass healthcare workers in both the public and private sector. France's healthcare system and response to public health emergencies is made up of healthcare workers from the public and private sectors as well as non-

governmental organisations (NGOs). [1, 2] The Communications Cell (Cellule de Communication) activated by the Centre of Health Crisis (Centre de Crise Sanitaire or CSS) in case of a public health emergency is responsible for coordinating communication, by telephone or email, between all healthcare workers and public health officials and other government officials in the event of a public health crisis, which necessarily includes public and private sector responders. [3] However, there is no explicit evidence of such inclusion.

[1] Nay O, Béjean S, Benamouzig D, Bergeron H, Castel P, Ventelou B. 2016. "Achieving universal health coverage in France: policy reforms and the challenge of inequalities". [<https://www.thelancet.com/journals/lancet/article/PIIS0140-6736>

[16] 00580-8/fulltext?code=lancet-site]. The Lancet 387(10034). Accessed 26 November 2020

[2] Catherine Borretti. 2012. "Chapter 4: The French Vigilance System. Contributing to the Reduction of Disaster Risks in France". In M. Golnarahhi ed. Institutional Partnerships in Multi-Hazard EarlyWarning Systems. Berlin Heidelberg. Springer-Verlag. Accessed 26 November 2020

[3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 6 January 2016. "Organisation of crisis management (Organisation de la gestion de crise)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/article/organisation-de-la-gestion-de-crise>]. Accessed 26 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

France's public health system monitors and tracks the number of healthcare associated infections (HAIs) that occur in healthcare facilities.

The French Ministry of Health has put in place a national plan for the fight against HAIs since 1994, and has mandated inter-regional entities, the Centres for Coordination of the Fight Against HAIs (centres de coordination de la lutte contre les infections nosocomiales or CCLIN), and a national unit, the General Direction of Health's (Direction Générale de Santé or DGS) Technical Committee and HAIs Cell (comité technique et cellule infections nosocomiales), which coordinate the surveillance and monitoring of, and the response to, HAIs. [1]

A specific network for the notification, investigation, and surveillance of HAIs, the RAISIN network, has been coordinating the surveillance of HAIs since 2001, and has harmonised surveillance and notification protocols for all healthcare facilities across France. [2]

[1] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). 28 November 2017 "National Programme for the Fight Against HAIs (PROPIAS) (Programme national d'actions de prévention des infections associées aux soins (PROPIAS))". [<https://solidarites-sante.gouv.fr/soins-et-maladies/qualite-des-soins-et-pratiques/securite/propias/article/programme-national-d-actions-de-prevention-des-infections-associees-aux-soins>]. Accessed 26 November 2020

[2] Public Health France (Santé Publique France). June 2018. "Healthcare acquired infections: Surveillance at the service of

prevention (Infections Nosocomiales : La surveillance au service de la pré?vention)".

[<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwjts62xt3eAhXDzLwKHb->

TDgYQFjAAegQIBhAC&url=http%3A%2F%2Fsantepubliquefrance.fr%2Fcontent%2Fdownload%2F4283%2F32701%2Fversion%2F4%2Ffile%2FDP-INFECTIONS-NOSOCOMIALES-040618.pdf&usg=AOvVaw0a_eV4_IV-tLmqHBURfFHT]. Accessed 26 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

France has a national requirement for ethical review before beginning a clinical trial.

In 1988, France integrated a law into the Code of Public Health, the Huriet-Seruschat Law on the Protection of people participating in biomedical research whatever the nature of the research, including clinical trials, defining that all biomedical research on persons must pass an ethical review. [1]

In 1991, France created the Committees for the Protection of Persons in Biomedical Research (Comités de Protection des Personnes dans la Recherche Biomédicale or CCPPRB), which are made up of at least one general physician (GP), two further doctors specialised in biomedical research, one biostatistician or epidemiologist, a hospital pharmacist, a nurse, an ethical specialist, a social worker, a psychologist, and two people qualified in legal matters. [2] These committees, of which there exist 39 as of 2017, are made up of 14 permanent members and 14 volunteers, all of whom apply for the role and are chosen by the regional prefect based on recommendations by current members and the Regional Direction for Health and Social Affairs (Direction Régionale des Affaires Sanitaire et Sociales or DRASS), and are responsible for approving the ethical component of all biomedical research, including clinical trials. [3]

[1] Centre for Coordination of Cancerology. "Huriet-Seruschat Law (Loi Huriet-Seruschat)". [<http://www.3c28.fr/loi-huriet-seruschat.php>]. Accessed 26 November 2020

[2] Frija-Orvoën E. 2011. "Regulations and legislation in biomedical research: the CPPs (Réglementation et législation dans la recherche biomédicale : Les CPP)". [https://www.recherchecliniquepariscentre.fr/wp-content/uploads/2012/01/frija_diucp2010RC.pdf]. Accessed 26 November 2020

[3] Frija-Orvoën E. 30 March 2017. "The legal and ethical framework for clinical research in France (Le cadre juridique et éthique d'exercice de la recherche clinique en France)". [http://www.fcrin.org/sites/default/files/fichiers/hcl_2017-03_1.4_ethique-et-juridique_frija.pdf]. Accessed 26 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 publicly available evidence that France has in place an expedited process for approving clinical trials for unregistered medical countermeasures in case of public health emergencies.

France has a set time within which the Committees for the Protection of Persons in Biomedical Research (Comités de Protection des Personnes dans la Recherche Biomédicale or CCPRB) must return judgment as to approval or rejection of the proposal for biomedical research: this used to be 45 days to return a first opinion (which could be increased to 60 days in case of need for any clarification). [1] However, the National Agency for Medication and Health Product Safety (Agence nationale de la sécurité du médicament et des produits de santé or ANSM) decided in 2018 to lower that time to approval or rejection from 45 days to an upper limit of 25 to 40 days, depending on the type of research, as of 2020. [2]

There is no evidence of an expedited process for approving clinical trials from the Ministries of Health or Research, nor from the National Centre for Scientific Research (Centre National de Recherche Scientifique or CNRS), nor from the Influenza Pandemic Preparedness Plan. [3, 4, 5, 6]

[1] Frija-Orvoën E. 30 March 2017. "The legal and ethical framework for clinical research in France (Le cadre juridique et éthique d'exercice de la recherche clinique en France)". [http://www.fcrin.org/sites/default/files/fichiers/hcl_2017-03_1.4_ethique-et-juridique_frija.pdf]. Accessed 26 November 2020

[2] The doctor's newspaper (Le Quotidien du médecin). 15 October 2018. "The ANSM accelerates the authorisation of clinical trials (L'ANSM accélère l'autorisation des études cliniques)". [https://www.lequotidiendumedecin.fr/actualites/article/2018/10/15/lansm-accelere-lautorisation-des-etudes-cliniques_861824]. Accessed 26 November 2020

[3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 26 November 2020

[4] Ministry of Higher Education, Research, and Innovation (Ministère de l'Enseignement Supérieur, de la Recherche, et de l'Innovation). "Presentation of Research (Présentation de la Recherche)". [<http://www.enseignementsup-recherche.gouv.fr/pid24889/presentation-de-la-recherche.html>]. Accessed 26 November 2020

[5] National Centre for Scientific Research (Centre National de Recherche Scientifique). "Research (La Recherche)". [<http://www.cnrs.fr/fr/la-recherche>]. Accessed 26 November 2020

[6] French Government. October 2011. "National Plan for Prevention and Control 'Influenza Pandemic' (Plan national de prévention et de lutte 'Pandémie Grippale)". [<https://www.gouvernement.fr/risques/plan-pandemie-grippale>]. Accessed 26 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

France has in place a government agency responsible for approving new medical countermeasures for humans.

This agency, the National Agency for Medication and Health Products Safety (Agence nationale de sécurité du médicament et des produits de santé or ANSM), is responsible for the scientific and technical evaluation of all medications and biological products, including vaccines and medical products such as medical technology and Personal Protective Equipment (PPE). The profile of medications and biological products is evaluated in order to determine whether the safety, the instructions, and the efficacy all correspond to the quality expected before products are placed on the market. ANSM also performs regular tests once products are on the market, to verify that they still conform to the standards established. [1]

[1] National Agency for Medication and Health Products Safety (Agence nationale de sécurité du médicament et des produits de santé). 2017. "The ANSM : authorising (L'ANSM : autoriser)". [[https://www.ansm.sante.fr/L-ANSM/Autoriser/Autoriser/\(offset\)/0](https://www.ansm.sante.fr/L-ANSM/Autoriser/Autoriser/(offset)/0)]. Accessed 26 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: 0

There is no evidence that France has an expedited process for approving medical countermeasures for human use during public health emergencies.

The National Agency for Medication and Health Products Safety (Agence nationale de sécurité du médicament et des produits de santé or ANSM), the agency responsible for the scientific and technical evaluation of all medications and biological products, including vaccines, medical technology, and Personal Protective Equipment, has an expedited process available for granting temporary authorisation for medications or medical products for rare or serious medical conditions whilst waiting for them to be given an official authorisation via classic channels, but there is no mention of public health emergencies. [1]

There is no evidence that France has such an expedited process from Public Health France nor from the Ministry of Health, nor from the Influenza Pandemic Preparedness Plan. [2, 3, 4]

[1] National Agency for Medication and Health Products Safety (Agence nationale de sécurité du médicament et des produits de santé). 2017. "The ANSM : authorising (L'ANSM : autoriser)". [[https://www.ansm.sante.fr/L-ANSM/Autoriser/Autoriser/\(offset\)/0](https://www.ansm.sante.fr/L-ANSM/Autoriser/Autoriser/(offset)/0)]. Accessed 26 November 2020

[2] Public Health France (Santé Publique France). 2 July 2018. "Management of strategic stocks of medical countermeasures (Gestion des stocks stratégiques de produits de santé)". [<https://www.santepubliquefrance.fr/Sante-publique-France/Qui-sommes-nous/Organisation/Direction-alerte-et-crisis/Etablissement-pharmaceutique/Gestion-des-stocks-strategiques-de-produits-de-sante>]. Accessed 26 November 2020

[3] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Signalement-sante.gouv.fr". [<https://solidarites-sante.gouv.fr/soins-et-maladies/signalement-sante-gouv-fr/>]. Accessed 26 November 2020

[4] French Government. October 2011. "National Plan for Prevention and Control 'Influenza Pandemic' (Plan national de prévention et de lutte 'Pandémie Grippale')". [<https://www.gouvernement.fr/risques/plan-pandemie-grippale>]. Accessed 26 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 publicly available evidence that pandemics are integrated into France's national risk reduction strategy or that there is any standalone national disaster risk reduction strategy for pandemics. France is part of the United Nations International Strategy for Disaster Reduction (UNISDR) Europe office, and has in place a Disaster Risk Reduction (DRR) strategy, but this is not publicly available, and the excerpt that is available makes no mention of health emergencies, nor of pandemics. In addition, France has published several reports on DRR for different types of risks (flooding, climate change-related, seismic), but none on public health emergencies or pandemics. [1] There is no public evidence that pandemics are integrated into France's national risk reduction strategy from the Ministry of Health, nor from the Government's Crisis Management Centre. [2, 3]

[1] United Nations International Strategy for Disaster Reduction (UNISDR). "France".

[https://www.unisdr.org/partners/countries/fra]. Accessed 26 November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)".

[https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/]. Accessed 26 November 2020

[3] French Government (Gouvernement). "Prevention of major risks (Prévention des risques majeurs)".

[https://www.gouvernement.fr/risques/le-processus-de-gestion-de-crise]. Accessed 26 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

France has in place cross-border agreements in place with neighbouring countries with regards to public health emergencies, and there is no evidence of gaps in implementation.

There is in place an agreement between France, Germany, and Switzerland, which stipulates that health responses can be mobilised from any of the three countries to come in aid when needed by one of the countries in case of routine health emergencies or of a major health event on the border of these countries - this includes but is not limited to health transport (including helicopters), emergency doctors and medical personnel, and non-medical respondents to public health emergencies. There are no other publicly available details of how the agreement functions. [1]

There is no additional evidence of this agreement, nor of a broader cross-border agreement, from the Ministry of Health, nor from the Government's Crisis Management Centre. [2, 3] There is no evidence that France has taken any action in response to the European Directive of 22 October 2013 on serious cross-border threats to health. [4]

[1] European Regional Development Fund (Fonds européen de développement régional). May 2018. "Urgent medical healthcare in France, Germany, and Switzerland (Les soins médicaux urgents en France, en Allemagne et en Suisse)". [https://www.trisan.org/fileadmin/user_upload/Cahier_th%C3%A9matique_TRISAN__Urgences_FR_%C3%A9cran.pdf]. Accessed 27 November 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 27 November 2020

[3] French Government (Gouvernement). "Prevention of Major Risks (Prévention des risques majeurs)". [<https://www.gouvernement.fr/risques/le-processus-de-gestion-de-crise>]. Accessed 27 November 2020

[4] European Union. 22 October 2013. "European Decision of 22 October 2013 on serious cross-border threats to health". [https://ec.europa.eu/health/sites/health/files/preparedness_response/docs/decision_serious_crossborder_threats_22102013_en.pdf]. Accessed 27 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

France has in place cross-border agreements as part of a regional group with regards to animal health emergencies, and there is no evidence of gaps in implementation.

There exists a European Union-wide (EU) Rapid Response network dedicated to animal health and diseases, to which France belongs, which includes veterinary competent authorities in member states, private veterinarians, farmers, and agricultural professionals. This network coordinates EU-wide action to restrict any disease outbreaks among livestock and animal products. [1]

There is also in place a cooperation within EU States as regards animal health, which aims to improve the health conditions of animals, as well as the security in member states, and which aims to encourage trade. [2]

In addition, as France is part of the European Union (EU), it participates in the cross-border agreements set out by the EU regarding animal health, both in terms of preparedness and prevention of infectious animal diseases and of responsiveness to outbreaks, to make joint action easier and stronger. These agreements are the fruit of a meeting of the Working Party of Chief Veterinary Officers (CVOs) in Europe, in June 2017, which determined what areas of emergency preparedness were most in need of updating, and what priorities were the most urgent. [3] The agreements cover areas that need improving and standardising across the EU, including early warning systems, risk assessment, awareness, and contingency plans among others. [4] It was determined that strong and early warning systems in particular are vital within the EU space, and that all Member States should continue and reinforce surveillance activities to keep early warning systems effective, and put in place regular exchanges of surveillance information. The agreements also cover the importance of the exchange of information and data between Member States to anticipate and respond to outbreaks as quickly as possible. [3]

[1] European Commission Directorate General for Health and Consumers. 1 August 2012. "Evaluation of the EU rapid response network, crisis management and communication capacity regarding certain transmissible animal diseases". [https://ec.europa.eu/food/sites/food/files/animals/docs/ah_policy_eval_eu-rapid-response_20120801.pdf]. Accessed 27 November 2020

[2] EU Monitor. 7 July 2010. "EU Member States' cooperation projects on animal health with third countries". [<https://www.eumonitor.nl/9353000/1/j9vvik7m1c3gyxp/vj6ipmir6pya>]. Accessed 27 November 2020

[3] General Secretariat of the European Union Council. 29 June 2017. "Working Party of Chief Veterinary Officers (21-23 June 2017) - Partial outcome of proceedings". [<http://data.consilium.europa.eu/doc/document/ST-10676-2017-INIT/en/pdf>]. Accessed 27 November 2020

[4] EU Monitor. 30 June 2017. "Animal health: a common way forward on emergency preparedness". [https://www.eumonitor.eu/9353000/1/j9vvik7m1c3gyxp/vkfifam2ugzi?ctx=vk08kutn41zh&tab=1&start_tab1=15]. Accessed 27 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 France has allocated national funds in the last three years to address epidemic threats. The General Budget for France for 2020 allocated €0.7M towards preventing the risk of emergence of infectious diseases (in particular targetting vector-borne diseases such as dengue, chikungunya, zika, and malaria) and €0.8M towards preparing for public health emergencies. [1] There is no further information from the Ministry of Health, the Ministry of Agriculture, from the Prime Minister's Office, or from Public Health France. [2, 3, 4, 5]

[1] French Republic. "2020 General Budget" [https://www.performance-publique.budget.gouv.fr/sites/performance_publique/files/farandole/ressources/2020/pap/pdf/PAP2020_BG_Sante.pdf]. Accessed 6 December 2020

[2] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 27 November 2020

[3] Ministry of Agriculture (Ministère de l'Agriculture). "Directions and Services". [<http://agriculture.gouv.fr/directions-et-services>]. Accessed 27 November 2020

[4] French Government. 2020. "The actions of the government" [<https://www.gouvernement.fr/les-actions-du-gouvernement>]. Accessed 27 November 2020

[5] Public Health France. 11 July 2019. "Public Health France: Who are we?" [<https://www.santepubliquefrance.fr/a-propos/sante-publique-france-qui-sommes-nous>]. Accessed 27 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: 0

There is no evidence that France has a publicly identified special emergency public financing mechanism or funds which the country can access in the face of a public health emergency.

The European Commission's approach to crisis management specifically states that in case of a public health emergency that overwhelms national capacities, all EU countries are able to request financial assistance from other EU countries according to an already established mechanism, the Community Civil Protection Mechanism, although this fund can be utilised for all public health emergencies, but is not specific to public health emergencies. [1]

France is not eligible for World Bank Pandemic Financing. [2] The French General Direction of Health (Direction Général de la Santé or DGS) laid out a plan for its 2017-2019 strategy stating that work will be undertaken to set up a mechanism of emergency financing for exceptional health-related circumstances, including public health emergencies, but there is no evidence this mechanism has been set up as of December 2020. [3]

There is no evidence from the Ministry of Health of a special emergency financing mechanism, nor from the Government's Crisis Management department. [4, 5]

[1] European Commission. "Crisis Management".

[https://ec.europa.eu/health/preparedness_response/crisis_management_en]. Accessed 26 November 2020

[2] International Development Agency. 2018. "Borrowing Countries". [<http://ida.worldbank.org/about/borrowing-countries>]. Accessed 26 November 2020

[3] General Direction of Health (Direction Général de la Santé). 2016. "Strategic Project 2017-2019 (Projet stratégique 2017-2019)". [https://solidarites-sante.gouv.fr/IMG/pdf/projet_strategique_dgs.pdf]. Accessed 26 November 2020

[4] Ministry of Solidarities and Health (Ministère des Solidarités et de la Santé). "Health Security (Sécurité Sanitaire)". [<https://solidarites-sante.gouv.fr/systeme-de-sante-et-medico-social/securite-sanitaire/>]. Accessed 26 November 2020

[5] French Government (Gouvernement). "Prevention of Major Risks (Prévention des risques majeurs)". [<https://www.gouvernement.fr/risques/le-processus-de-gestion-de-crise>]. Accessed 26 November 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: 1

There is evidence that French senior leaders have committed publicly to support other countries to improve capacity to address epidemic threats by providing financing or support.

In November 2019, France's special envoy in charge of directing and monitoring the French response in the fight against the Ebola epidemic, Professor Yves Lévy, announced that France has pledged €71 million to support healthcare in the Democratic Republic of the Congo (DRC) between 2018 and 2021. [1]

The French President, Emmanuel Macron, also donated €500 million on behalf of France towards the development of a vaccine against COVID-19, in an EU-led effort towards global cooperation. [2]

There is no evidence that France has explicitly requested support to improve the country's capacity to address epidemic threats, but in a phone call in March 2019, the French foreign minister Jean-Yves Le Drian thanked the Chinese foreign minister, Mr Wang Yi, for "sending medical supplies to France and allocating resources to meet France's purchase demand". [3]

[1] France Diplomacy. 21 November 2019. "Joint press release - Combating the Ebola epidemic and strengthening the healthcare system in DRC: France and the DRC step up their joint efforts." [<https://www.diplomatie.gouv.fr/en/country-files/democratic-republic-of-the-congo/news/article/joint-press-release-combating-the-ebola-epidemic-and-strengthening-the>]. Accessed 29 November 2020

[2] Euronews. 5 May 2020. "World leaders pledge billions for research into coronavirus vaccine" [<https://www.euronews.com/2020/05/04/eu-leaders-to-pledge-billions-towards-global-fight-against-covid-19>]. Accessed 29 November 2020

[3] Consulate-General Of The People's Republic Of China In Brisbane. 19 March 2020. "Wang Yi Speaks by Phone with French Foreign Minister Jean-Yves Le Drian" [<http://brisbane.chineseconsulate.org/eng/zgxw/t1758654.htm>]. Accessed 29

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: 1

There is evidence that France has, in the past three years, provided other countries with financing or technical support to improve capacity to address epidemic threats. But there is no evidence that it has requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats. The European & Developing Countries Clinical Trials Partnership (EDCTP), of which France is a member, mobilised research funds in September 2018 to fight the Ebola Virus Disease (EVD) outbreak in the DRC. [1] According to the Global Health Security Funding Tracking dashboard, France has committed US\$ 397.7 million for immunization between 2014 and 2020. [2] While there is no evidence that France has requested financing or technical support from donors to improve the domestic capacity to address epidemic threats, there is evidence that France has received medical countermeasures including medical and surgical masks, protective suits, and medical gloves, from China in March 2020 to help with the fight against the COVID-19 pandemic. [3]

[1] European & Developing Countries Clinical Trials Partnership (EDCTP). September 2018. "Mobilisation of research funds in case of Public Health Emergencies". [<http://www.edctp.org/call/mobilisation-of-research-funds-in-case-of-public-health-emergencies/>]. Accessed 27 November 2020

[2] Global Health Security Funding Tracking dashboard. France Funder Profile. [<https://tracking.ghscosting.org/details/945/funder>] Accessed 13 May 2021.

[3] CGTN. 19 March 2020. "France thanks China for providing medical aid amid COVID-19" [<https://news.cgtn.com/news/2020-03-19/France-thanks-China-for-providing-medical-aid-amid-COVID-19-OZIO8edE6Q/index.html>]. Accessed 29 November 2020

5.5.4c

Is there evidence that the country has fulfilled its full contribution to the WHO within the past two years?

Yes = 1, No = 0

Current Year Score: 0

2021

Economist Impact analyst qualitative assessment based on official national sources, which vary by country

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

5.6.1 Commitment to sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) in both emergency and nonemergency research

5.6.1a

Is there a publicly available plan or policy for sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) along with the associated epidemiological data with international organizations and/or other countries that goes beyond influenza?

Yes = 1, No = 0

Current Year Score: 1

There is evidence that France has in place a policy for sharing disease data of various types, beyond influenza, with international organisations.

France is a member of the Global Health Security Initiative, which has developed a "voluntary agreement to facilitate the rapid sharing of non-influenza biological materials among GHSI members during a potential or actual public health emergency." [1,2]

Although surveillance data is shared regularly with the European Centre for Disease Prevention and Control (ECDC), there is no mention of sharing genetic data or clinical specimens in this context. [3]

In addition, France shares data specific to the Human Immunodeficiency Virus (HIV) with the United Nations AIDS programme (UNAIDS), but there is no explicit mention of genetic data or clinical specimens. [4]

[1] Global Health Security Initiative. "GHSI Members." [<http://www.ghsi.ca/english/members.asp>]. Accessed 26 November 2020

[2] Global Health Security Initiative. "Ministerial Statements: Brussels, Belgium - February 24, 2017." [<http://www.ghsi.ca/english/statementBrussels2017.asp>]. Accessed 26 November 2020

[3] Institute of Health Surveillance (Institut de Veille Sanitaire). 8 June 2011. "International programs / activities". [http://invs.santepubliquefrance.fr/en/Invs_en/EUROPE-AND-INTERNATIONAL/International-programs-activities]. Accessed 26 November 2020

[4] UNAIDS. 2020. "France - Factsheet 2019". [<http://www.unaids.org/en/regionscountries/countries/france>]. Accessed 26 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 evidence that France has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework within the past two years. The World Health Organisation records no instances of France withholding samples,

nor is there any evidence in news outlets of the country refusing to share influenza samples. [1]

[1] World Health Organisation (WHO) Regional Office for Europe. November 2020. "News".
[<http://www.euro.who.int/en/health-topics/communicable-diseases/influenza/news/news/news>]. Accessed 26 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 evidence that France has not shared samples of pandemic pathogens during an outbreak over the past two years. The World Health Organisation records no instances of France withholding samples, nor is there any evidence in news outlets of the country refusing to share influenza samples. [1] There is no evidence of France withholding any COVID-19 samples either from the National Reference Centre for influenza, which, as part of the Pasteur Institute, is the reference laboratory for COVID-19 testing. [2, 3] There is no further evidence as per top international and local media outlets.

[1] World Health Organisation (WHO) Regional Office for Europe. November 2020. "News".
[<http://www.euro.who.int/en/health-topics/communicable-diseases/influenza/news/news/news>]. Accessed 29 November 2020

[2] National Centre of Reference for Influenza (Centre National de Référence des virus de la grippe). 2020. "Activités de recherche du CNR virus des infections respiratoires (dont la grippe)" [<https://www.pasteur.fr/fr/sante-publique/centres-nationaux-reference/cnr/virus-infections-respiratoires-dont-grippe/activites-recherche-du-cnr-virus-infections-respiratoires-dont-grippe>]. Accessed 29 November 2020

[3] National Centre of Reference for Influenza (Centre National de Référence des virus de la grippe). 2020. "COVID-19 disease (Novel coronavirus)" [<https://www.pasteur.fr/en/medical-center/disease-sheets/covid-19-disease-novel-coronavirus#some-frequently-asked-questions-updated-on-june-25>]. Accessed 29 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: 3

2020

Economist Intelligence

6.1.1b

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

Input number

Current Year Score: 4

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: 3

2020

Economist Intelligence

6.1.1e

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

Input number

Current Year Score: 69

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: 4

2021

Economist Intelligence

6.1.3 Risk of social unrest

6.1.3a

What is the risk of disruptive social unrest?

Very low: Social unrest is very unlikely = 4, Low: There is some prospect of social unrest, but disruption would be very limited = 3, Moderate: There is a considerable chance of social unrest, but disruption would be limited = 2, High: Major social unrest is likely, and would cause considerable disruption = 1, Very high: Large-scale social unrest on such a level as to seriously challenge government control of the country is very likely = 0

Current Year Score: 2

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

How likely is it that domestic or foreign terrorists will attack with a frequency or severity that causes substantial disruption?

No threat = 4, Low threat = 3, Moderate threat = 2, High threat = 1, Very high threat = 0

Current Year Score: 2

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: 3

2021

Economist Intelligence

6.1.5 Armed conflict

6.1.5a

Is this country presently subject to an armed conflict, or is there at least a moderate risk of such conflict in the future?

No armed conflict exists = 4, Yes; sporadic conflict = 3, Yes; incursional conflict = 2, Yes, low-level insurgency = 1, Yes; territorial conflict = 0

Current Year Score: 4

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

Does the government's authority extend over the full territory of the country?

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

Is there a threat that international disputes/tensions could have a negative effect?

No threat = 4, Low threat = 3, Moderate threat = 2, High threat = 1, Very high threat = 0

Current Year Score: 3

2021

Economist Intelligence

6.2 SOCIO-ECONOMIC RESILIENCE

6.2.1 Literacy

6.2.1a

Adult literacy rate, population 15+ years, both sexes (%)

Input number

Current Year Score: 99.9

2008-2018

United Nations Development Programme (UNDP); United Nations Educational, Scientific and Cultural Organization (UNESCO);
The Economist Intelligence Unit

6.2.2 Gender equality

6.2.2a

United Nations Development Programme (UNDP) Gender Inequality Index score

Input number

Current Year Score: 0.95

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

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

The most recent data regarding informal employment in France dates from 2011, at which time the German Institute for the Study of Labor estimated that the percentage of the labour force working in the informal sector in France was approximately 10%. [1] There is no data from the World Bank or from the International Labour Organisation as to the proportion of France's labour force working in the informal sector. [2, 3]

[1] Institute for the Study of Labor. July 2011. "Informal Workers Across Europe: Evidence from 30 Countries"

[<http://ftp.iza.org/dp5871.pdf>]. Accessed 26 November 2020

[2] The World Bank. 2020. "Informal employment" [<https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS>] Accessed 26 November 2020

[3] ILOSTAT. 2020. "Statistics on the Informal Economy" [<https://ilostat.ilo.org/topics/informality/>] Accessed 26 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: 1

2021

Economist Intelligence Democracy Index

6.2.5 Local media and reporting

6.2.5a

Is media coverage robust? Is there open and free discussion of public issues, with a reasonable diversity of opinions?

Input number

Current Year Score: 2

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.32

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a

What is the risk that the road network will prove inadequate to meet needs?

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

Current Year Score: 4

2021

Economist Intelligence

6.3.2 Adequacy of airports

6.3.2a

What is the risk that air transport will prove inadequate to meet needs?

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

Current Year Score: 4

2021

Economist Intelligence

6.3.3 Adequacy of power network

6.3.3a

What is the risk that power shortages could be disruptive?

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

Current Year Score: 4

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 80.71

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: 1.63

2008-2018

World Bank; Economist Impact

6.4.3 Natural disaster risk

6.4.3a

What is the risk that the economy will suffer a major disruption owing to a natural disaster?

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

Current Year Score: 4

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a

Total life expectancy (years)

Input number

Current Year Score: 82.72

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: 290.1

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 20.39

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 34.6

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 21.6

2016

WHO

6.5.2 Access to potable water and sanitation

6.5.2a

Percentage of homes with access to at least basic water infrastructure

Input number

Current Year Score: 99

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 98.65

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: 3852.32

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