

Norway

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

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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

In Norway, there is a national AMR plan for surveillance, detection and reporting of priority AMR pathogens. Norway's current 5-year strategy, the 2015–2020 National Strategy Against Antibiotic Resistance, was released in 2015 and focuses on reducing antibiotic usage, improving knowledge around AMR and working to influence international policy. [1] Surveillance and reporting of AMR pathogens are key pillars in the strategy. As stipulated in the plan, the Institute for Public Health (FHI) is responsible for monitoring infectious diseases in Norway and assisting in the international monitoring thereof. The plan was concluded in 2020, and the health minister, Bent Høie, in a written response to a question addressed to him by a member of parliament, Nicholas Wilkinson, stated that he had commissioned the National Institute of Public Health to lead a cross-sectoral expert group that will update the report. [2] The update has not been published yet. FHI also operates the Norwegian Surveillance System for Communicable Diseases (MSIS), which is a health register intended to help monitor infectious diseases in people in Norway through the continuous and systematic collection, analysis, interpretation and reporting of information on incidences of communicable diseases. [1]

[1] Government of Norway. June 2015. "National Strategy Against Antibiotic Resistance: 2015 - 2020," <https://www.regjeringen.no/contentassets/5eaf66ac392143b3b2054aed90b85210/antibiotic-resistance-engelsk-lavopploslig-versjon-for-nett-10-09-15.pdf>. Accessed 30 January 2021.

[2] Norwegian Parliament. August 2020. "Written question from Nicholas Wilkinson (SV) to the Minister of Health and Care Services." ("Skriftlig spørsmål fra Nicholas Wilkinson (SV) til helse- og omsorgsministeren.") <https://www.stortinget.no/no/Saker-og-publikasjoner/Sporsmal/Skriftlige-sporsmal-og-svar/Skriftlig-sporsmal/?qid=80641>. Accessed 30 January 2021.

1.1.1b

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

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

Current Year Score: 2

The Norwegian national laboratory system can test for all 7+1 priority AMR pathogens. The Norwegian Institute for Public Health is the national laboratory system and resistance to antibiotics is monitored by the Norwegian Surveillance System for Communicable Diseases (MSIS), the Norwegian Surveillance System for Antimicrobial Drug Resistance (NORM), and the Norwegian Surveillance System for Antimicrobial Drug Resistance - Veterinary Medicine (NORM-VET). [1] These laboratory services monitor for pathogens including Methicillin-resistant *S. aureus*, *e. coli*, *K. pneumonia*, *S. pneumonia*, multidrug-

resistant tuberculosis, gonorrhoea, salmonella and shigella. [1, 2]

[1] Norwegian Institute of Public Health. June 2017. "Antibiotic Resistance in Norway,". <https://www.fhi.no/en/op/public-health-report-2014/health--disease/antibiotic-resistance-in-norway---p/#surveillance-of-antibiotic-resistance-in-norway>. Accessed 31 January 2021.

[2] Norwegian Institute of Public Health. "Veileder for mikrobiologiske laboratorieanalyser." ("Guidance for Microbiological Laboratory Analysis.") <https://www.fhi.no/nettpub/veileder-for-mikrobiologiske-laboratorieanalyser/>. Accessed 31 January 2021.

1.1.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that the government conducts detection or surveillance activities for antimicrobial residues or AMR organisms. It does not appear that any government agency currently conduct detection or surveillance activities antimicrobial residues in the environment at the moment; however, the Norwegian government has prioritized surveillance activities for antimicrobial residues in the environment, and is working with relevant stakeholders to implement this. [1] The National AMR strategy, which covers 2015-2020, describes the need to monitor and map antibiotic resistant bacteria in soil, water and animals. In 2014, GenØk, an independent biosafety foundation that is publicly funded and works closely with the government, began a research project that monitors the presence of antibiotic resistance marker genes in the Norwegian environment. [2] There is no additional evidence on the website of the Norwegian Environmental Agency. [3] Moreover, in 2020 August, the Norwegian Scientific Committee for Food and Environment published a report titled "Assessment of the impact of wastewater and sewage sludge treatment methods on antimicrobial resistance", in which they claim that today's surveillance programs do not monitor antimicrobial residues or AMR organisms in the environment, only in animals, animal feed and food (through the NORM-VET program). [4] There is no further information on the website for the Norwegian Veterinary Institute, the Ministry of Agriculture and Food, or the Ministry of Health and Care Services. [5, 6]

[1] Government of Norway. 2015. "National strategy Against Antibiotic Resistance: 2015 - 2020". <https://www.regjeringen.no/contentassets/5eaf66ac392143b3b2054aed90b85210/antibiotic-resistance-engelsk-lavopploslig-versjon-for-nett-10-09-15.pdf>. Accessed 8 February 2021.

[2] GenØk. 2016. "Prevalence of Resistance Marker Genes (ARMG) in selected environments in Norway". http://genok.no/wp-content/uploads/2017/03/M_675_2016.pdf. Accessed 8 February 2021.

[3] Norwegian Environmental Agency. <http://www.miljodirektoratet.no/no/Om-Miljodirektoratet/Norwegian-Environment-Agency/>. Accessed 8 February 2021.

[4] Norwegian Scientific Committee for Food and Environment. 1 October 2020. "Assessment of the impact of wastewater and sewage sludge treatment methods on antimicrobial resistance". <https://vkm.no/risikovurderinger/allevurderinger/antimikrobiellresistensavloppsslamogavloppsvann.4.65c0b5731698fbd3067495c0.html> Accessed 8 February 2021.

[5] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 12 February 2021.

[6] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 12 February 2021.

1.1.2 Antimicrobial control

1.1.2a

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

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

Current Year Score: 2

There is national legislation or regulation in place requiring prescriptions for antibiotic use for humans, and there is no evidence of gaps in enforcement. In Norway, antibiotic drugs for therapeutic use in humans, domestic animals and farmed fish are prescription drugs only. [1, 2] Moreover, both human and veterinary antibiotic drugs have to be dispensed through pharmacies that are supplied solely by drug wholesalers. [1] The regulation that requires that prescriptions are given for antibiotic use for humans is highlighted in the "National Strategy against Antibiotic Resistance 2015-2020", published in 2015. [3] There is no evidence suggesting the legislation not being enforced. Dagens Medicin, a Norwegian medicinal journal indicates that some Norwegians attempt to buy antibiotics from abroad, either online or in person while on holiday. [4]

[1] Grave, K. et al. February 1999. "Surveillance of the overall consumption of antibacterial drugs in humans, domestic animals and farmed fish in Norway in 1992 and 1996". <https://academic.oup.com/jac/article/43/2/243/849163>. Accessed 12 February 2021.

[2] Norwegian Institute of Public Health. "Welcome to the Norwegian Prescription Database". <http://www.norpd.no/>. Accessed 12 February 2021.

[3] Norwegian Ministries. 2015. "National Strategy against Antibiotic Resistance 2015-2020". <https://www.regjeringen.no/contentassets/5eaf66ac392143b3b2054aed90b85210/antibiotic-resistance-engelsk-lavopploslig-versjon-for-nett-10-09-15.pdf>. Accessed 12 February 2021.

[4] Anne Olaug Olsen. 21 August 2018. "Self-medication goes under the radar". ("Selvmedisinering går under radaren"). <https://www.dagensmedisin.no/artikler/2018/08/21/selvmedisinering-gar-under-radaren/>. Accessed 12 February 2021.

1.1.2b

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

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

Current Year Score: 2

There is national legislation or regulation in place requiring prescriptions for antibiotic use for animals, and there is no evidence of gaps in enforcement. In Norway, antibiotic drugs for therapeutic use in humans, domestic animals and farmed fish are prescription drugs only. [1, 2] Moreover, both human and veterinary antibiotic drugs have to be dispensed through pharmacies that are supplied solely by drug wholesalers. [1] The regulation that requires that prescriptions are given for antibiotic use for animals is highlighted in the National Strategy against Antibiotic Resistance 2015-2020, which was published in 2015. [3] There is no evidence suggesting the legislation not being enforced.

[1] Grave, K. et al. February 1999. "Surveillance of the overall consumption of antibacterial drugs in humans, domestic animals and farmed fish in Norway in 1992 and 1996". <https://academic.oup.com/jac/article/43/2/243/849163>. Accessed 12 February 2021.

[2] Norwegian Institute of Public Health. "Welcome to the Norwegian Prescription Database". <http://www.norpd.no/>. Accessed 12 February 2021.

[3] Norwegian Ministries. 2015. "National Strategy against Antibiotic Resistance 2015-2020". <https://www.regjeringen.no/contentassets/5eaf66ac392143b3b2054aed90b85210/antibiotic-resistance-engelsk-lavopploslig-versjon-for-nett-10-09-15.pdf>.

lavopploslig-versjon-for-nett-10-09-15.pdf. Accessed 12 February 2021.

1.2 ZOONOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

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

Yes = 1 , No = 0

Current Year Score: 1

Norway has legislation on zoonotic disease. Although not a member state of the European Union (EU), Norway follows the EU Council Directive 2003/99/EC on zoonotic disease. [1] The EU zoonotic disease directive requires data collection on human and animal incidences of zoonotic diseases. [2] Nationally, the Food Safety Act of 2003 covers all aspects of plant and animal health, including communicable diseases between animals and humans (i.e. zoonotic diseases). [3] The act gives the Norwegian Food Safety Authority the power to implement measures to prevent or stop the spread of contagion, such as imposing restrictions on animal husbandry, slaughter of animals, preventing movement in or out of defined areas and ordering product recalls from the market. The Norwegian Veterinary Institute also monitors zoonotic disease data and publishes an annual report pursuant to EU Council Directive 2003/99/EC. [1]

[1] Norwegian Veterinary Institute. 2019. "The Norwegian Zoonoses Report 2019". <https://www.vetinst.no/rapporter-og-publikasjoner/rapporter/2020/the-norwegian-zoonoses-report-2019>. Accessed 8 February 2021.

[2] European Union. November 2003. "Directive 2003/99/EC of the European Parliament and of the Council of 17 November 2003 on the monitoring of zoonoses and zoonotic agents, amending Council Decision 90/424/EEC and repealing Council Directive 92/117/EEC". <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32003L0099>. Accessed 13 November 2018.

[3] Government of Norway. January 2018. "National health preparedness plan". https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf. Accessed 14 February 2021.

1.2.1b

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

Yes = 1 , No = 0

Current Year Score: 1

Norway has national legislation and plans that include measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. The Food Safety Act of 2003 covers all aspects of plant and animal health, including communicable diseases between animals and humans (e.g. zoonotic diseases). [1] The act gives the Norwegian Food Safety Authority the power to implement measures to prevent or stop the spread of contagion. When clusters of notifiable zoonoses are detected in humans, investigations are performed to trace the source of infection and measures to prevent new cases are implemented. In cases where food or animals are suspected to be the source, the Norwegian Food Safety Authority (NFSA) is notified. The District Medical Officer must notify the NFSA in cases where humans are believed to be infected from animals or food. People employed in the food industry should not work while symptomatic with infections that may be transmitted through food. Before returning to work they should have two negative fecal samples after clinical

improvement. According to the Food Act, Food Business Operators are responsible for implementing appropriate measures to prevent the occurrence or spread of contagious disease in animals, and to notify the NFSA about any suspicion of contagious disease in animals that has potential to cause significant negative consequences for society. In total, 14 border inspection posts and 7 associated control centers in Norway perform control of foods and foodstuffs of animal origin that are imported from outside the European Union and European Economic Area. Moreover, the Norwegian Surveillance System for Communicable Diseases (MSIS) was implemented nationally in Norway in 1975 to describe trends and detect outbreaks of communicable diseases, including zoonoses. [2]

[1] Government of Norway. January 2018. "National health preparedness plan".
https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.
Accessed 14 February 2021.

[2] Norwegian Veterinary Institute. 2020. "The Norwegian Zoonoses Report 2019". <https://www.vetinst.no/rapporter-og-publikasjoner/rapporter/2020/the-norwegian-zoonoses-report-2019>. Accessed 12 February 2021.

1.2.1c

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

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that Norway follows guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern. According to its annual Zoonoses Report, Norway follows Directive 2003/99/EC of the European Parliament and of the Council of 17 November 2003 on the Monitoring and Control of Zoonoses and Zoonotic Agents. The directive specifically mentions monitoring for brucellosis, salmonella, E.coli, campylobacter, influenza and tuberculosis, among others, which are of public health concern. [1] The purpose of the directive is to ensure that zoonoses, zoonotic agents and related antimicrobial resistance are properly monitored to enable the collection of information necessary to evaluate relevant trends and sources. [2] Moreover, the 1994 Act on Protection Against Infectious Diseases mentions that all clinicians and laboratories that analyse samples from humans must report all cases of specified communicable diseases (at present 65 different diseases), including a number of zoonoses. [3]

[1] Norwegian Veterinary Institute. 2019. "The Norwegian Zoonoses Report 2019". <https://www.vetinst.no/rapporter-og-publikasjoner/rapporter/2020/the-norwegian-zoonoses-report-2019>. Accessed 8 February 2021.

[2] European Union. November 2003. "Directive 2003/99/EC of the European Parliament and of the Council of 17 November 2003 on the monitoring of zoonoses and zoonotic agents, amending Council Decision 90/424/EEC and repealing Council Directive 92/117/EEC". <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32003L0099>. Accessed 13 November 2018.

[3] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases [Infection Control Act] ". ("Lov om vern mot smittsomme sykdommer [smittevernloven]").
<https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 17 March 2021.

1.2.1d

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

Yes = 1 , No = 0

Current Year Score: 1

There is an agency dedicated to zoonotic disease that functions across ministries.

The Norwegian Veterinary Institute (NVI) is a cross-ministerial national institute that collects data and monitors zoonotic diseases in Norway. [1] The NVI is a National Reference Laboratory and is responsible for monitoring diseases that can be transmitted between animals and humans. The NVI falls primarily under the Ministry of Agriculture and Food, but also is funded by the Ministry of Industry and Fisheries and the Research Council of Norway. [2] The website cites that the organization's key partners include the Norwegian Food Safety Authority, the Norwegian Institute of Public Health and the Environment Directorate.

[1] Norwegian Veterinary Institute. "Zoonoser". <https://www.vetinst.no/fagomrader/zoonoser>. Accessed 12 February 2021.

[2] Norwegian Veterinary Institute. "Om oss". <https://www.vetinst.no/om-oss>. Accessed 12 February 2021.

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

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

Yes = 1 , No = 0

Current Year Score: 1

Norway has a national mechanism for owners of livestock to conduct and report on disease surveillance to a central government agency. The Food Safety Act of 2003 requires reporting in the event of a suspected communicable animal disease that could cause "hazardous and significant societal consequences". [1] The act requires notification to the Norwegian Food Safety Authority "when there is a reason to suspect a risk of hazardous foods or intermediate goods hazardous to health" and covers all aspects of plant and animal health, including zoonotic diseases. [1] In the event of observing symptoms of an infectious disease that occurs suddenly and spreads to several animals (such as blisters on the mucous membranes, rashes, or high fever), animal health professionals, animal owners and the general public are expected to call the Norwegian Food Safety Authority directly on the phone number given at the Authority's website. [2]

[1] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf. Accessed 14 February 2021.

[2] Norwegian Food Safety Authority. 6 June 2012 (Updated 31 January 2020). "Animal diseases". ("Dyresykdommer"). https://www.mattilsynet.no/dyr_og_dyrehold/dyrehelse/dyresykdommer/. Accessed 1 March 2021.

1.2.2b

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

Yes = 1 , No = 0

Current Year Score: 1

There are safeguards for the confidentiality of information generated through surveillance activities for animals. The Animal Welfare Act of 2009 states that animal health surveillance data that contain personal information cannot be collected without permission and are subject to the Personal Data Act of 2000 (updated in 2018). [1] In addition, the Personal Data Act

aims to protect the right to privacy in the processing of personal data. [2]

[1] Government of Norway. 2009. Animal Welfare Act. <https://www.regjeringen.no/en/dokumenter/animal-welfare-act/id571188/>. Accessed 12 February 2021. Animal health professionals, animal owners and the general public are Government of Norway. 2000 (Updated 2018). "Act on the processing of personal data (Personal Data Act)". ("Lov om behandling av personopplysninger (personopplysningsloven)"). <https://lovdata.no/dokument/NL/lov/2018-06-15-38>. Accessed 12 February 2021.

1.2.2c

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

Yes = 1 , No = 0

Current Year Score: 1

Norway conducts wildlife surveillance of zoonotic diseases. The Norwegian Veterinary Institute (NVI) is Norway's wildlife laboratory and conduct autopsies and laboratory tests of wild animals, wildlife and exotic animals from zoos. There are various research projects related to disease and environmental toxicity in wildlife. Emphasis is placed on diseases that affect game animals, and on infectious diseases that can be exchanged between domestic animals and wildlife or transmitted from wild animals to humans. The Veterinary Institute covers a range of wildlife and diseases including surveillance of avian influenza in wild birds and diseases in wild deer. [1] As a recent example, in the health surveillance program for wild boar, which started in 2018, samples from 79 wild boar harvested through hunting were tested for *Trichinella* in 2019, none of which were positive. [2]

[1] Norwegian Veterinary Institute. "Wild". ("Vilt"). <https://www.vetinst.no/dyr/vilt>. Accessed 12 February 2021.

[2] Norwegian Veterinary Institute. 2019. "The Norwegian Zoonoses Report 2019". <https://www.vetinst.no/rapporter-og-publikasjoner/rapporter/2020/the-norwegian-zoonoses-report-2019>. Accessed 1 March 2021.

1.2.3 International reporting of animal disease outbreaks

1.2.3a

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

Yes = 1 , No = 0

Current Year Score: 0

2019

OIE WAHIS database

1.2.4 Animal health workforce

1.2.4a

Number of veterinarians per 100,000 people

Input number

Current Year Score: 76.25

2018

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 18.68

2018

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of a specific mechanism for involving the private sector in controlling or responding to zoonotic disease beyond a requirement to report suspected diseases. Norwegian food safety law requires surveillance and control of zoonoses in all sectors of the economy. The Food Safety Act of 2003 stipulates a notification duty for everyone, including the private sector, in the event of a suspected communicable animal disease that could cause hazardous and significant societal consequences. [1] The act requires the entities to notify the Norwegian Food Safety Authority when there is a reason to suspect a risk of hazardous foods or intermediate goods hazardous to health. Moreover, the 2019 annual report on zoonoses includes data from the private sector, but does not detail any mechanisms for collaboration in response. [2] There is no further information on private sector involvement in controlling or responding to zoonotic disease on the website for the Norwegian Veterinary Institute, the Ministry of Agriculture and Food, or the Ministry of Health and Care Services. [4, 5]

[1] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.

Accessed 14 February 2021.

[2] Norwegian Veterinary Institute. 2019. "The Norwegian Zoonoses Report 2019". <https://www.vetinst.no/rapporter-og-publikasjoner/rapporter/2020/the-norwegian-zoonoses-report-2019>. Accessed 12 February 2021.

[3] Norwegian Veterinary Institute. "Norwegian Veterinary Institute". <https://www.vetinst.no/en>. Accessed 12 February 2021.

[4] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>.

Accessed 12 February 2021.

[5] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 12 February 2021.

1.3 BIOSECURITY

1.3.1 Whole-of- government biosecurity systems

1.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient public evidence that Norway has in place a record, updated within the past 5 years, of the facilities in which especially dangerous pathogens and toxins are stored, including details on inventories. By law, entities that export dangerous substances are required to register for a license with the Ministry of Foreign Affairs. [2] However, neither the Ministry of Foreign Affairs, the Ministries of Agriculture and Food, Defence, Health and Care Services, and Justice and Public Security have any additional information about inventory management, nor have they released any reports about monitoring facilities that have dangerous pathogens and toxins. [2, 3, 4, 5, 6] Although Norway reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return" under the Biological Weapons Convention, these reports make no mention of inventories. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, and the organizational structure of the facilities. [7] There is no further relevant evidence in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [8]

[1] Government of Norway. June 2013. "Regulations relating to the export of defence-related products, dual-use items, technology and services". https://www.regjeringen.no/globalassets/departementene/ud/vedlegg/eksportkontroll/140121-regulations-endelig-versjon---for-2013-06-19-718-eksportkontroll_2013_eng.pdf. Accessed 12 February 2021.

[2] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 12 February 2021.

[3] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 12 February 2021.

[4] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 12 February 2021.

[5] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 12 February 2021.

[6] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 12 February 2021.

[7] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". <https://bwc-ecbm.unog.ch/state/norway>. Accessed 12 February 2021

[8] Verification Research, Training and Information Centre. "BWC Legislation Database. N." <https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>. 1 March 2021.

1.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Norway has biosecurity legislation or regulations that address requirements for facilities in which especially dangerous pathogens and toxins are stored or processed. As a member of the European Committee for Standardization, Norway has adopted CEN 15793 on laboratory bio-risk management. The standard was developed by the American Biological Safety Association, European BioSafety Association, and Det Norske Veritas. It establishes the necessary requirements to control risks for the handling, storage and terminal storage for biological agents and toxins in laboratories and other facilities, including operational control, exclusion, infrastructure, physical and information security, and emergency response and contingency plans. [1] However, there is no evidence that this standard has the force of law in Norway. No biosecurity rules are contained in the 1994 Act Relating to the Control of Communicable Diseases, the 1996 Regulation on Contagious Material or the 2002 Regulation on the Protection of Workers against Dangers of Working with Biological Factors. [2,3,4] There is no evidence of biosecurity laws or regulations on the websites of the Ministry of Health and Care Services, the Ministry of Agriculture and Food, the Ministry of Defense, or the Ministry of Justice and Public Security. [5, 6, 7, 8]

[1] European Committee for Standardization. 2012. "CEN WORKSHOP AGREEMENT - CWA 16393".

<https://www.cdc.gov.tw/Uploads/files/201504/d0feebf2-a92c-46e1-914a-b9d1435bc52f.pdf>. Accessed 12 February 2021.

[2] Government of Norway. 1994. "Act relating to the Control of Communicable Diseases". ("Lov om vern mot smittsomme sykdommer"). https://lovdata.no/dokument/NL/lov/1994-08-05-55#KAPITTEL_1. Accessed 12 February 2021.

[3] Government of Norway. December 1996. "Regulations on the import, transport and other handling of material that is contagious to humans". ("Forskrift om innførsel, transport og annen håndtering av materiale som er smittefarlig for mennesker"). <https://lovdata.no/dokument/SF/forskrift/1996-09-12-903>. Accessed 12 February 2021.

[4] Government of Norway. 2002. "The Protection of Workers against Dangers of Working with Biological Factors". ("Forskrift om endring i forskrift om vern av arbeidstakerne mot farer ved arbeid med biologiske faktorer"). <https://lovdata.no/dokument/LTI/forskrift/2002-06-20-825>. Accessed 12 February 2021.

[5] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 12 February 2021.

[6] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 12 February 2021

[7] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 12 February 2021.

[8] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 12 February 2021.

1.3.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of an established agency responsible for the enforcement of biosecurity legislation and regulations. In Norway, laws and regulations focus on biosafety issues, while there is no public evidence of an established legal framework for biosecurity measures. As a consequence, the institutional framework also focuses on biosafety, which is not centralized under one agency, but rather shared between a number of government departments. The Ministry of Health implements the primary act relating to biosafety in Norway, namely the Act relating to the Control of Communicable Diseases. [1] However the Ministry of Foreign Affairs, the Directorate for Civil Protection (DSB) and the Ministry of Agriculture and Food (MAF) also enforce associated legislation on the area. For example, the Ministry of Foreign Affairs has jurisdiction over the cross-border transport and containment of dual-use substances, while the domestic transport of dangerous substances falls under the DSB. [2, 3] The DSB maintains an overview of various risks and is responsible for overseeing the domestic transport of

hazardous substances. [4] The DSB guidelines on the handling of dangerous substances follow international standards set in by the World Health Organization in the document "Guidance on regulations for the Transport of Infectious Substances" and the International Civil Aviation Organization (ICAO). [5] Finally, the MAF owns the Norwegian Institute of Bioeconomy Research (NIBIO), an institute that delivers research, managerial support and knowledge for use in national preparedness, as well as for businesses and the society at large. [6] However, all of these institutions are responsible for biosafety issues, and there is no mentioning on their websites of activities related to biosecurity. [3,4,5,6]

[1] Government of Norway. 1994. "Act relating to the Control of Communicable Diseases". ("Lov om vern mot smittsomme sykdommer"). https://lovdata.no/dokument/NL/lov/1994-08-05-55#KAPITTEL_1. Accessed 12 February 2021.

[2] Government of Norway. 2013. "Regulations relating to the export of defence-related products, dual-use items, technology and services". https://www.regjeringen.no/globalassets/departementene/ud/vedlegg/eksportkontroll/140121-regulations-endelig-versjon---for-2013-06-19-718-eksportkontroll_2013_eng.pdf. Accessed 12 February 2021.

[3] Ministry of Foreign Affairs. October 2018. "Ministry of Foreign Affairs" <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 12 February 2021.

[4] Directorate for Civil Protection. October 2018. "About DSB". <https://www.dsb.no/menyartikler/om-dsb/about-dsb/> Accessed 12 February 2021.

[5] Directorate for Civil Protection. May 2020. "Shipment of infectious biological material." ("Forsendelse av smittefarlig biologisk materiale.") <https://www.dsbinfo.no/DSBno/2020/tema/httpswwwdsbnonyhetsarkiv2020veileder-for-forsendelse-av-smittefarlig-biologisk-materiale/?page=1>. Accessed 12 February 2021.

[6] NIBIO. "About us". <https://nibio.no/en/about-eng/about-us>. Accessed 12 February 2021.

1.3.1d

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that shows that the country has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities. There is no evidence of such action on the websites of the Ministry of Agriculture and Food, the Ministry of Defense, the Ministry of Foreign Affairs, the Ministry of Health and Care Services, or the Ministry of Justice and Public Security. [1, 2, 3, 4, 5] Norway reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention, also these reports not provide any relevant evidence. [6] There is no further relevant evidence in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [7]

[1] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 12 February 2021

[2] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 12 February 2021.

[3] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 12 February 2021

[4] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 12 February 2021.

[5] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 12 February 2021.

[6] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". <https://bwc->

ecbm.unog.ch/state/norway. Accessed 12 February 2021.

[7] Verification Research, Training and Information Centre. "BWC Legislation Database. N."

[https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/]. 1 March 2021.

1.3.1e

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

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that Norway has in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and ebola, which would preclude culturing a live pathogen. The National Institute for Public Health (NIPH) monitors for anthrax and tularaemia and make use of PCR-based diagnostic testing for these diseases. [1,2] The NIPH can also conduct PCR testing for ebola. [3]

[1] National Institute for Public Health (NIPH). June 2016 (Updated July 2019). "Notifiable diseases in the Norwegian Surveillance System for Communicable Diseases". <https://www.fhi.no/en/hn/health-registries/msis/notifiable-diseases-msis/>. Accessed 12 February 2021.

[2] Norwegian Health Library. 2012. "Anthrax – miltbrann (Anthrax)". <https://www.helsebiblioteket.no/retningslinjer/h%C3%A5ndbok-i-nbc-medisin/biologiske-hendelser/aktuelle-agens-symp-beh/anthrax-miltbrann>. Accessed 12 February 2021.

[3] Norwegian Health Library. 2012. "Viral Haemorrhagic Fever (VHF)". <https://www.helsebiblioteket.no/retningslinjer/h%C3%A5ndbok-i-nbc-medisin/biologiske-hendelser/aktuelle-agens-symp-beh/viral-hemoragisk-feber-vhf>. Accessed 12 February 2021.

1.3.2 Biosecurity training and practices

1.3.2a

Does the country require biosecurity training, using a standardized, required approach, such as through a common curriculum or a 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 Norway requires biosecurity training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. The European Committee for Standardization (CEN) standards on laboratory biorisk management, which Norway has adopted, mandate that a comprehensive proficiency programme in biorisk management should exist. The standards state that organizations should detail how their training programmes are organized, monitored and evaluated and should define the different types of training they will require for different types of work, which indicates that standardization is required. [1] However, no further information on Norway's adoption of the CEN standard or other details of the biosecurity training required could be found. This includes the reports Norway provides to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention, as well as the Verification Research, Training and Information Center's database on Norway. [2,3] The websites of the Ministry of Defence, Foreign Affairs, Health and Care

Services, Justice and Public Security, Food and Agriculture, Education and Research or the National Institute of Public Health do not contain evidence of such training. [4,5,6,7,8,9,10]

- [1] European Committee for Standardization. 2012. "CEN WORKSHOP AGREEMENT - CWA 16393". <https://www.cdc.gov.tw/Uploads/files/201504/d0feebf2-a92c-46e1-914a-b9d1435bc52f.pdf>. Accessed 12 February 2021.
- [2] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_norway.pdf. Accessed 12 February 2021.
- [3] Verification Research, Training and Information Centre. "Norway". <https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>. Accessed 17 March 2021.
- [4] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 17 March 2021.
- [5] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 17 March 2021.
- [6] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 17 March 2021.
- [7] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 17 March 2021.
- [8] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 17 March 2021.
- [9] Ministry of Education and Research. "Ministry of Education and Research". <https://www.regjeringen.no/en/dep/kd/id586/>. Accessed 17 March 2021.
- [10] Norwegian Institute of Public Health. "Norwegian Institute of Public Health". <https://www.fhi.no/en/>. Accessed 17 March 2021.

1.3.3 Personnel vetting: regulating access to sensitive locations

1.3.3a

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

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

Current Year Score: 0

Norway does not have any regulations or licensing conditions that specify that security and other personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential are subject to drug testing, background checks, or psychological or mental fitness checks. Regulation on Contagious Material, issued in 1996 and last updated in 2013, addresses the handling of dangerous biological materials, but it does not require drug tests, background checks or mental health checks for people working with them. [1] There is no evidence of such requirements on the websites of the Ministry of Agriculture and Food, the Ministry of Defense, the Ministry of Foreign Affairs, the Ministry of Health and Care Services, or the Ministry of Justice and Public Security. [2, 3, 4, 5, 6] Norway reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention, but these reports do not provide any relevant evidence. [7] There is no further relevant evidence in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [8]

- [1] Government of Norway. December 1996. "Regulations on the import, transport and other handling of material that is contagious to humans". ("Forskrift om innførsel, transport og annen håndtering av materiale som er smittefarlig for mennesker"). <https://lovdata.no/dokument/SF/forskrift/1996-09-12-903>. Accessed 12 February 2021.
- [2] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 12 February 2021
- [3] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 12 February 2021.
- [4] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 12 February 2021
- [5] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 12 February 2021.
- [6] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 12 February 2021.
- [7] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". <https://bwc-ecbm.unog.ch/state/norway>. Accessed 12 February 2021.
- [8] Verification Research, Training and Information Centre. "BWC Legislation Database. N." [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. 1 March 2021.

1.3.4 Transportation security

1.3.4a

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

Yes = 1 , No = 0

Current Year Score: 1

Norway has regulations and guidelines in place for the safe and secure transport of infectious substances, which specifically refer to categories A and B. The Directorate for Civil Protection (DSB) follows the European Agreement concerning the International Carriage of Dangerous Goods by Road. There are separate rules for the transport of contagious biological materials (Categories A and B) applicable to land, sea and air transport. The current regulations regulate what kind of biological material can be sent and how such material is to be handled. It is the responsibility of the consignor to ensure that contagious biological material is properly classified, packed, marked and that the correct documents are included in the shipment. [1] No further information was found in Norway's yearly reports to the United Nations Office at Geneva (UNOG) for the "Confidence Building Measure Return" reporting mechanism set by the Biological Weapons Convention. [2]

[1] Directorate for Civil Protection. May 2020. "Shipment of infectious biological material." ("Forsendelse av smittefarlig biologisk materiale.") <https://www.dsbinform.no/DSBno/2020/tema/httpswwwdsbnonyhetsarkiv2020veileder-for-forsendelse-av-smittefarlig-biologisk-materiale/?page=1>. Accessed 12 February 2021.

[2] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". <https://bwc-ecbm.unog.ch/state/norway>. Accessed 12 February 2021.

1.3.5 Cross-border transfer and end-user screening

1.3.5a

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

Yes = 1 , No = 0

Current Year Score: 1

Norway has a national regulation to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins and pathogens with pandemic potential. The export control system is intended to ensure that defense-related products, technology and services are only exported from Norway in accordance with Norwegian security and defense policy, and that exports of dual-use items do not contribute to the proliferation of weapons of mass destruction (nuclear, chemical and biological weapons) or their means of delivery. [1] The export control list includes "pathogens or toxins, selected or modified (such as altering purity, shelf life, virulence, dissemination characteristics, or resistance to UV radiation) to produce casualties in humans or animals, degrade equipment or damage crops or the environment". [2] The Ministry of Foreign Affairs requires that for all such materials, "adequate documentation of end use must be provided before an export licence can be issued". [1]

[1] Ministry of Foreign Affairs. March 2016. "What is Norway's export control system?".

<https://www.regjeringen.no/en/topics/foreign-affairs/eksportkontroll/om-eksportkontroll/export-control/id2008483/>.

Accessed 12 February 2021.

[2] Ministry of Foreign Affairs. March 2019. "Vedlegg I til Forskrift om eksport av forsvarsmateriell, flerbruksvarer, teknologi og tjenester; Liste I – forsvarsrelaterte varer (2018)".

https://www.regjeringen.no/globalassets/departementene/ud/vedlegg/eksportkontroll/liste1_forsvarsrelatert1905.pdf.

Accessed 12 February 2021.

1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

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

Yes = 1 , No = 0

Current Year Score: 1

Norway has national legislation addressing biosafety. The Regulation on the Protection of Workers against Dangers of Working with Biological Factors was issued in 2002, and aims to protect the health and safety of workers and to prevent them from being exposed to hazards that occur or may arise from exposure to biological factors in the working environment. It includes details on safety of the physical environment (including containment, decontamination facilities and escape routes), availability of appropriate equipment, signage and appropriate vaccination when necessary, as well as other details. [1] Norway's reports to the United Nations Office at Geneva (UNOG) for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention, do not provide any further information. [2]

[1] Government of Norway. 2002. "The Protection of Workers against Dangers of Working with Biological Factors". ("Forskrift om endring i forskrift om vern av arbeidstakerne mot farer ved arbeid med biologiske faktorer").

<https://lovdata.no/dokument/LTI/forskrift/2002-06-20-825>. Accessed 12 February 2021.

[2] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". <https://bwc-ecbm.unog.ch/state/norway>. Accessed 12 February 2021.

1.4.1b

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

Yes = 1 , No = 0

Current Year Score: 1

Norway has an established agency that is responsible for the enforcement of biosafety legislation and regulations. According to the Regulation on the Protection of Workers against Dangers of Working with Biological Factors, the Labour Inspection Authority, which is a department within the Ministry of Labour and Government Administration, is the main responsible agency for the enforcement of biosafety legislation. [1] Furthermore, Norway reports to the United Nations Office at Geneva (UNOG) for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The latest CBM report also mentions the Norwegian Customs Authorities, the Norwegian Food Safety Authority, the Ministry of Foreign Affairs and the Norwegian Police Security Service as relevant implementing agencies of certain biosafety and biosecurity legislation. [2]

[1] Government of Norway. 2002. "Forskrift om endring i forskrift om vern av arbeidstakerne mot farer ved arbeid med biologiske faktorer (The Protection of Workers against Dangers of Working with Biological Factors)".

<https://lovdata.no/dokument/LTI/forskrift/2002-06-20-825>. Accessed 12 February 2021.

[2] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". <https://bwc-ecbm.unog.ch/state/norway>. Accessed 12 February 2021.

1.4.2 Biosafety training and practices

1.4.2a

Does the country require biosafety training, using a standardized, required approach, such as through a common curriculum or a 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 Norway requires biosafety training, using a standardized, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. The 2002 Regulation Amending the Regulation for the Protection of Workers against Dangers of Working with Biological Factors requires biosecurity training for employees who handle dangerous substances. [1] Specifically, section 16 of the law states that "Employers shall ensure that workers who are assigned to work where they are or may be subject to biological factors receive the necessary training, exercise and instruction in the work so that exposure can, as far as possible, be avoided or reduced". Specifically, training programmes must inform those involved of the assessment of risk that has been undertaken, as well as of any major changes to the "necessary protective measure, hygiene requirements and use of personal protective equipment, including protective clothing". The Law goes on state that employers should make sure that procedures are "established and implemented for accidents or emergencies associated with biological factors, as well as procedures for all handling of biological factors classified in "contagious group 4". However, the law does not mention a mandatory standardized curriculum. [1] Norway's reports to the United Nations Office at Geneva (UNOG) for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention, do not provide any further information, and neither does the Verification Research, Training and Information Center's database on Norway. [2,3] The websites of the Ministry of Defence, Foreign Affairs, Health and Care Services, Justice and Public Security, Food and Agriculture, Education and Research or the

National Institute of Public Health do not contain evidence of such training. [4,5,6,7,8,9,10]

[1] Government of Norway. 2002. "The Protection of Workers against Dangers of Working with Biological Factors". ("Forskrift om endring i forskrift om vern av arbeidstakerne mot farer ved arbeid med biologiske faktorer").

<https://lovdata.no/dokument/LTI/forskrift/2002-06-20-825>. Accessed 12 February 2021.

[2] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_norway.pdf. Accessed 12 February 2021.

[3] Verification Research, Training and Information Centre. "Norway". <https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>. Accessed 17 March 2021.

[4] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 17 March 2021.

[5] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 17 March 2021.

[6] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 17 March 2021.

[7] Ministry of Justice and Public Security. "Ministry of Justice and Public Security".

<https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 17 March 2021.

[8] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>.

Accessed 17 March 2021.

[9] Ministry of Education and Research. "Ministry of Education and Research".

<https://www.regjeringen.no/en/dep/kd/id586/>. Accessed 17 March 2021.

[10] Norwegian Institute of Public Health. "Norwegian Institute of Public Health". <https://www.fhi.no/en/>. Accessed 17 March 2021.

1.5 DUAL-USE RESEARCH AND CULTURE OF RESPONSIBLE SCIENCE

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

1.5.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that an assessment has been conducted to determine whether research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential or other dual-use research in Norway. The National Committee for Medical and Health Research Ethics is responsible for research ethics in Norway and its website does not have any publicly available information on dual-use ethics and assessments. [1] The Ministry of Agriculture and Food, the Ministry of Defense, the Ministry of Foreign Affairs, the Ministry of Health and Care Services, and the Ministry of Justice and Public Security do not have information about conducting assessments to determine whether ongoing research is occurring on especially dangerous substances. [2, 3, 4, 5, 6] Norway's reports to the United Nations Office at Geneva (UNOG) for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention, do not provide any further relevant information. [7] There is no further relevant evidence in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [8]

- [1] National Committee for Medical and Health Research Ethics. "About us". <https://www.etikkom.no/en/our-work/>. Accessed 14 February 2021.
- [2] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 14 February 2021.
- [3] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 14 February 2021.
- [4] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 14 February 2021.
- [5] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.
- [6] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 14 February 2021.
- [7] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". <https://bwcecbm.unog.ch/state/norway>. Accessed 14 February 2021.
- [8] Verification Research, Training and Information Centre. "BWC Legislation Database. N." [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. 1 March 2021.

1.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a national policy requiring oversight of dual-use research, such as research with especially dangerous pathogens, toxins, and pathogens with pandemic potential. While the 2013 Regulation on the Export of Defense Material specifies requirements for licensing from the Ministry of Foreign Affairs to export dual-use materials, there are no requirements for monitoring research activity. [1] There is no information about policies for overseeing dual-use research on the websites of the Ministry of Agriculture and Food, the Ministry of Defense, the Ministry of Foreign Affairs, the Ministry of Health and Care Services, the Ministry of Education and Research, or the Ministry of Justice and Public Security. [2, 3, 4, 5, 6, 7] Norway's reports to the United Nations Office at Geneva (UNOG) for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention, also do not provide any further information. [8] There is no further relevant evidence in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [9]

- [1] Government of Norway. 2013. "Regulations on the export of defense materiel, multi-purpose goods, technology and services". ("Forskrift om eksport av forsvarsmateriell, flerbruksvarer, teknologi og tjenester"). <https://lovdata.no/dokument/SF/forskrift/2013-06-19-718>. Accessed 14 February 2021.
- [2] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 14 February 2021
- [3] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 14 February 2021.
- [4] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 14 February 2021.
- [5] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.
- [6] Ministry of Education and Research. "Ministry of Education and Research". <https://www.regjeringen.no/en/dep/kd/id586/>. Accessed 14 February 2021.
- [7] Ministry of Justice and Public Security. "Ministry of Justice and Public Security".

<https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 14 February 2021.

[8] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". <https://bwcecbm.unog.ch/state/norway>. Accessed 14 February 2021.

[9] Verification Research, Training and Information Centre. "BWC Legislation Database. N." [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. 1 March 2021.

1.5.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, and/or other dual use research. According to the 2013 Regulation on Export of Defence Material, any entity that handles dual use materials is required to apply for a license from the Ministry of Foreign Affairs, but the law does not mention any additional oversight requirements. [1] The National Committee for Medical and Health Research Ethics is responsible for research ethics in Norway, but it is not explicitly responsible for the oversight of research with especially dangerous pathogens, pathogens with pandemic potential, or other dual use research. [2] There is no further relevant evidence on the websites of the Ministry of Agriculture and Food, the Ministry of Defense, the Ministry of Foreign Affairs, the Ministry of Health and Care Services, the Ministry of Education and Research, or the Ministry of Justice and Public Security. [3, 4, 5, 6, 7, 8]. Norway's reports to the United Nations Office at Geneva (UNOG) for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention, also do not provide any further information. [9] There is no further relevant evidence in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [10]

[1] Government of Norway. 2013. "Regulations on the export of defense materiel, multi-purpose goods, technology and services". ("Forskrift om eksport av forsvarsmateriell, flerbruksvarer, teknologi og tjenester"). <https://lovdata.no/dokument/SF/forskrift/2013-06-19-718>. Accessed 14 February 2021.

[2] National Committee for Medical and Health Research Ethics. "About us". <https://www.etikkom.no/en/our-work/>. Accessed 14 February 2021.

[3] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 14 February 2021.

[4] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 14 February 2021.

[5] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 14 February 2021.

[6] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.

[7] Ministry of Education and Research. "Ministry of Education and Research". <https://www.regjeringen.no/en/dep/kd/id586/>. Accessed 14 February 2021.

[8] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 14 February 2021.

[9] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". <https://bwcecbm.unog.ch/state/norway>. Accessed 14 February 2021.

[10] Verification Research, Training and Information Centre. "BWC Legislation Database. N." [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. 1 March 2021.

1.5.2 Screening guidance for providers of genetic material

1.5.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no public evidence of a national legislation or policy addressing the screening of synthesized DNA before it is sold. There is no such evidence on the websites of the Directorate for Civil Protection, the Ministry of Agriculture and Food, the Ministry of Defense, the Ministry of Foreign Affairs, the Ministry of Health and Care Services, the Ministry of Education and Research, or the Ministry of Justice and Public Security. [2, 3, 4, 5, 6, 7] Norway's reports to the United Nations Office at Geneva (UNOG) for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention, do not provide any relevant information. [8] There is no relevant evidence in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [9]

[1] Directorate for Civil Protection (DSB). "Firesafety, fire agency and emergency network". ("Brannvern, brannvesen og nødnett"). <https://www.dsb.no/lover/brannvern-brannvesen-nodnett/>. Accessed 14 February 2021.

[2] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 14 February 2021.

[3] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 14 February 2021.

[4] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 14 February 2021.

[5] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.

[6] Ministry of Education and Research. "Ministry of Education and Research". <https://www.regjeringen.no/en/dep/kd/id586/>. Accessed 14 February 2021.

[7] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 14 February 2021.

[8] United Nations Office at Geneva. 2020. "Confidence Building Measure Forms - Norway". <https://bwc-ecbm.unog.ch/state/norway>. Accessed 14 February 2021.

[9] Verification Research, Training and Information Centre. "BWC Legislation Database. N." [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/n/>]. 1 March 2021.

1.6 IMMUNIZATION

1.6.1 Vaccination rates

1.6.1a

Immunization rate (measles/MCV2)

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

Current Year Score: 2

2019

World Health Organization

1.6.1b

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

Yes = 1 , No = 0

Current Year Score: 1

2020

OIE WAHIS database

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

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a

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

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

Current Year Score: 0

There is not sufficient evidence that the national laboratory system in Norway has the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests. The Norwegian Institute for Public Health (NIPH) tests for more than 60 diseases, which includes influenza virus (flu); poliovirus (polio); HIV; mycobacterium tuberculosis (tuberculosis/TB); and plasmodium spp. (malaria). However, the NIPH's website does not specify the type of testing used for any of these. [1] That said, for mycobacterium tuberculosis there is evidence of microscopy testing being conducted in Norway's national laboratory system. [2] There is also evidence that Norway conducts Polymerase Chain Reaction (PCR) testing for the Influenza virus. [3] There is no evidence on the website of the Norwegian Ministry of Health and Care Services that Norway has defined country-specific core tests. [4]

[1] Norwegian Institute for Public Health (NIPH). 2016 (Updated 2019). "Notifiable diseases in the Norwegian Surveillance System for Communicable Diseases" <https://www.fhi.no/en/hn/health-registries/msis/notifiable-diseases-msis/>. Accessed 14 February 2021.

[2] Ministry of Security and Service Organization (DSS). 2011. "Joint ECDC/WHO Regional Office for Europe: Tuberculosis country visit". https://www.regjeringen.no/globalassets/upload/hod/dokumenter20fha/fos/tb_final_report_ecdc_who_country_visit_norway.pdf?id=2215750. Accessed 14 February 2021.

[3] Norwegian Institute for Public Health (NIPH). 2018. "Norway: National Influenza Center".

https://fhi.no/globalassets/dokumenterfiler/rapporter/vaksine/2018_nic_norway_vcm.pdf. Accessed 14 February 2021.

[4] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 17 March 2021.

2.1.1b

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

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

Current Year Score: 0

There is no public evidence of an existing 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. There is no mention of a detailed plan for conducting testing in the Long-Term Strategy and Plan for Handling the COVID-19 Pandemic and Adjustment of Measures (2020), the National Strategy for Emergency Preparedness for Incidents Involving Hazardous Substances and Infectious Diseases (2016), or the National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases (2019). [1, 2, 3] There is no evidence of such national plan, strategy or similar document on the websites of the Ministry of Agriculture and Food, the Ministry of Defense, the Ministry of Foreign Affairs, the Ministry of Health and Care Services, the Ministry of Education and Research, or the Ministry of Justice and Public Security. [4, 5, 6, 7, 8, 9]

[1] Office of the Prime Minister. 8 May 2020. "Long-term strategy and plan for handling the Covid-19 pandemic and adjustment of measures". <https://www.regjeringen.no/en/dokumenter/long-term-strategy-and-plan-for-handling-the-covid-19-pandemic-and-adjustment-of-measures/id2701518/>. Accessed 14 February 2021.

[2] Ministry of Justice and Public Security, Ministry of Health and Care Services, Ministry of Defense. 2016. "National strategy for emergency preparedness for incidents involving hazardous substances and infectious diseases 2016–2020". ("Nasjonal strategi for CBRNE-beredskap 2016–2020").

<https://www.regjeringen.no/contentassets/3fe1d74dc4e94cf58d4dbc10a9c410da/nasjonal-strategi-cbrne.pdf>. Accessed 14 February 2021.

[3] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer").

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 14 February 2021.

[4] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 14 February 2021.

[5] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 14 February 2021.

[6] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 14 February 2021.

[7] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.

[8] Ministry of Education and Research. "Ministry of Education and Research". <https://www.regjeringen.no/en/dep/kd/id586/>. Accessed 14 February 2021.

[9] Ministry of Justice and Public Security. "Ministry of Justice and Public Security".

<https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 14 February 2021.

2.1.2 Laboratory quality systems

2.1.2a

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

Yes = 1, No = 0

Current Year Score: 1

There is a national laboratory that serves as a reference facility that is accredited. The Norwegian Institute of Public Health's (NIPH) Department of Bacteriology and Infection Immunology, which is the national reference facility, is an accredited laboratory. [1] Indeed, in order to operate in Norway a laboratory must meet requirements set by Norwegian Accreditation (NA), which is the national body for technical accreditation in Norway and uses ISO 15189:2003. [2] In addition, many of the laboratories within NIPH are also accredited according to the International Standard ISO 17025. [3]

[1] Norwegian Institute of Public Health (NIPH). 2008 (Updated 2016). "International tuberculosis research and monitoring". <https://www.fhi.no/en/qk/global-health-collaboration/global-health/bilateral-collaboration/international-tuberculosis-research/>. Accessed 14 February 2021.

[2] Norsk Akkreditering. 1 December 2017. "Conditions for accreditation". www.akkrediter.no/globalassets/na-dokumenter/dok00534.pdf. Accessed 14 February 2021.

[3] Norwegian Institute of Public Health (NIPH). 20 February 2017 (Updated 24 October 2018). "Accreditation at the Institute of Public Health". ("Akkreditering ved Folkehelseinstituttet"). <https://www.fhi.no/om/om-fhi/fhi/om-akkrediteringved-folkehelseinstituttet/>. Accessed 14 February 2021.

2.1.2b

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

Yes = 1, No = 0

Current Year Score: 1

The national laboratory that serves as a reference facility is subject to external quality assurance (EQA) review. In order to operate in Norway a laboratory must meet requirements set by Norwegian Accreditation (NA), which is the national body for technical accreditation in Norway. To be accredited, laboratories must meet accreditation standard NS-EN ISO 15189 for medical laboratories on requirements for quality and competence. The national reference laboratories must meet certification requirements in order to operate in the country. [1] ISO 15189 certification requires external quality assurance reviews. [2]

[1] Norsk Akkreditering. 1 December 2017. "Conditions for accreditation". www.akkrediter.no/globalassets/na-dokumenter/dok00534.pdf. Accessed 14 February 2021

[2] World Health Organisation. "Content Sheet 10-1: Overview of External Quality Assessment (EQA)". http://www.who.int/ihr/training/laboratory_quality/10_b_eqa_contents.pdf. Accessed 14 February 2021.

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system?

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that Norway has a nationwide specimen transport system that can reach all parts of the country. Private firms, such as Swisslog, manage specimen handling and transport, for example transporting specimens from the site of collection to a laboratory for testing. [1] Additionally, Biobank Norway, a national biobank infrastructure encompassing the Norwegian Institute of Public Health, hospitals and universities, transports, stores and processes valuable biological samples across the country. [2,3] However, neither of these companies mention on their website what proportion of Norway's territory they cover. [1, 2, 3] There is no explicit evidence that Norway's specimen transport networks cover more than 80% of the country on the websites of the Ministry of Health and Social Services, the Ministry of Agriculture or the Norwegian Public Health Institute. [4,5,3]

[1] Swisslog. "Automated transport for laboratories". <https://www.swisslog-healthcare.com/en-gb/solutions/transport/lab-specimen-transport>. Accessed 14 February 2021.

[2] Biobank Norway. "A national biobank infrastructure for global research collaboration." <https://bbmri.no/>. Accessed 14 February 2021.

[3] Norwegian Public Health Institute. 21 June 2016 (Updated 15 January 2021). "About the Biobank at NIPH". <https://www.fhi.no/en/more/biobanks/about-the-biobank-at-niph/>. Accessed 14 February 2021.

[4] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.

[5] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 14 February 2021.

2.2.2 Laboratory cooperation and coordination

2.2.2a

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

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

Current Year Score: 0

There is no public evidence of a plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale up testing during an outbreak. There is no mention of rapidly authorizing or licensing laboratories to increase testing capacity in the Long-Term Strategy and Plan for Handling the COVID-19 Pandemic and Adjustment of Measures (2020), the National Strategy for Emergency Preparedness for Incidents Involving Hazardous Substances and Infectious Diseases (2016), or the National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases (2019). [1, 2, 3] There is no evidence of such a plan on the websites of the Ministry of Agriculture and Food, the Ministry of Defense, the Ministry of Foreign Affairs, the Ministry of Health and Care Services, the Ministry of Education and Research, or the Ministry of Justice and Public Security. [4, 5, 6, 7, 8, 9]

- [1] Office of the Prime Minister. 8 May 2020. "Long-term strategy and plan for handling the Covid-19 pandemic and adjustment of measures". <https://www.regjeringen.no/en/dokumenter/long-term-strategy-and-plan-for-handling-the-covid-19-pandemic-and-adjustment-of-measures/id2701518/>. Accessed 14 February 2021.
- [2] Ministry of Justice and Public Security, Ministry of Health and Care Services, Ministry of Defense. 2016. "National strategy for emergency preparedness for incidents involving hazardous substances and infectious diseases 2016-2020". ("Nasjonal strategi for CBRNE-beredskap 2016–2020"). <https://www.regjeringen.no/contentassets/3fe1d74dc4e94cf58d4dbc10a9c410da/nasjonal-strategi-cbrne.pdf>. Accessed 14 February 2021.
- [3] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer"). https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 14 February 2021.
- [4] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 14 February 2021.
- [5] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 14 February 2021.
- [6] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 14 February 2021.
- [7] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.
- [8] Ministry of Education and Research. "Ministry of Education and Research". <https://www.regjeringen.no/en/dep/kd/id586/>. Accessed 14 February 2021.
- [9] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 14 February 2021.

2.3 REAL-TIME SURVEILLANCE AND REPORTING

2.3.1 Indicator and event-based surveillance and reporting systems

2.3.1a

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

Yes, there is evidence of ongoing event-based surveillance and evidence that the data is being analyzed on a daily basis = 2,
Yes, there is evidence of ongoing event-based surveillance, but no evidence that the data are being analyzed on a daily basis
= 1, No = 0

Current Year Score: 0

There is no evidence that Norway is conducting ongoing event-based surveillance and analysis for infectious disease. There is no evidence of ongoing event-based surveillance on the websites of the Norwegian Directorate for Civil Protection, the Ministry of Health and Care Services, the Ministry of Agriculture and Food, the Ministry of Defense, the Ministry of Foreign Affairs, or the Ministry of Justice and Public Security. [1, 2, 3, 4, 5, 6]

- [1] Directorate for Civil Protection (DSB). "Risk, Vulnerability and Preparedness". ("Risiko, sårbarhet og beredskap"). <https://www.dsb.no/lover/risiko-sarbarhet-og-beredskap/>. Accessed 14 February 2021.
- [2] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.
- [3] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 14 February 2021.

[4] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 14 February 2021.

[5] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 14 February 2021.

[6] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 14 February 2021.

2.3.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Norway reported a potential public health emergency of international concern (PHEIC) to the World Health Organization (WHO) within the last two years, including in relation to COVID-19. The WHO Disease Outbreak News webpage, the WHO country webpage for Norway and the website of the Norwegian Ministry of Health and Care Services do not have any mention of such cases from the previous two years. [1,2,3] The most recent notification made to the WHO is from June 2017 when Norway was one of 15 countries to report an unusual increase in cases of hepatitis A affecting mainly men who have sex with men, related to three distinct multi-country hepatitis A outbreaks. [4]

[1] World Health Organisation (WHO). "Disease Outbreak News (DONs)". <https://www.who.int/csr/don/en/>. Accessed 14 February 2021.

[2] World Health Organisation (WHO). "Norway". <https://www.euro.who.int/en/countries/norway>. Accessed 14 February 2021.

[3] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.

[4] World Health Organisation (WHO). 7 June 2017. "Hepatitis A outbreaks mostly affecting men who have sex with men European Region and the Americas". <http://www.who.int/csr/don/07-june-2017-hepatitis-a/en/>. Accessed 14 February 2021.

2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a

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

Yes = 1 , No = 0

Current Year Score: 1

Norway has an electronic reporting surveillance system at both the national and sub-national level. The Norwegian Institute of Public Health runs the Norwegian Surveillance System for Communicable Diseases (MSIS), which is a surveillance system at both the national and sub-national level. The MSIS coordinates the monitoring of health institutions and participating in the European Center for Disease Prevention and Control (ECDC) and the World Health Organization's surveillance of infectious diseases. Since 2014, influenza-like illness (ILI) is monitored through the Norwegian Syndromic Surveillance System (NorSSS), an automated electronic system that weekly provides data about the occurrence of influenza-like illness in each county. Data are collected from all general practitioners and emergency clinics. [1]

[1] Norwegian Surveillance System for Communicable Diseases (MSIS). 15 June 2016 (Updated 4 July 2019). "Notifiable diseases in the Norwegian Surveillance System for Communicable Diseases" <https://www.fhi.no/en/hn/health->

registries/msis/notifiable-diseases-msis/. Accessed 14 February 2021.

2.3.2b

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence that the government's electronic reporting surveillance system collects ongoing/real-time laboratory data. The Norwegian Institute of Public Health runs the Norwegian Surveillance System for Communicable Diseases (MSIS), which is a surveillance system that collects ongoing laboratory data. The MSIS coordinates the monitoring of health institutions and participating in the European Center for Disease Prevention and Control (ECDC) and the World Health Organization's surveillance of infectious diseases. Since 2014 influenza-like illness (ILI) is monitored through the Norwegian Syndromic Surveillance System (NorSSS), an automated electronic system that weekly provides data about the occurrence of influenza-like illness in each county. Data from all general practitioners and emergency clinics is collected. [1] However, there is no further information regarding the timeframe for ongoing surveillance.

[1] Norwegian Surveillance System for Communicable Diseases (MSIS). 15 June 2016 (Updated 4 July 2019). "Notifiable diseases in the Norwegian Surveillance System for Communicable Diseases" <https://www.fhi.no/en/hn/health-registries/msis/notifiable-diseases-msis/>. Accessed 14 February 2021.

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

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

Current Year Score: 2

Electronic health records (EHRs) are commonly in use in Norway. All healthcare providers in Norway (both private and public) are obligated to use a publicly owned, secure national network established especially for electronic communication between healthcare providers. [1] The National Health Record system was introduced in 1981, and by 2015 more than 75% of all primary, secondary and tertiary care facilities used it. [2] All Norwegians (5.2 million people) have access to the system and it is used by 6,000 healthcare professionals. [3] The EHRs contain patient health information, such as administrative and billing data, patient demographics, progress notes, medical histories, diagnoses, medications, immunization dates, allergies, radiology images, lab and test results. [4]

[1] US National Library of Medicine. 2011. "Diffusion of Electronic Health Records and electronic communication in Norway". <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3631929/>. Accessed 14 February 2021. [

[2] World Health Organisation. 2015. "Country profile - Norway". <https://www.who.int/goe/publications/atlas/2015/nor.pdf?ua=1>. Accessed 4 March 2021.

[3] Accenture. "Power to the people - Digital solutions empower patients and improve safety across all of Norway". <https://www.accenture.com/no-en/success-norwegian-directorate-ehealth-electronic-health-records>. Accessed 4 March 2021.

[4] The Office of the National Coordinator for Health Information Technology. 9 April 2019. "What information does an electronic health record (EHR) contain?". <https://www.healthit.gov/faq/what-information-does-electronic-health-record-ehr-contain>. Accessed 4 March 2021.

2.4.1b

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

Yes = 1 , No = 0

Current Year Score: 1

The national public health system has access to electronic health records of individuals in Norway. The Norwegian health care system is controlled centrally and Norway's four regional health authorities control the provision of specialized health services. [1] Norway has been an early user of electronic health records and all health care providers in Norway (both private and public) are obligated to use a publicly owned, secure national network established especially for electronic communication between health care providers. [2] The national public health system manages and can access these records. [3]

[1] The Norwegian Medicines Agency. "The Norwegian health care system and pharmaceutical system". <https://legemiddelverket.no/english/about-us/the-norwegian-health-care-system-and-pharmaceutical-system>. Accessed 14 February 2021.

[2] US National Library of Medicine. 2011. "Diffusion of Electronic Health Records and electronic communication in Norway". <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3631929/>. Accessed 14 February 2021.

[3] Norwegian Institute of Public Health. 21 June 2016 (Updated 22 September 2019). "Overview of the national health registries". <https://www.fhi.no/en/more/access-to-data/about-the-national-health-registries2/>. Accessed 14 February 2021.

2.4.1c

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

Yes = 1 , No = 0

Current Year Score: 1

Norway has data standards in place to ensure that data are comparable. The Norwegian Medical Electronic File System (ESDM) was certified with the ISO (hospital quality standard). [1] Norway has been an early user of electronic health records. [2]

[1] Norwegian Institute of Public Health. 11 August 2015 (Updated 5 December 2016). "Interventions for sharing of electronic patient records" <https://www.fhi.no/en/publ/2015/interventions-for-sharing-of-electronic-patient-records>. Accessed 14 February 2021.

[2] US National Library of Medicine. 2011. "Diffusion of Electronic Health Records and electronic communication in Norway". <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3631929/>. Accessed 14 February 2021.

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

2.4.2a

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

Yes = 1, No = 0

Current Year Score: 1

There are established mechanisms to share data among animal, human and wildlife surveillance activities. Norway follows Directive 2003/99/EC of the European Parliament and of the Council of 17 November 2003 on the Monitoring of Zoonoses and Zoonotic agents, the purpose of which is to ensure that zoonoses, zoonotic agents and related antimicrobial resistance are properly monitored to enable the collection of information necessary to evaluate relevant trends and sources. [1, 2] In accordance with this directive, departments within the Ministry of Health and Care Services and the Ministry of Agriculture and Food collect data and publish annual reports on their findings. An example of an established mechanism for sharing information across animal, human and wildlife health is the tick monitoring mechanism, a database delivering annual reports on tick bites and related diseases. [3] Lyme disease is notifiable to the Norwegian Surveillance System for Communicable Diseases (MSIS). Only cases that meet the notification criteria should be reported. [4]

[1] Norwegian Veterinary Institute. 2019. "The Norwegian Zoonoses Report 2019". <https://www.vetinst.no/rapporter-og-publikasjoner/rapporter/2020/the-norwegian-zoonoses-report-2019>. Accessed 14 February 2021.

[2] European Union. November 2003. "Directive 2003/99/EC of the European Parliament and of the Council of 17 November 2003 on the monitoring of zoonoses and zoonotic agents, amending Council Decision 90/424/EEC and repealing Council Directive 92/117/EEC". <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32003L0099>. Accessed 14 February 2021.

[3] Norwegian Institute of Public Health. "Ticks and tick-borne diseases" <https://www.fhi.no/en/el/insects-and-pests/ticks-and-tick-borne-diseases/>. Accessed 14 February 2021.

[4] Norwegian Institute for Public Health (NIPH). 2016 (Updated 2019). "Notifiable diseases in the Norwegian Surveillance System for Communicable Diseases" <https://www.fhi.no/en/hn/health-registries/msis/notifiable-diseases-msis/>. Accessed 14 February 2021.

2.4.3 Transparency of surveillance data

2.4.3a

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

Yes = 1, No = 0

Current Year Score: 1

Norway makes de-identified health surveillance data on disease outbreaks publicly available via reports on government websites. Norway has health surveillance data through its national health registries for various diseases, and these are available via government websites. [1] Some of these registries make de-identified records on health surveillance data of disease outbreaks available. [2] The Norwegian Surveillance System for Communicable Diseases (MSIS) publishes data diseases including gonorrhoea, HIV infection and syphilis, and data are updated on a daily basis. [3] The mandatory national health registries were established to maintain national functions. They are used for health analysis, health statistics,

improving the quality of health care, research, administration and emergency preparedness. [1]

[1] Norwegian Institute for Public Health. 21 June 2016 (Updated 22 September 2020). "Overview of the national health registries". <https://www.fhi.no/en/more/access-to-data/about-the-national-health-registries2/>. Accessed 14 February 2021.

[2] Norwegian Institute for Public Health. 15 June 2016 (Updated 4 July 201). "Notifiable diseases in the Norwegian Surveillance System for Communicable Diseases" <https://www.fhi.no/en/hn/health-registries/msis/notifiable-diseases-msis/>. Accessed 14 February 2021.

[3] Norwegian Institute of Public Health. "Welcome to the Norwegian Surveillance System for Communicable Diseases (MSIS)". <http://www.msis.no/>. Accessed 4 March 2021.

2.4.3b

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

Yes = 1, No = 0

Current Year Score: 1

Norway makes de-identified COVID-19 surveillance data available on government websites. The Norwegian Institute of Public Health publishes daily statistics on the COVID-19 pandemic on its website, including details such as daily case count, number of confirmed cases by sex, age, geographical location, number of tested persons, hospital admissions, and intensive care admissions. [1]

[1] Norwegian Institute of Public Health. 12 March 2020 (Updated 17 February 2021). "Daily report and statistics about coronavirus and COVID-19". <https://www.fhi.no/en/id/infectious-diseases/coronavirus/daily-reports/daily-reports-COVID19/#key-figures-for-norway>. Accessed 17 February 2021.

2.4.4 Ethical considerations during surveillance

2.4.4a

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

Yes = 1, No = 0

Current Year Score: 1

There are laws in Norway that safeguard the confidentiality of identifiable health information for individuals. According to the Health Register Act (adopted in 2015, last amended in 2021), all health registers must be consent-based, or the health data cannot contain direct personally identifiable characteristics of persons. [1] In the latter case, the information is processed without the data controller having access to names, birth numbers or other directly identifiable characteristics. Everyone who processes health information in accordance with this act has a duty of confidentiality. [1] The Personal Data Act (adopted 2000, last amended 2018) regulates the collection and use of personal data, but does not specifically mention health information. [2,3]

[1] Government of Norway. 2014. "Health Register Act". ("Helseregisterloven"). <https://lovdata.no/dokument/NL/lov/2014-06-20-43>. Accessed 4 March 2021.

[2] Government of Norway. 2000 (Updated 2018). "Act on the processing of personal data (Personal Data Act)". ("Lov om behandling av personopplysninger (personopplysningsloven)"). <https://lovdata.no/dokument/NL/lov/2014-06-20-43>.

Accessed 14 February 2021.

[3] Christopher Sparre-Enger Clausen. 23 September 2020. "Data protection in Norway: overview"

[https://uk.practicallaw.thomsonreuters.com/w-016-](https://uk.practicallaw.thomsonreuters.com/w-016-6825?originationContext=knowHow&transitionType=KnowHowItem&contextData=%28sc.DocLink%29#)

[6825?originationContext=knowHow&transitionType=KnowHowItem&contextData=%28sc.DocLink%29#](https://uk.practicallaw.thomsonreuters.com/w-016-6825?originationContext=knowHow&transitionType=KnowHowItem&contextData=%28sc.DocLink%29#). Accessed 14 February 2021.

2.4.4b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence of legislation or regulations safeguarding the confidentiality of identifiable health information for individuals that include mention of protection from cyber-attacks. There is no mention of cyber-attacks in the 2000 Personal Data Act or the 2014 Health Register Act. [1, 2] The Norwegian cyber-security policy, issued in 2012, states that primary responsibility for safeguarding cyber-security in each sector's ICT infrastructure lies with each ministry; the policy does not specifically mention protecting health information from cyber-attacks. [3] The 2017 Cyber-Security Act specifies that each ministry is responsible for: Identifying critical infrastructure in their sector; ensuring adequate security; planning emergency measures with respect to various crisis situations; and monitoring information security efforts in their departments. [4] The Cyber-Security Act does not, however, specifically mention protecting health information from cyber-attacks. [4] There is no further relevant evidence on the websites of the Ministry of Health and Care Services, the National Health Directorate or the Ministry of Defence. [5, 6, 7] In 2018, there was a cyber attack on the Helse Sør-Øst RHF (Health South-East) healthcare authority, which compromised patients' health records. [8]

[1] Government of Norway. 2000 (Updated 2018). "Act on the processing of personal data (Personal Data Act)". ("Lov om behandling av personopplysninger (personopplysningsloven)"). <https://lovdata.no/dokument/NL/lov/2018-06-15-38>. Accessed 14 February 2021.

[2] Government of Norway. 2014. "Health Register Act". ("Helseregisterloven"). <https://lovdata.no/dokument/NL/lov/2014-06-20-43>. Accessed 4 March 2021.

[3] Government of Norway. 18 December 2012. "Cyber security strategy for Norway" <https://www.regjeringen.no/en/dokumenter/cyber-security-strategy-for-norway/id710469/>. Accessed 14 February 2021.

[4] Government of Norway. 21 November 2017 (Updated 3 December 2019). "Cyber Security Act". ("Cybersikkerhetsforordningen"). <https://www.regjeringen.no/no/sub/eos-notatbasen/notatene/2017/nov/cybersecurity-act/id2590048/>. Accessed 14 February 2021.

[5] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 4 March 2021.

[6] Norwegian Institute of Public Health. "Norwegian Institute of Public Health". <https://www.fhi.no/en/>. Accessed 4 March 2021.

[7] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 4 March 2021.

[8] Luke Irwin. 1 February 2018. "Breach at Norway's largest healthcare authority was a disaster waiting to happen". <https://www.itgovernance.eu/blog/en/breach-at-norways-largest-healthcare-authority-was-a-disaster-waiting-to-happen>. Accessed 14 February 2021.

2.4.5 International data sharing

2.4.5a

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

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

Current Year Score: 2

There is evidence that the government has made a commitment to share surveillance data during a public health emergency with other countries in the region for more than one disease. As a member of the European Economic Area, Norway shares surveillance data during public health emergencies with other countries in the region for more than one disease. All EEA and European Union (EU) countries are part of the European Center for Disease Prevention and Control's Early Warning and Response System (EWRS), 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 EU Decision on Serious Cross-Border Threats to Health notes that the European Commission shall make available to the national competent authorities through the EWRS any information that may be useful for coordinating the response, including information related to serious cross-border threats to health and public health measures related to serious cross-border threats to health transmitted through rapid alert and information systems established under other provisions of EU law or the Euratom Treaty. [2]

[1] European Center for Disease Prevention and Control. Early Warning and Response System (EWRS). <https://ecdc.europa.eu/en/early-warning-and-response-system-ewrs>. Accessed 14 February 2021.

[2] Official Journal of the European Union. 5 November 2013. "Decision No 1082/2013/EU of the European Parliament and of the Council of 22 October 2013 on Serious Cross-Border Threats to Health and Repealing Decision No 2119/98/EC". https://ec.europa.eu/health/sites/health/files/preparedness_response/docs/decision_serious_crossborder_threats_22102013_en.pdf. Accessed 14 February 2021.

2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a

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

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

Current Year Score: 1

Norway has a national system to provide support at the sub-national level to conduct contact tracing; the Norwegian government supports sub-national systems, but only in response to active public health emergencies. Norway has a national system in place to provide support at the sub-national level to conduct contact tracing during the COVID-19 pandemic, but there is no indication in publicly available sources that this system is generally applicable and can be utilised in future health

emergencies. [1,2,3] A national infection detection team has been set up at the Norwegian Institute of Public Health to assist and support the municipalities in their work to deal with local outbreaks of COVID-19, including contact tracing. The team can assist the work of municipalities in the event of local public health emergencies with professional advice on handling outbreaks, risk assessment, possible introduction of infection control, systematic collection, processing and analysis of data, etc. [4] Moreover, the Norwegian Institute of Public Health provides digital tools for infection and contact tracing to support the municipalities in the follow-up work of people in isolation and quarantine, and be able to provide simple statistical overviews, summaries of where people are infected and compilation of reports for sharing internally and externally. [5,6] There is no further evidence of a generally applicable system on the websites of the Ministry of Health and Care Services or the Norwegian Institute of Public Health. [1,2]

[1] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 4 March 2021.

[2] Norwegian Institute of Public Health. "Norwegian Institute of Public Health". <https://www.fhi.no/en/>. Accessed 4 March 2021.

[3] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 4 March 2021.

[4] Norwegian Institute of Public Health. 2 November 2020. "3b. Assistance from the national infection detection team". ("3b. Hjelp fra nasjonalt smittesporingsteam"). <https://www.fhi.no/nettpub/overvaking-vurdering-og-handtering-av-covid-19-epidemien-i-kommunen/ti-trinn2/3b.-hjelp-fra-nasjonalt-smittesporingsteam/?term=&h=1>. Accessed 19 February 2021.

[5] Norwegian Institute of Public Health. 8 February 2020 (Updated 18 February 2021). "Infection tracing". ("Smittesporing"). <https://www.fhi.no/nettpub/coronavirus/testing-og-oppfolging-av-smittede/smittesporing/>. Accessed 19 February 2021.

[6] Norwegian Association of Local and Regional Authorities (KS). 5 June 2020. "Digital tool for infection tracking". ("Digitalt verktøy for smittesporing"). <https://www.ks.no/fagomrader/digitalisering/felleslosninger/fiks-smittesporing/elektronisk-losning-for-smittesporing/>. Accessed 19 February 2021.

2.5.1b

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

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

Current Year Score: 0

There is insufficient evidence that Norway provides wraparound services to enable infected people and their contacts to self-isolate as recommended, beyond measures specific to COVID-19. During the COVID-19 pandemic, Norway has been providing wraparound services in all parts of the country to those required to self-isolate, but none of the official websites or legislation referring to this support indicates that such services are generally available for any future pandemic. [1,2,3,4,5] With regards to the ongoing COVID-19 pandemic, Norway introduced several economic measures aimed at persons affected by COVID-19, including the extension of the unemployment benefit scheme by granting benefit from the first day, increased daily allowance, and increased number of days for parents to stay home with sick children. [6] Citizens placed in quarantine have the opportunity to contact their doctor, other medical professionals and clinics online via e-consultation, and some of them also provides video consultation. [7] In case an employed person gets placed in quarantine because of COVID-19 infection, the person is entitled to sickness benefits. The first three days are paid for by the employer, and from the fourth day onwards, the Norwegian National Insurance Scheme ("folketrygden") covers the sick leave. [8] The 1997 National Insurance Act covers all kinds of social benefits from subsidies to job security guarantees, but it does not refer to any kind of benefits during self-isolation. [9] The 1994 Act on Protection Against Infectious Diseases, which regulates the rules of isolation and restrictions on freedom of movement, does not mention any type of wraparound services. [10] There is no further evidence of such services in the 2001 Health Preparedness Act, which regulates health and care services and social services being

offered to the population during war and in crises and disasters in peacetime. [11]

- [1] Government of Norway. 2012. "Public Health Act". ("Folkehelseloven"). <https://lovdata.no/dokument/NL/lov/2011-06-24-29>. Accessed 4 March 2021.
- [2] Government of Norway. 2021. "Social Services Act". ("Sosialtjenesteloven"). <https://lovdata.no/dokument/NL/lov/2009-12-18-131>. Accessed 4 March 2021.
- [3] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 4 March 2021.
- [4] Norwegian Institute of Public Health. "Norwegian Institute of Public Health". <https://www.fhi.no/en/>. Accessed 4 March 2021.
- [5] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 4 March 2021.
- [6] Ministry of Finance. 8 June 2020. "Economic measures in Norway in response to Covid-19". <https://www.regjeringen.no/en/topics/the-economy/economic-policy/economic-measures-in-norway-in-response-to-covid-19/id2703484/>. Accessed 19 February 2021.
- [7] Helsenorge. "Do you need a doctor or other type of health care assistance?". ("Har du behov for lege eller annen helsehjelp?"). <https://www.helsenorge.no/koronavirus/nar-oppsoke-lege/>. Accessed 19 February 2021.
- [8] Government of Norway. 10 February 2021. "Rules for employees and employers". ("Regler for arbeidstakere og arbeidsgivere"). <https://www.regjeringen.no/no/tema/Koronasituasjonen/regler-for-arbeidstakere-og-arbeidsgivere/id2694582/>. Accessed 19 February 2021.
- [9] Government of Norway. 1997 (Updated 2020). "National Insurance Act". ("Lov om folketrygd"). <https://lovdata.no/dokument/NL/lov/1997-02-28-19>. Accessed 6 March 2021.
- [10] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases [Infection Control Act]". ("Lov om vern mot smittsomme sykdommer [smittevernloven]"). <https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 4 March 2021.
- [11] Government of Norway. 2001 (Updated 2021). "Health Preparedness Act". ("Helseberedskapsloven"). <https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 4 March 2021.

2.5.1c

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

Yes = 1, No = 0

Current Year Score: 0

Norway does not make de-identified data on contact tracing efforts for COVID-19 available via daily reports. The Norwegian Institute of Public Health makes de-identified COVID-19 surveillance data available on its website on a daily basis. [1] These data include details such as daily case count, number of confirmed cases by sex, age, geographical location, number of tested persons, hospital admissions, and intensive care admissions, but they do not contain contract tracing data. [1] There is no evidence of such data on the website of the Ministry of Health and Care Services either. [2]

[1] Norwegian Institute of Public Health. 12 March 2020 (Updated 17 February 2021). "Daily report and statistics about coronavirus and COVID-19". <https://www.fhi.no/en/id/infectious-diseases/coronavirus/daily-reports/daily-reports-covid19/#key-figures-for-norway>. Accessed 17 February 2021.

[2] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 20 February 2021.

2.5.2 Point of entry management

2.5.2a

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

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

Current Year Score: 0

There is no public evidence of a joint plan or cooperative agreement in Norway 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. The guidelines of the Norwegian Institute of Public Health on infection tracing and contact tracing do not mention the monitoring of suspected and potential cases for international travelers. [1] To limit the risk of transmitting the significantly more contagious variant of the coronavirus, the Government imposed strict rules on foreign nationals who seek entry to Norway. In general, only foreign nationals who reside in Norway will be permitted to enter. These steps are aimed at limiting the entry of international travelers to the country, but there is no evidence of monitoring them. [2] There is no such information on the websites of the Norwegian Institute of Public Health, the Ministry of Health and Care Services, the Ministry of Justice and Public Security, the Ministry of Defence or the National Police Directorate. [3,4,5,6,7]

[1] Norwegian Institute of Public Health. 8 February 2020 (Updated 18 February 2021). "Infection tracing". ("Smittesporing"). <https://www.fhi.no/nettpub/coronavirus/testing-og-oppfolging-av-smittede/smittesporing/>. Accessed 20 February 2021.

[2] Government of Norway. 27 January 2021. "Norway introduces its strictest entry rules since March 2020". ("Innfører de strengeste innreisereglene til Norge siden mars 2020"). <https://www.regjeringen.no/no/aktuelt/innforer-de-strengeste-innreisereglene-til-norge-siden-mars-2020/id2830390/>. Accessed 20 February 2021.

[3] Norwegian Institute of Public Health. "Norwegian Institute of Public Health". <https://www.fhi.no/en/>. Accessed 20 February 2021.

[4] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 20 February 2021.

[5] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 20 February 2021.

[6] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 20 February 2021.

[7] National Police Directorate. "Politiet". <https://www.politiet.no/>. Accessed 20 February 2021.

2.6 EPIDEMIOLOGY WORKFORCE

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

2.6.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 1

There is an applied epidemiology training program in Norway, and Norwegian citizens are sent to other countries to participate in such programs. There is an applied epidemiology training program available in Norway, called the Norwegian Field Epidemiology Training Program (Nor-FETP), which has been running since 2001. During the training period for Nor-FETP, students are actively involved in field investigations, surveillance and related research activities, and get acquainted with laboratory methods relevant to epidemiological investigations. [1] Nor-FETP participants, where feasible, are also sent on a site visit to another European department of infectious disease surveillance, to the European Centre for Disease Prevention and Control, or the World Health Organization for at least one week to attend an international scientific conference. [2]

[1] European Center for Disease Control and Prevention. "Folkehelseinstituttet - EPIET".

<https://ecdc.europa.eu/en/folkehelseinstituttet-epiet>. Accessed 14 February 2021.

[2] Krause, G, et. al. October 2009. "Differences and Commonalities of National Field Epidemiology Training Programmes in Europe". <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19378>. Accessed 14 February 2021.

2.6.1b

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

Yes = 1 , No = 0

Current Year Score: 1

Field epidemiology training programs are explicitly inclusive of animal health issues in Norway. The Norwegian Field Epidemiology Training Programme (Nor-FETP) started in 2001 with the objective of strengthening Norway's capacity to prevent and control communicable diseases by training highly qualified physicians, veterinarians and public health nurses in surveillance, outbreak investigations, applied research, communication, and support for decision making. [1] Information from the European Center for Disease Prevention and Control confirms that veterinary issues are part of the training. [2]

[1] Krause, G, et. al. October 2009. "Differences and Commonalities of National Field Epidemiology Training Programmes in Europe". <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19378>. Accessed 14 February 2021.

[2] European Center for Disease Control and Prevention. "Folkehelseinstituttet - EPIET".

<https://ecdc.europa.eu/en/folkehelseinstituttet-epiet>. Accessed 14 February 2021.

2.6.2 Epidemiology workforce capacity

2.6.2a

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

Yes = 1 , No = 0

Current Year Score: 0

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 2

Norway has an overarching national public health emergency response plan that addresses planning for multiple communicable diseases with pandemic potential. The National Health Preparedness Plan (adopted January 2018) constitutes the basis for how the health sector handles all types of crises and disasters, including disease outbreaks; nuclear preparedness; preparedness against biological terrorism; control of communicable diseases and pandemic preparedness; preparedness against acute pollution and chemical incidents; severe burns and violence and trauma. This plan describes a Pandemic Committee functioning as an advisory body for the Directorate of Health and the Norwegian Institute of Public Health, which provides advice before, during and after outbreaks of pandemics. [1] This plan is a national framework for all types of health crises, and it is based on the Act on Protection Against Infectious Diseases (1994) and the Health Preparedness Act (2001). [2,3] Norway also has a subordinate plan called National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases (2019). This plan addresses planning for multiple communicable diseases with epidemic potential and outlines the actions Norway will take in the event of a pandemic. It is primarily aimed at leaders, doctors and other healthcare personnel in the primary and specialist health services, but is also relevant to other sectors involved. [4]

[1] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf. Accessed 4 March 2021.

[2] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases [Infection Control Act] ". ("Lov om vern mot smittsomme sykdommer [smittevernloven]").

<https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 4 March 2021.

[3] Government of Norway. 2001 (Updated 2021). "Health Preparedness Act". ("Helseberedskapsloven").

<https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 4 March 2021.

[4] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer").

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smitte

vern.pdf. Accessed 4 March 2021.

3.1.1b

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

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

Current Year Score: 1

Norway's overarching national public health emergency response plan has been updated in the last three years. The National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases, which addresses planning for multiple communicable diseases with epidemic potential, was adopted in 2019. [1] In addition, the 1994 Act on Protection Against Infectious Diseases and the 2001 Health Preparedness Act have both been updated in 2021. [2, 3] The current version of the National Health Preparedness Plan was adopted in January 2018. [2]

[1] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer"). https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 4 March 2021.

[2] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases [Infection Control Act] ". ("Lov om vern mot smittsomme sykdommer [smittevernloven]"). <https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 4 March 2021.

[3] Government of Norway. 2001 (Updated 2021). "Health Preparedness Act". ("Helseberedskapsloven"). <https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 4 March 2021.

[4] Government of Norway. January 2018. "National health preparedness plan". https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf. Accessed 4 March 2021.

3.1.1c

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

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

Current Year Score: 1

Norway's overarching national public health emergency response plan includes considerations for pediatric populations. The National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases (adopted 2019) mentions that restrictions on the attendance of kindergartens and schools may be imposed in emergency health situations. [1]The Infection Control Act (adopted in 1995) mentions that when it is necessary to prevent a generally dangerous infectious disease or to prevent it from being transmitted, the municipal council may adopt closure or restriction of activities in kindergartens and schools. [2] The National Health Preparedness Plan (adopted in 2018) states that municipalities must obtain an overview of relevant risks, reduce risks and vulnerabilities in society, and assess civil protection in relation to their development pattern. [3]

[1] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer"). https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 4 March 2021.

[2] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases

[Infection Control Act] ". ("Lov om vern mot smittsomme sykdommer [smittevernloven]").

<https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 4 March 2021.

[3] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.

Accessed 14 February 2021.

3.1.1d

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

Yes = 1 , No = 0

Current Year Score: 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 no evidence that the country has a specific mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response. The National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases (adopted 2019) lists companies that should be invited as advisers during a state of emergency, but all of these companies are state-owned, and the plan does not define a specific mechanism for this cooperation. [1] The National Health Preparedness Plan (adopted 2018) states that "private and non-governmental resources that are suitable for emergency response to save lives can also be mobilized for response in the public rescue service", but it does not define a specific mechanism for such engagement. [2] There is no additional information about this on the website of the Ministry of Health and Care Services. [3] The Infection Control Act (1995, last amended 2021) and the Health Preparedness Act (2001, last amended 2021) do not define a specific mechanism for engagement with the private sector either. [4,5]

[1] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer").

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smitte_vern.pdf. Accessed 4 March 2021.

[2] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.

Accessed 14 February 2021.

[3] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.

[4] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases". ("Infection Control Act"). ("Lov om vern mot smittsomme sykdommer [smittevernloven]").

<https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 4 March 2021.

[5] Government of Norway. 2001 (Updated 2021). "Health Preparedness Act". ("Helseberedskapsloven").

<https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 21 February 2021.

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 2

Norway has a policy in place to implement non-pharmaceutical interventions (NPIs) for more than one disease during an epidemic or pandemic. The Act on Protection Against Infectious Diseases (Infection Control Act) of 1994 outlines the NPIs to be implemented in the event of an epidemic or pandemic. [1] It includes: bans on meetings and gatherings; closure of, and restrictions on, enterprises that gather people (e.g. kindergartens, schools, swimming pools, airports, shops, hotels); stoppages or restrictions in communications; isolation of persons in geographically delimited areas or other restrictions on their freedom of movement for up to seven days at a time; cleaning and disinfection of objects and premises; killing of pets; and extermination of rats. The law outlines the basic requirements of such infection control measures: it states that they must be based on a clear medical professional justification, be necessary for reasons of infection control and appear useful after an overall assessment, and that emphasis should be placed on voluntary participation from the person or persons to whom the measure applies. However, the law does not outline specific criteria for NPIs' introduction. [1] Norway has implemented some of these measures during the current COVID-19 epidemic, including social distancing, restrictions on gatherings, recommendations to implement digital education at universities and working from home at workplaces. [2] The Health Preparedness Act (2001, last amended 2021) and the National Health Preparedness Plan (2018) both also list the same NPIs as are listed in the Infection Control Act. [3,4]

[1] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases (Infection Control Act)". ("Lov om vern mot smittsomme sykdommer [smittevernloven]").

<https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 21 February 2021.

[2] Government of Norway. 29 January 2021 (Updated 4 February 2021). "Overview of national measures". ("Oversikt over nasjonale tiltak"). <https://www.regjeringen.no/en/topics/koronavirus-covid-19/national-measures-from-29-january-2021/id2826828/>. Accessed 21 February 2021.

[3] Government of Norway. 2001 (Updated 2021). "Health Preparedness Act". ("Helseberedskapsloven").

<https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 21 February 2021.

[4] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.

Accessed 21 February 2021.

3.2 EXERCISING RESPONSE PLANS

3.2.1 Activating response plans

3.2.1a

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 1

There is no evidence that, in the past year, Norway has activated its national emergency response plan for an infectious disease outbreak or completed a national-level biological threat-focused exercise. However, in June 2020, Norway adopted the Contingency Plan for Infection Control Measures during the COVID-19 Pandemic, which has since then guided the government's response to the COVID-19 pandemic. [1] Measures in the plan include the limitation of social contacts, restrictions on foreign citizens entering the country, limitations on private gatherings, and work-from-home recommendations. [1] The plan does not contain any language suggesting that it is an activation of any pre-existing documents, such as the 2019 National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases, the 2001 Health Preparedness Act or the 2018 National Health Preparedness Plan. [1] According to the Norwegian Directorate of Health, the latest "national health exercise" was conducted in 2018 in order to test the capacity of the national emergency response. [2] On the websites of the Ministry of Health and Care Services, the Norwegian Institute of Public Health, the Norwegian Directorate of Health, the Directorate for Civil Protection and the World Health Organization (WHO), there is no evidence that Norway has in the past year activated a pre-existing emergency response plan, or held a biological threat-focused exercise. [3,4,5,6,7] There is no evidence of a simulation exercise on the WHO extranet either. [8]

[1] Ministry of Health and Care Services. 10 June 2020 (Updated 14 December 2020). "Contingency Plan for Infection Control Measures during the COVID-19 Pandemic". ("Beredskapsplan for smitteverntiltak under covid 19-pandemien"). <https://www.regjeringen.no/contentassets/73a60433276240bb9247a00ecc8b23c7/beredskapsplan-covid-19-oppdatert-desember-2020-hbrj.pdf>. Accessed 5 March 2021.

[2] Norwegian Directorate of Health. 7 August 2019. "Project report for the National Health Exercise 2018". ("Prosjektrapport for Nasjonal helseøvelse 2018"). https://www.helsedirektoratet.no/rapporter/prosjektrapport-for-nasjonal-helseovelse-2018/Prosjektrapport%20for%20Nasjonal%20helse%C3%B8velse%202018.pdf/_/attachment/inline/dd6a1221-9c72-4b9b-b38e-6a72256f9e64:5e6419f1be4aed6add41fe8a111a6934ea7ee7d5/Prosjektrapport%20for%20Nasjonal%20helse%C3%B8velse%202018.pdf. Accessed 20 February 2021.

[3] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 20 February 2021.

[4] Norwegian Institute of Public Health. "Norwegian Institute of Public Health". <https://www.fhi.no/en/>. Accessed 20 February 2021.

[5] Norwegian Directorate of Health. <https://helsedirektoratet.no/>. Accessed 20 February 2021.

[6] Directorate for Civil Protection. <https://innmelding.dsb.no/>. Accessed 20 February 2021.

[7] World Health Organization. [<https://www.who.int/>]. Accessed 14 February 2021.

[8] World Health Organization. March 2021. "Simulation exercise". <https://extranet.who.int/sph/simulation->

exercise?region=202&country=315. Accessed 17 March 2021.

3.2.1b

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

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

Current Year Score: 0

There is no public evidence that, in the past year, Norway has conducted an after-action review of gaps and best practices after an actual emergency or a biological threat-focused exercise. On its website, the Directorate for Civil Protection (DSB) publishes information on risk, vulnerability and preparedness in Norway, including details of municipal responsibilities, social planning, exercises, evaluations and learning. [1] However, this webpage does not contain any evidence of after-action reviews. [1] The national exercise calendar does not show a national health emergency exercise in the last year, though between 25 October and 7 November 2018, the Ministry of Health and Care Services held a national exercise, named "LiveX", which aimed to strengthen the national capacity for crisis management and coordination of health services throughout the range from peace, to crisis to war. [2, 3] The World Health Organization's Strategic Partnership Portal does not list any Norwegian after-action reviews or biological threat-focused IHR exercises as having been completed or currently being planned. [4] There is no further relevant evidence on the website of the Ministry of Health and Care Services. [5]

[1] Directorate for Civil Protection (DSB). "Risk, vulnerability and preparedness". ("Risiko, sårbarhet og beredskap"). <https://www.dsb.no/lover/risiko-sarbarhet-og-beredskap/>. Accessed 20 February 2021.

[2] Directorate for Civil Protection (DSB). "National exercise calendar". ("Nasjonal øvelseskalender"). <https://innmelding.dsb.no/ovelse/sok;jsessionid=AEBA444C13D08F518F4DB49D333CC83F?0>. Accessed 20 February 2021.

[3] Directorate for Civil Protection (DSB). "National health exercise". ("Nasjonal helseøvelse"). <https://innmelding.dsb.no/ovelse/detaljer?5>. Accessed 20 February 2021.

[4] World Health Organization. "Norway". <https://extranet.who.int/sph/country/norway>. Accessed 20 February 2021.

[5] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.

3.2.2 Private sector engagement in exercises

3.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Norway has in the past year undergone a national-level biological threat-focused exercise that has included private sector representatives. According to the Norwegian Directorate of Health, the latest "national health exercise" was conducted in 2018 in order to test the capacity of the national emergency response, including response to biological threats,. [1] According to a report from March 2019 prepared on the exercise, over 6,000 people were involved in it in total. This included personnel from all levels in the specialist and municipal health services, personnel from local fire brigades, local teams from the Red Cross, Norwegian People's Aid, the Norwegian Women's Health Association, pupils and

students in health sciences, media studies, and pupils from high schools. [1] The report does not mention private sector representatives among the participants. [1] There is no evidence of further exercises on the website of the Ministry of Health and Care Services or the World Health Organization. [2, 3]

[1] Norwegian Directorate of Health. 26 March 2019. "National Health Exercise 2018". ("Nasjonal helseøvelse 2018"). https://www.helsedirektoratet.no/rapporter/prosjektrapport-for-nasjonal-helseovelse-2018/Evalueringsrapport%20for%20Live-delen%20av%20Nasjonal%20Helse%C3%B8velse%202018.pdf/_/attachment/inline/e89ffd71-32ec-4eeb-91e9-8e593cc83229:3dfaa063e9340dc4e02eb5349669643ae77c4842/Evalueringsrapport%20for%20Live-delen%20av%20Nasjonal%20Helse%C3%B8velse%202018.pdf. Accessed 20 February 2021.

[2] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 14 February 2021.

[3] World Health Organization. "Norway". <https://extranet.who.int/sph/country/norway>. Accessed 20 February 2021.

3.3 EMERGENCY RESPONSE OPERATION

3.3.1 Emergency response operation

3.3.1a

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

Yes = 1, No = 0

Current Year Score: 1

Norway has in place an emergency operations center. The Emergency Support Unit (KSE) is a part of the central emergency management system in Norway. The Emergency Support Unit supports the Ministries and the Crisis Council, the highest coordinating body at administrative level, in emergencies. [1] KSE is a permanent body and it is located within the Ministry of Justice and Public Security. [2] According to the National Health Preparedness Plan, the main function of the Emergency Support Unit is to contribute competence in the form of advice, technical assistance and comprehensive central crisis management to work of the Ministry of Justice and Public Security in the event of a public health emergency. [3]

[1] Government of Norway. "KSE – Permanent Secretariat to the Government Emergency Management Council". <https://www.regjeringen.no/en/dep/jd/organisation/Departments/Department-of-Public-Security/emergency-support-unit/id709278/>. Accessed 14 February 2021.

[2] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer").

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 4 March 2021.

[3] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf. Accessed 14 February 2021.

3.3.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that the Norwegian emergency operations center conducts, or is required to conduct, a drill at least once per year. The Emergency Support Unit (ESU) is Norway's emergency operations center. [1] There is no evidence on the ESU webpage, or in any of its annual reports, that it conducts annual drills. [1] The regulation governing the ESU the "2012 Regulation Relating to Instructions for the Ministries' Work on Civil Protection and Preparedness, the Ministry of Justice and Public Security's Coordination Role, Supervision and Central Crisis Management" does not mention annual drills. [2] The National Institute of Public Health, which works closely with the World Health Organization, does not mention annual drills on its website either. [3] There is no further relevant evidence on the websites of the Ministry of Health and Care Services or the Norwegian Directorate for Civil Protection. [4,5]

[1] Government of Norway. "KSE - Permanent Secretariat to the Government Emergency Management Council". <https://www.regjeringen.no/en/dep/jd/organisation/Departments/Department-of-Public-Security/emergency-support-unit/id709278/>. Accessed 14 February 2021.

[2] Government of Norway. 2012. "Regulation Relating to Instructions for the Ministries' Work on Civil Protection and Preparedness, the Ministry of Justice and Public Security's Coordination Role, Supervision and Central Crisis Management". ("Instruks for departementenes arbeid med samfunnssikkerhet og beredskap, Justis- og beredskapsdepartementets samordningsrolle, tilsynsfunksjon og sentral krisehåndtering"). <https://lovdata.no/dokument/LTI/forskrift/2012-06-15-535>. Accessed 5 March 2021.

[3] National Institute of Public Health. "WHO, EU, bilateral cooperation". ("WHO, EU, bilateralt samarbeid"). <https://www.fhi.no/kk/internasjonalt/global-helse/>. Accessed 14 February 2021.

[4] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 5 March 2021.

[5] Norwegian Directorate for Civil Protection (DSB). "About DSB". <https://www.dsb.no/menyartikler/om-dsb/about-dsb/>. Accessed 5 March 2021.

3.3.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that the emergency operations center (EOC) can conduct, or has conducted within the last year, a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency or scenario. According to the Directorate for Civil Protection's national exercise calendar, a national health exercise titled "LiveX" was conducted in 2018 in order to test the capacity of the national emergency response. [1] However, the evaluation of the exercise, which was published in 2019, does not mention that the emergency response exercise activated the EOC within 120 minutes. [2] There is no further relevant evidence on the websites of the Ministry of Health and Care Services or the Norwegian Directorate for Civil Protection. [3,4]

[1] Directorate for Civil Protection. "National Exercise Calendar". ("Nasjonal øvelseskalender"). <https://innmelding.dsb.no/ovelse/detaljer?3>. Accessed 14 February 2021.

[2] Norwegian Directorate of Health. 7 August 2019. "Project report for the National Health Exercise 2018". ("Prosjektrapport for Nasjonal helseøvelse 2018"). https://www.helsedirektoratet.no/rapporter/prosjektrapport-for-nasjonal-helseovelse-2018/Prosjektrapport%20for%20Nasjonal%20helse%C3%B8velse%202018.pdf/_attachment/inline/dd6a1221-9c72-4b9b-

b38e-

6a72256f9e64:5e6419f1be4aed6add41fe8a111a6934ea7ee7d5/Prosjektrapport%20for%20Nasjonal%20helse%C3%B8velse%202018.pdf. Accessed 14 February 2021.

[3] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 5 March 2021.

[4] Norwegian Directorate for Civil Protection (DSB). "About DSB". <https://www.dsb.no/menyartikler/om-dsb/about-dsb/>.

Accessed 5 March 2021.

3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

3.4.1a

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 1

Norway has publicly available standard operating procedures between the public health and security authorities to respond to a potential deliberate biological event, but there is no public evidence that public health and national security authorities have ever carried out an exercise to respond to a potential deliberate biological event. The 2012 Regulation Relating to Instructions for the Ministries' Work on Civil Protection and Preparedness, the Ministry of Justice and Public Security's Coordination Role, Supervision and Central Crisis Management describes the standard operating procedures for coordinating public health and security authorities for a joint response in times of crisis. These guidelines outline how these ministries will work together during a public health crisis including deliberate events (such as a terrorist attack). [1] These guidelines are also cited in the 2018 National Health Preparedness Plan. [2] There is no evidence of public health and national security authorities carrying out an exercise to respond to a potential deliberate biological event on the websites of the Ministry of Health and Care Services, the National Institute of Public Health or the Norwegian Directorate of Health . [3, 4, 5]

[1] Government of Norway. June 2012. "Regulation Relating to Instructions for the Ministries' Work on Civil Protection and Preparedness, the Ministry of Justice and Public Security's Coordination Role, Supervision and Central Crisis Management ". ("Instruks for departementenes arbeid med samfunnssikkerhet og beredskap, Justis- og beredskapsdepartementets samordningsrolle, tilsynsfunksjon og sentral krisehåndtering"). <https://lovdata.no/dokument/LTI/forskrift/2012-06-15-535>. Accessed 14 February 2021.

[2] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf. Accessed 14 February 2021.

[3] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 20 February 2021.

[4] National Institute of Public Health. <https://www.fhi.no/>. Accessed 20 February 2021.

[5] Norwegian Directorate of Health. <https://helsedirektoratet.no/>. Accessed 20 February 2021.

3.5 RISK COMMUNICATIONS

3.5.1 Public communication

3.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Norway has a risk communication plan that outlines how messages will reach populations and sectors with different communications needs. The National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases from 2019 has a separate chapter on communication, and it outlines the responsibilities, roles and coordination of communication work, target groups and communication channels during a health emergency. The plan identifies several communication channels including regional health trusts, county governors, municipalities, general practitioners, the websites and social media channels of the relevant ministries, agencies, and telephone hotlines. Moreover, the plan mentions various communication activities and measures in case of a public health emergency, including the creation of common messages and talking points to use when in contact with media, population surveys to map knowledge, attitudes, need for information and effect of communication measures, press conferences, texts for websites and social media, information hotline for the population, and posters. [1] There is no further evidence that highlights communication plans for populations and sectors with different communication needs.

[1] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer"). https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 4 March 2021.

3.5.1 Risk communication planning

3.5.1a

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

Yes = 1 , No = 0

Current Year Score: 1

There is evidence of a risk communication plan that is specifically intended for use during a public health emergency. The National Health Preparedness Plan includes a section on communication during emergencies, according to which the Norwegian Emergency Medical Alarm (AMK) is a nationwide system for notification and handling of inquiries relating to the need for emergency medical assistance and communication. In the event of incidents where a response from other emergency agencies is necessary, the system aims to provide triple notification quickly in accordance with set procedures. [1] Moreover, the National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases from 2019 has a separate chapter on communication, and it outlines the responsibilities, roles and coordination of communication work, target groups

and communication channels during a health emergency. [2]

[1] Government of Norway. January 2018. "National health preparedness plan".
https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.
Accessed 14 February 2021.

[2] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer").
https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 4 March 2021.

3.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Norway's National Health Preparedness Plan designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. [1] There is no evidence on the websites of the Ministry of Health and Care Services, the National Institute of Public Health or the Norwegian Directorate of Health of any other plan, legislation, regulation or strategy document that designates a specific position within the government to serve as the primary spokesperson to the public during a health emergency. [2,3,4] There is no mention of a designated spokesperson in the Infection Control Act (1995, last amended 2021), the Health Preparedness Act (2001, last amended 2021) or the National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases (adopted 2019). [5,6,7]

[1] Government of Norway. January 2018. "National health preparedness plan".
https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.
Accessed 20 February 2021.

[2] Ministry of Health and Care Services. "Ministry of Health and Care Services".
<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 20 February 2021.

[3] National Institute of Public Health. <https://www.fhi.no/>. Accessed 20 February 2021.

[4] Norwegian Directorate of Health. <https://helsedirektoratet.no/>. Accessed 20 February 2021.

[5] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases (Infection Control Act)". ("Lov om vern mot smittsomme sykdommer [smittevernloven]").
<https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 4 March 2021.

[6] Government of Norway. 2001 (Updated 2021). "Health Preparedness Act". ("Helseberedskapsloven").
<https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 21 February 2021.

[7] Ministry of Health and Care Services. 2019. "National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer").
https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 20 February 2021.

3.5.2 Public communication

3.5.2a

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

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

Current Year Score: 2

The Norwegian public health system has actively shared messages via online media platforms to inform the public about ongoing public health concerns in the past year. The National Institute of Public Health regularly publishes information on ongoing health concerns, including a range of topics, such as vaccine recommendations for seasonal influenza, neurological health, mental health issues, alcoholism, and hand hygiene. [1, 2, 3, 4, 5] During the COVID-19 epidemic, the Norwegian government has been publishing daily updates and news related to the pandemic on the National Institute of Public Health's website, Facebook, Twitter, Instagram and Youtube account. [1, 2, 3, 4, 5]

[1] Norwegian Institute of Public Health. <https://www.fhi.no>. Accessed 20 February 2021.

[2] Norwegian Institute of Public Health. <https://www.facebook.com/folkehelseinstituttet.no/>. Accessed 20 February 2021.

[3] Norwegian Institute of Public Health. <https://twitter.com/Folkehelseinst>. Accessed 20 February 2021.

[4] Norwegian Institute of Public Health. <https://www.instagram.com/folkehelseinstituttet/>. Accessed 20 February 2021.

[5] Norwegian Institute of Public Health. <https://www.youtube.com/c/folkehelseinstituttet>. Accessed 20 February 2021.

3.5.2b

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

No = 1, Yes = 0

Current Year Score: 1

There is no evidence that senior leaders of Norway have shared misinformation or disinformation on infectious diseases in the past two years. There is no evidence of such cases on the websites of the main Norwegian and international news outlets. [1,2,3,4,5,6]

[1] VG – Verdens Gang. <https://www.vg.no/>. Accessed 20 February 2021.

[2] Aftenposten. <https://www.aftenposten.no/>. Accessed 20 February 2021.

[3] Nettavisen. <https://www.nettavisen.no/>. Accessed 20 February 2021.

[4] BBC. <https://www.bbc.com/>. Accessed 20 February 2021.

[5] CNN. <https://edition.cnn.com/>. Accessed 20 February 2021.

[6] The New York Times. <https://www.nytimes.com/>. Accessed 20 February 2021.

3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

3.6.1 Internet users

3.6.1a

Percentage of households with Internet

Input number

Current Year Score: 98

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: 107.17

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: 1.0

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 Norway 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 in the past year. The World Trade Organisation's "COVID-19: Measures affecting trade in goods" list confirms that Norway issued "Temporary implementation of export licensing requirements on personal protective equipment (HS Chapters 39; 40; 61; 62; 63; 90), due to the COVID-19 pandemic (list updated on 28 April 2020) (originally effective 6 March 2020 to 1 January 2021)" which ceased to apply from 27 May 2020. [1] There is no further relevant evidence on the websites of the Ministry of Health and Care Services, the Ministry of Foreign Affairs, or the Ministry of Agriculture and Food. [2, 3, 4]

[1] World Trade Organisation. June 4, 2021. "COVID-19: Measures affecting trade in goods".

[https://www.wto.org/english/tratop_e/covid19_e/trade_related_goods_measure_e.htm] Accessed June 24, 2021.

[2] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 20 February 2021.

[3] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 14 February 2021.

[4] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 14 February 2021.

3.7.1b

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

Yes = 0, No = 1

Current Year Score: 1

There is no evidence that Norway issued a restriction, without international/bilateral support, on the export/import of non-medical goods due to an infectious disease outbreak in the past year. On the website of Norwegian Customs, all import and export restrictions are listed, and there is no restriction imposed on medical goods due to COVID-19 or other infectious disease outbreaks. [1] Furthermore, in a "frequently asked questions" page, last updated in February 2021, Norwegian Customs specifically mentions that no special measures have yet been taken concerning the import and export of goods in connection with the ongoing pandemic. [2] There is no further relevant evidence on the websites of the Ministry of Health and Care Services, the Ministry of Foreign Affairs, or the Ministry of Agriculture and Food. [3, 4, 5]

[1] Norwegian Customs. 14 April 2020. "Restrictions on import and export". ("Restriksjoner ved inn- og utførsel").

<https://www.toll.no/no/verktoy/regelverk/tollabc/1/1-5/restriksjoner/>. Accessed 20 February 2021.

[2] Norwegian Customs. 4 February 2021. "Frequently asked questions about the corona situation". ("Vanlige spørsmål om koronasituasjonen"). <https://www.toll.no/no/om-tolletaten/nyheter/2020/vanlige-sporsmal-om-koronavirus/>. Accessed 20 February 2021.

[3] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 20 February 2021.

[4] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 14 February 2021.

[5] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 14 February 2021.

3.7.2 Travel restrictions

3.7.2a

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

Yes = 0, No = 1

Current Year Score: 0

In the past year, Norway has implemented a ban, without international or bilateral support, on travelers arriving from specific countries due to an infectious disease outbreak. In March 2020, the Norwegian government closed its border to foreign nationals, except citizens of countries in the European Economic Area and people who reside in Norway. From January 2021, the government has imposed mandatory testing for COVID-19 for all travellers to Norway and further tightened entry restrictions, so that now the only foreign nationals allowed to enter are those who reside in Norway. The enhanced restrictions are the result of recommendations issued by the Norwegian Directorate of Health and the National Institute of Public Health. The new entry rules are in addition to an extensive border control system that includes requirements of a negative coronavirus test result prior to arrival in Norway, registration of each traveler's purpose for entering and intended place of quarantine, mandatory testing at the border and legally mandated quarantine. [1]

[1] Government of Norway. February 2020 (Updated March 2021). "Timeline: News from Norwegian Ministries about the Coronavirus disease Covid-19". ("Tidslinje: myndighetenes håndtering av koronasituasjonen"). <https://www.regjeringen.no/no/tema/Koronasituasjonen/tidslinje-koronaviruset/id2692402/>. Accessed 5 March 2021.

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

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

4.1.1 Available human resources for the broader healthcare system

4.1.1a

Doctors per 100,000 people

Input number

Current Year Score: 291.64

2018

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 1822.48

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 no public evidence of a current strategy to identify fields where there is an insufficient workforce or evidence of strategies to address these shortcomings. Norway monitors and audits the healthcare workforce, but primarily for the purposes of licensing. The Norwegian Board of Health Supervision (NBHS) is a national public institution under the Ministry of Health and Care Services that is responsible for health and care services. The board monitors workforce demand and supply and audits the workforce and expects that by 2060, 40% of the workforce will be working in the healthcare sector, with a large demand in long-term care. [1,2] The Ministry of Health and Care Services does not have additional information about this. [3]

[1] Norwegian Board of Health Supervision. 5 march 2019. "Oversikt over helsepersonell".

<https://www.helsetilsynet.no/no/tilsyn/hendelsesbasert-tilsyn/oversikt-over-helsepersonell/>. Accessed 20 February 2021.

[2] OECD. 2016. "Health Policy in Norway". www.oecd.org/norway/Health-Policy-in-Norway-February-2016.pdf. Accessed 20 February 2021.

[3] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 20 February 2021.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 353

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

Norway has the capacity to isolate patients with highly communicable diseases in a biocontainment patient care unit. The 1994 Act Relating to the Control of Communicable Diseases provides for "short-term isolation may only be implemented to ascertain whether there is an occurrence of a communicable disease that is hazardous to public health." [1] The Norwegian Institute for Public Health lists diseases that require isolation and notification. [2] There is a biocontainment unit at Oslo University Hospital, Ullevål, which includes decontamination units and the use of advanced personal protective equipment, and this is where an ebola patient was treated in 2014. In anticipation of a large number of intensive care patients during the pandemic, three intensive care units were established in early March 2020 that were ready to accommodate a total of 33 COVID-19 patients requiring intensive care, as well as four negative pressure isolation rooms that were reserved for procedures with an especially high risk of aerosol generation. [3,4,5]

[1] Government of Norway. 1994. "Act Relating to the Control of Communicable Diseases". ("Lov om vern mot smittsomme sykdommer"). https://lovdata.no/dokument/NL/lov/1994-08-05-55#KAPITTEL_1. Accessed 14 February 2021.

[2] Norwegian Institute of Public Health. 15 June 2016 (Updated 4 July 2019). "Notifiable diseases in the Norwegian Surveillance System for Communicable Diseases". <https://www.fhi.no/en/hn/health-registries/msis/notifiable-diseases-msis/>. Accessed 14 February 2021.

[3] Norwegian Institute of Public Health. 4 May 2016 (Updated 25 May 2016). "Ebola - questions and answers". <https://www.fhi.no/en/id/infectious-diseases/ebola/ebola---questions-and-answers/>. Accessed 14 February 2021.

[4] Ola Mjaaland; Jenny-Linn Lohne. 6 October 2014. "This is how Norway tackles the Ebola infection". ("Slik takler Norge ebola-smitten"). <https://www.vg.no/nyheter/innenriks/ebola/slik-takler-norge-ebola-smitten/a/23310477/>. Accessed 14 February 2021.

[5] Journal of the Norwegian Medical Association (Tidsskriftet). 5 August 2020. "Ventilatory support for hypoxaemic intensive care patients with COVID-19" [https://tidsskriftet.no/sites/default/files/generated_pdfs/59618-ventilatory-support-for-

hypoxaemic-intensive-care-patients-with-covid-19.pdf]

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 Norway has developed and activated a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years. There is also evidence that the country has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years. The National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases mentions that all hospitals must have contingency plans to restructure their ordinary operations in order to increase isolation capacities during a pandemic outbreak. [1] According to the plan, this may involve using rooms with several beds, designated wards or buildings for isolation and treatment of patients with the same diagnosis (cohort isolation). [1] The plan outlines that, during large outbreaks of serious infectious disease, it may be necessary to isolate the sick at home, nursing homes and other non-hospital buildings. This shall take place in collaboration with hospitals and the municipality's health and care service. [1] Furthermore, the municipal health and care service should make plans for follow-up of patients who are isolated at home or who need supervision and care. [1] According to the Long-term Strategy and Plan for Handling the COVID-19 Pandemic, this plan has been activated in the form of freeing up hospital beds during the COVID-19 pandemic to ensure sufficient capacity for treating and isolating patients. [2]

[1] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer"). https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 30 April 2021.

[2] Office of the Prime Minister. 8 May 2020. "Long-term strategy and plan for handling the Covid-19 pandemic and adjustment of measures". <https://www.regjeringen.no/en/dokumenter/long-term-strategy-and-plan-for-handling-the-covid-19-pandemic-and-adjustment-of-measures/id2701518/>. 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: 1

There is a national system in place for public procurement that includes the Ministry of Health and Care Services and the Ministry of Agriculture and Food. The national procurement system applies across all departments of government, including the mentioned ministries. [1] There is no public information on an existing public procurement protocol that could be utilized by this ministry for procuring these type of supplies. [2] Regarding the Norwegian health sector, procurement for hospitals is carried out by three different procurers. Local procurement is executed by the Hospital Trust, regional by the Regional Health Authorities and national by Procurement Services for Health Enterprises. [3] On the purchasing side, there is a non-profit group purchasing organisation (GPO) called Sykehusinnkjøp HF, owned by the four Norwegian regional health authorities. The company was established in December 2015 after a decision by the regional health authorities to pool all procurement resources in the public hospital sector into one strategic procurement company responsible for procurement of both laboratory and medical supplies at the national, regional and local level. The company's portfolio covers both medical and non-medical categories and it includes 26 hospital trusts and 52 hospitals in total. Its total procurement value in 2019 was approximately EUR 3 billion (USD 3.6 billion). [4]

[1] Norwegian Agency for Public and Financial Management. "E-procurement". <https://www.anskaffelser.no/e-procurement>. Accessed 15 February 2021.

[2] Ministry of Agriculture and Food. "Ministry of Agriculture and Food". <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 30 April 2021.

[3] Nordic Lighthouse Project. 2011. "Innovative Public Procurement and Health Care". <http://norden.diva-portal.org/smash/get/diva2:700591/FULLTEXT01.pdf>. Accessed 15 February 2021.

[4] European Public Health Procurement Alliance. "Sykehusinnkjøp". <http://www.ehppa.com/Members/3/5/8>. Accessed 17 March 2021.

4.2.2 Stockpiling for emergencies

4.2.2a

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

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

Current Year Score: 2

Norway maintains a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during public emergencies, including essential medicines. According to the 2018 National Health Preparedness Plan, Norway maintains stocks of various medicines, including antidotes for poisoning and antimicrobial substances, antiviral medicines and potassium iodide tablets. [1] According to section 5 of the 1993 Regulation on Wholesale Business with Medicines and section 12-2 of the 2009 Regulation on Medicinal Products, pharmaceutical wholesalers must secure extra stock of particularly important medicines for use in the primary health care service. The emergency stockpile shall comprise at least two months' ordinary sale of the medicinal products listed in the wholesale regulations. These include dalteparin, enoxaparin, anti-tuberculosis drugs, and cyclosporine, among other medicines. [2,3]

[1] Government of Norway. January 2018. "National health preparedness plan". https://www.regjeringen.no/globalassets/departmentene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf. Accessed 15 February 2021.

[2] Government of Norway. 1993. "Regulations on wholesale business with medicines". ("Forskrift om grossistvirksomhet med legemidler"). <https://lovdata.no/dokument/SF/forskrift/1993-12-21-1219>. Accessed 17 March 2021.

[3] Government of Norway. 2010. "Regulations on medicinal products (Medicines Regulations)". ("Forskrift om legemidler

(legemiddelforskriften"). <https://lovdata.no/dokument/SF/forskrift/2009-12-18-1839>. Accessed 17 March 2021.

4.2.2b

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

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

Current Year Score: 0

There is no public evidence that Norway has a stockpile of laboratory supplies for national use during a public health emergency. There is no such evidence on the websites of the Ministry of Health and Care Services, the Norwegian Medicines Agency, the Ministry of Defense or the Ministry of Foreign Affairs. [1,2,3,4]

[1] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 20 February 2021.

[2] The Norwegian Medicines Agency. "About the Norwegian Medicines Agency". ("Om Legemiddelverket").

<https://legemiddelverket.no/om-oss>. Accessed 20 February 2021.

[3] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 20 February 2021.

[4] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 20 February 2021.

4.2.2c

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

Yes = 1, No = 0

Current Year Score: 1

There is evidence that Norway requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency. The Norwegian Directorate of Health publishes an annual report on the actual status of the emergency stockpile, including production and storing of the medicines, risk analysis and recommendations. [1] The Norwegian Medicines Agency receives regular reports from the pharmaceutical wholesalers on the actual stock of the medicines that are on the emergency stockpile list. [2] The Norwegian Directorate of Health, in collaboration with the Norwegian Medicines Agency, assesses the stock status, access to medicines and possible challenges of pharmaceutical wholesalers on an ongoing basis. [2] Moreover, under the COVID-19 epidemic, the Norwegian Medicines Agency has, as a voluntary scheme from the wholesalers, gained access to the wholesalers' stock via a temporary login function. [2]

[1] Norwegian Directorate of Health. February 2020. "National Medicinal Preparedness" ("Nasjonal legemiddelberedskap").

https://www.helsedirektoratet.no/rapporter/nasjonal-legemiddelberedskap.delrapport-legemiddelproduksjon/Nasjonal%20legemiddelberedskap%20-%20delrapport%20lagemiddelproduksjon.pdf/_/attachment/inline/d327dbfe-af54-4d50-885b-45505c1de229:c980e9d51f614cfa48dec1c38db941fa387d7267/Nasjonal%20legemiddelberedskap%20-%20delrapport%20lagemiddelproduksjon.pdf. Accessed 30 April 2021.

[2] Norwegian Directorate of Health. January 2021. "Extended emergency preparedness for drugs under COVID-19". ("Utvidet beredskap på legemidler under covid-19"). <https://www.helsedirektoratet.no/veiledere/koronavirus/vaksiner-smittevernustyr-og-legemidler/legemidler-og-medisinsk-utstyr/utvidet-beredskap-pa-legemidler-under-covid-19>. Accessed 30 April 2021.

[2] Norwegian Directorate of Health. January 2021. "Extended emergency preparedness for drugs under COVID-19". ("Utvidet beredskap på legemidler under covid-19"). <https://www.helsedirektoratet.no/veiledere/koronavirus/vaksiner-smittevernustyr-og-legemidler/legemidler-og-medisinsk-utstyr/utvidet-beredskap-pa-legemidler-under-covid-19>. Accessed 30 April 2021.

[2] Norwegian Directorate of Health. January 2021. "Extended emergency preparedness for drugs under COVID-19". ("Utvidet beredskap på legemidler under covid-19"). <https://www.helsedirektoratet.no/veiledere/koronavirus/vaksiner-smittevernustyr-og-legemidler/legemidler-og-medisinsk-utstyr/utvidet-beredskap-pa-legemidler-under-covid-19>. Accessed 30 April 2021.

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 Norway has an agreement to leverage domestic manufacturing capacity to produce medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during public health emergencies, but there is no evidence of a plan or agreement for the procurement thereof. According to the National Health Preparedness Plan, which was adopted in 2018, the Norwegian Institute of Public Health (FHI) is responsible for vaccine supply and emergency preparedness for vaccines, immunoglobulins and sera. [1] The plan mentions that the FHI has an agreement with Novartis Norge AS (a Norwegian pharmaceuticals manufacturer) on the reservation of production capacity and the purchase of vaccines for the entire population of Norway in the event that the World Health Organization declares a pandemic. According to the agreement, the manufacturer delivers a percentage of its weekly production to Norway, within a given time period (the percentage depending on how many vaccine doses Norway orders). [1]

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

There is no evidence of a plan or agreement for the procurement of MCM for national use during public health emergencies on the websites of the Ministry of Health and Care Services, the Ministry of Defence, the Norwegian Directorate of Health or the Norwegian Medicines Agency. [3,4,5,6]

[1] Government of Norway. January 2018. "National health preparedness plan".
https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.
Accessed 21 February 2021.

[2] European Commission. "Joint Procurement Of Medical Countermeasures".
[\[https://ec.europa.eu/health/preparedness_response/joint_procurement_en\]](https://ec.europa.eu/health/preparedness_response/joint_procurement_en). Accessed 3 September 2020

[3] Ministry of Health and Care Services. "Ministry of Health and Care Services".
<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 15 February 2021.

[4] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 12 February 2021.

[5] Norwegian Directorate of Health. <https://helsedirektoratet.no/>. Accessed 21 February 2021.

[6] The Norwegian Medicines Agency. "About the Norwegian Medicines Agency". ("Om Legemiddelverket").
<https://legemiddelverket.no/om-oss>. Accessed 20 February 2021.

4.2.3b

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 0

There is no evidence that Norway has any plans or agreements to leverage domestic manufacturing capacity or procure laboratory supplies for national use during public health emergencies. There is no evidence of relevant plans or agreements in the 2018 National Health Preparedness Plan, the 2016 National Strategy for Emergency Preparedness for Incidents Involving Hazardous Substances and Infectious Diseases, the 2019 National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases, the 2019 Action Plan for Better Infection Control, or the 2001 Health Preparedness Act, or on the websites of the Ministry of Health and Care Services, the Norwegian Directorate of Health or the Ministry of Defense. [1,2,3,4,5,6,7,8]

[1] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.

Accessed 21 February 2021.

[2] Ministry of Justice and Public Security, Ministry of Health and Care Services, Ministry of Defense. 2016. "National strategy for emergency preparedness for incidents involving hazardous substances and infectious diseases 2016-2020". ("Nasjonal strategi for CBRNE-beredskap 2016–2020").

<https://www.regjeringen.no/contentassets/3fe1d74dc4e94cf58d4dbc10a9c410da/nasjonal-strategi-cbrne.pdf>. Accessed 21 February

[3] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer").

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 21 February 2021.

[4] Ministry of Health and Care Services. 2019. "Action plan for better infection control". ("Handlingsplan for et bedre smittevern"). <https://www.regjeringen.no/contentassets/714aa1437e2545f7bb4914a3474cd691/handlingsplan-for-et-bedre-smittevern.pdf>. Accessed 21 February 2021.

[5] Government of Norway. 2001 (Updated 2021). "Health Preparedness Act". ("Helseberedskapsloven").

<https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 21 February 2021.

[6] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 21 February 2021.

[7] Norwegian Directorate of Health. <https://helsedirektoratet.no/>. Accessed 21 February 2021.

[8] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 21 February 2021.

4.3 MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

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

4.3.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Norway has a plan, program or guidelines for dispensing medical countermeasures during public health emergencies. According to the National Health Preparedness Plan, which was adopted in 2018, Norway maintains stocks of various medicines, but there are no publicly available guidelines that describe the plan for dispensing medical countermeasures for national use during a public health emergency. [1] The Norwegian Directorate of Health is responsible for decisions regarding the use of the stock and distribution during a public emergency. It does not provide additional information about dispensing countermeasures during a public health emergency. [2] There is no further evidence of a relevant plan, program or guidelines in the Infection Control Act (1995, last amended 2021), the Health Preparedness Act (2001, last amended 2021) or the National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases (adopted 2019). [3,4,5] There is no further evidence on websites of the Ministry of Health and Care Services, the Norwegian Directorate of Health or the Ministry of Defense. [6,7,8]

[1] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf. Accessed 14 February 2021.

[2] Norwegian Directorate of Health. <https://helsedirektoratet.no/>. Accessed 15 February 2021.

[3] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases (Infection Control Act)". ("Lov om vern mot smittsomme sykdommer [smittevernloven]"). <https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 4 March 2021.

[4] Government of Norway. 2001 (Updated 2021). "Health Preparedness Act". ("Helseberedskapsloven"). <https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 21 February 2021.

[5] Ministry of Health and Care Services. 2019. "National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer"). https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 20 February 2021.

[6] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 21 February 2021.

[7] Norwegian Directorate of Health. <https://helsedirektoratet.no/>. Accessed 21 February 2021.

[8] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 21 February 2021.

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

4.3.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Norway has a public plan in place to receive health personnel from other countries to respond to a public health emergency. There is no such evidence on the websites of the Ministry of Defense, the Ministry of Health and Care Services, the Norwegian Institute of Public Health, the Norwegian Directorate of Health or the Directorate for Civil Protection. [1,2,3,4,5]

[1] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 7 March 2021.

[2] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 7 March 2021.

[3] Norwegian Institute of Public Health. "Norwegian Institute of Public Health". <https://www.fhi.no/en/>. Accessed 7 March 2021.

[4] Norwegian Directorate of Health. <https://helsedirektoratet.no/>. Accessed 7 March 2021.

[5] Directorate for Civil Protection. October 2018. "About DSB". <https://www.dsb.no/menyartikler/om-dsb/about-dsb/> Accessed 7 March 2021.

4.4 HEALTHCARE ACCESS

4.4.1 Access to healthcare

4.4.1a

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

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

Current Year Score: 0

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 99.1

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: 924.2

2017

WHO Global Health Expenditure database

4.4.2 Paid medical leave

4.4.2a

Are workers guaranteed paid sick leave?

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

Current Year Score: 2

2020

World Policy Analysis Center

4.4.3 Healthcare worker access to healthcare

4.4.3a

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that the government has issued legislation, a policy or a public statement committing to provide prioritized health care services to healthcare workers who become sick as a result of responding to a public health emergency. There is no evidence of a prioritized healthcare services for healthcare workers on the website of the Ministry of Health and Care Services. [1] However, Norway does provide universal healthcare to all. [2] There is no further evidence in the the Act on Protection Against Infectious Diseases (1994) or the Health Preparedness Act (2001). [3,4] The National Health Preparedness Plan (adopted January 2018) or the National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases (2019) do not mention prioritized healthcare services to healthcare workers who become sick as a result of their work during a national health emergency either. [5,6] There is no further evidence on websites of the Ministry of Health and Care Services, the Norwegian Directorate of Health or the Ministry of Defense. [7,8,9]

[1] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 15 February 2021.

[2] The Commonwealth Fund. 5 June 2020. "International Health Care System Profiles: Norway".

<http://international.commonwealthfund.org/countries/norway/>. Accessed 15 February 2021.

[3] Government of Norway. 2001 (Updated 2021). "Health Preparedness Act". ("Helseberedskapsloven").

<https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 4 March 2021.

[4] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer").

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 4 March 2021.

[5] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.

Accessed 4 March 2021.

[6] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases [Infection Control Act] ". ("Lov om vern mot smittsomme sykdommer [smittevernloven]").

<https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 4 March 2021.

[7] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 21 February 2021.

[8] Norwegian Directorate of Health. <https://helsedirektoratet.no/>. Accessed 21 February 2021.

[9] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 21 February 2021.

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Norway has a system in place for public health officials and healthcare workers to communicate during public health emergencies. The National Health Preparedness Plan (adopted in January 2018) only describes a call for coordination between public health officials and healthcare workers to communicate, stating that "the municipalities must coordinate their preparedness plans internally and with their partners, such as health trusts, county authorities, county governors, the Norwegian Food Safety Authority, the Norwegian Armed Forces, the police, the Norwegian Civil Defence, local rescue coordination centre, joint rescue coordination centre, religious communities, non-governmental organisations and private entities. Health preparedness must be covered in collaboration agreements between the municipalities and regional health authorities, health trusts." The plan also states that "the Directorate of Health notifies regional health authorities who in turn notify the health trusts and air ambulance service ANS, as well as the health service emergency organization". [1] Neither this plan or the National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases (2019) describes a system for communication, and neither does the Act on Protection Against Infectious Diseases (1994) or the Health Preparedness Act (2001). [1,2,3,4] There is no evidence of such a system on the websites of the Ministry of Health and Care Services. [5]

[1] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departmentene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.

Accessed 14 February 2021.

[2] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer").

https://www.regjeringen.no/globalassets/departmentene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 7 March 2021.

[3] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases [Infection Control Act] ". ("Lov om vern mot smittsomme sykdommer [smittevernloven]").

<https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 7 March 2021.

[4] Government of Norway. 2001 (Updated 2021). "Health Preparedness Act". ("Helseberedskapsloven").

<https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 7 March 2021.

[5] Ministry of Health and Care Services. "Ministry of Health and Care Services".
<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 15 February 2021.

4.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Norway has a system for public health officials and healthcare workers to communicate during an emergency that encompasses healthcare workers in both the public and private sector. The 2018 National Health Preparedness Plan includes workers in the public and private sector. The plan states that the municipalities must coordinate their preparedness plans internally and with their partners, such as health trusts, county authorities, non-governmental organisations and private entities. [1] However, this is a call for coordination, and not a description of a system of communication. There is no evidence of a such a communication system that encompasses healthcare workers in both the public and private sector in the National Health Preparedness Plan, the National Emergency Preparedness Plan for Outbreaks of Severe Infectious Diseases (2019), the Act on Protection Against Infectious Diseases (1994) or the Health Preparedness Act (2001). [1,2,3,4] There is no evidence of such a system on the websites of the Ministry of Health and Care Services. [5]

[1] Government of Norway. January 2018. "National health preparedness plan".
https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf.
Accessed 14 February 2021.

[2] Ministry of Health and Care Services. 2019. "National emergency preparedness plan for outbreaks of severe infectious diseases". ("Nasjonal beredskapsplan mot utbrudd av alvorlige smittsomme sykdommer").
https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/rapporterplaner/nasjonal_beredskapsplan_smittevern.pdf. Accessed 7 March 2021.

[3] Government of Norway. 1 January 1995 (Updated 19 February 2021). "Act on protection against infectious diseases [Infection Control Act] ". ("Lov om vern mot smittsomme sykdommer [smittevernloven]").
<https://lovdata.no/dokument/NL/lov/1994-08-05-55>. Accessed 7 March 2021.

[4] Government of Norway. 2001 (Updated 2021). "Health Preparedness Act". ("Helseberedskapsloven").
<https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 7 March 2021.

[5] Ministry of Health and Care Services. "Ministry of Health and Care Services".
<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 15 February 2021.

4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

4.6.1 Healthcare associated infection (HCAI) prevention and control programs

4.6.1a

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

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that the national public health system monitors and tracks the number of healthcare-associated infections that take place in healthcare facilities. The National Strategy Against Antimicrobial Resistance for 2015-2020 aims to improve infection control by requiring that "institutions included in the municipal health and social care service, as well as the specialist health service, shall have an infection control programme." [1] The Norwegian Surveillance System for Healthcare-Associated Infections (NOIS) is used to monitor and track the number of healthcare-associated infections that take place in healthcare facilities. [2, 3] The system was established in 2005 and it provides an overview of the incidence of health service-associated infections and the use of antibiotics in hospitals and nursing homes, as well as contribute to the prevention of such infections and the correct use of antibiotics. The register contains de-identified health information on whether persons who are followed up during and after a stay in a hospital, day surgery clinics and nursing home have received antibiotics for prevention or treatment or have been infected with a healthcare-associated infection. The National Institute of Public Health is the data controller for the register. [2,3]

[1] Government of Norway. 2015. "National Strategy against Antibiotic Resistance 2015-2020".

<https://www.regjeringen.no/contentassets/5eaf66ac392143b3b2054aed90b85210/antibiotic-resistance-engelsk-lavopploslig-versjon-for-nett-10-09-15.pdf>. Accessed 15 February 2021.

[2] Government of Norway. 2005 (Updated 2018). "Regulations on the Norwegian monitoring system for antibiotic use and health service-associated infections (NOIS register regulations)". ("Forskrift om Norsk overvåkingssystem for antibiotikabruk og helsetjenesteassosierte infeksjoner (NOIS-registerforskriften)"). <https://lovdata.no/dokument/SF/forskrift/2005-06-17-611>. Accessed 6 March 2021.

[3] National Institute of Public Health. March 2007 (Updated May 2018). "Purpose of the Norwegian monitoring system for antibiotic use and health service-associated infections (NOIS)". ("Formål med Norsk overvåkingssystem for antibiotikabruk og helsetjenesteassosierte infeksjoner (NOIS)"). <https://www.fhi.no/hn/helseregistre-og-registre/nois/om-overvakingssystemet-for-antibiot/>. Accessed 6 March 2021.

4.7 CAPACITY TO TEST AND APPROVE NEW MEDICAL COUNTERMEASURES

4.7.1 Regulatory process for conducting clinical trials of unregistered interventions

4.7.1a

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

Yes = 1, No = 0

Current Year Score: 1

There is a national requirement for an ethical review before beginning a clinical trial. The Ministry of Health and Care Services "2009 Regulation on Clinical Trials of Medicinal Products for Human Use states that prior to initiating any clinical trial, approval must be obtained from the Ministry of Health and Care Services Ethics Committee". In considering the application, the Ethics Committee shall in particular consider the following: the relevance of the clinical trial, whether the assumed risks and disadvantages are weighed in relation to the benefit for the individual subject and for other current and future patients, and whether the conclusion is justified, the suitability of the tester and the other staff, the relevance and completeness of the consent form and the information process in connection with obtaining informed consent, justification for research on persons who are unable to give informed consent, the provisions on compensation or reimbursement if a subject suffers injury or dies as a result of a clinical trial, and how the subjects are recruited, among other things. [1]

[1] Government of Norway. 2009 (Updated 2018). "Regulations on clinical trials of medicinal products for human use". ("Forskrift om klinisk utprøving av legemidler til mennesker"). https://lovdata.no/dokument/SF/forskrift/2009-10-30-1321#KAPITTEL_3. Accessed 7 March 2021.

4.7.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of an expedited process for approving clinical trials for unregistered medical countermeasures. The Ministry of Health and Care Services 2009 Regulation on Clinical Trials of Medicinal Products for Human Use states that the Ethics Committee shall give its opinion to the applicant and to the Norwegian Medicines Agency no later than 60 days after the complete application has been received. If the application concerns clinical trials of drugs for gene therapy, somatic cell therapy or genetically modified organisms, the time limit as mentioned in the first paragraph may be extended once by 30 days. If the ethics committee is required to consult an expert group in accordance with current regulations, the deadline for such a medicinal product may be extended by a further 90 days. If the application concerns clinical trials involving xenogenic cell therapy, there is no maximum processing time for when the statement is to be given. The law does not mention an expedited process. [1] Due to COVID-19, in March 2020, there have been changes introduced in the process of approving clinical trials. These changes made fast track processing times available for all clinical trial applications where the indication of the study is COVID-19 prevention or treatment. Expected processing time for applications is 3 working days from a receiving a valid application. [2] However, there is no indication on the websites of the Norwegian Medicines Agency, the Ministry of Health and Care Services or the Ministry of Education and Research that these changes apply to trial applications that are not related to COVID-19. [2,3,4]

[1] Government of Norway. 2009 (Updated 2018). "Regulations on clinical trials of medicinal products for human use". ("Forskrift om klinisk utprøving av legemidler til mennesker"). https://lovdata.no/dokument/SF/forskrift/2009-10-30-1321#KAPITTEL_3. Accessed 7 March 2021.

[2] Norwegian Medicines Agency. March 2020 (Updated June 2020). "Management of Clinical Trials in relation to COVID-19". ("Endringer i kliniske studier som følge av COVID-19"). <https://legemiddelverket.no/godkjenning/klinisk-utproving/endringer-som-folge-av-covid-19-#dersom-en-studie-med-indikasjon-covid-19-blir-aktuell-for-norge---finnes-det-noen-plan-for-en-raskere-saksbehandling-av-disse-s%C3%B8knadene?>. Accessed 7 March 2021.

[3] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 7 March 2021.

[4] Ministry of Education and Research. "Ministry of Education and Research". <https://www.regjeringen.no/en/dep/kd/id586/>. Accessed 7 March 2021.

4.7.2 Regulatory process for approving medical countermeasures

4.7.2a

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

Yes = 1, No = 0

Current Year Score: 1

There is a government agency responsible for approving new medical countermeasures for humans in Norway. The Norwegian Medicines Agency (Statens Legemiddelverk) is the government agency that is responsible for approving new medications and medical devices for both humans and animals. [1] The Norwegian Medicines Control Agency (SLK) was established on 1 January 1974 by a merger of the Specialist Control and the Norwegian Pharmacopoeia Laboratory. The name was changed to the Norwegian Medicines Agency in 2001 when the agency took over administrative tasks from several other bodies. From the Norwegian Board of Health Supervision, the Norwegian Medicines Agency took over the administration and supervision of the supply chain for medicines. In 2013, the Norwegian Medicines Agency was also given the task of assessing the benefits and costs of new medicines that are to be financed by the specialist health service. In 2018, the role of professional and supervisory authority for medical equipment was transferred from the Norwegian Directorate of Health, and in 2019, the administrative responsibility for electromedical equipment was transferred from the Directorate for Civil Protection and Emergency Planning to the Norwegian Medicines Agency. The agency's most important tasks include the approval of medicines, investigating medicines for humans and animals in terms of quality, safety and efficacy, evaluating applications for marketing authorizations for the sale of medicines in Norway, as well as approve product reviews, package inserts and labeling, evaluating applications for changes to approved drugs, evaluating applications for clinical trials of drugs, supply chain management, granting permits for manufacturing, import, wholesale, import and export and sale of medicines, classifying drugs, doping substances, drugs, determining the price of prescription drugs for humans, managing laws and regulations on medical equipment, evaluating reports on clinical trials of medical devices, registering of Norwegian manufacturers of medical equipment, and issuing export certificates. [1]

[1] Norwegian Medicines Agency. "About the Medicines Agency". <https://legemiddelverket.no/om-oss>. Accessed 7 March 2021.

4.7.2b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence of an expedited process for approving medical countermeasures for human use during public health emergencies. The websites of the Ministry of Health and Care Services, the Ministry of Education and Research or the Norwegian Medicines Agency (Statens legemiddelverk), which is the government agency that is responsible for approving new medications, do not have information on expedited procedures for approving medical countermeasures for human use during public health emergencies. [1,2,3] The Medical Equipment Act (1995), the Medicines Act (1994), the Regulations on Medical Equipment (2006) and the Regulations on Medicinal Products (2010) do not mention an expedited process for approving MCMs. [4,5,6,7]

[1] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 7 March 2021.

[2] Ministry of Education and Research. "Ministry of Education and Research". <https://www.regjeringen.no/en/dep/kd/id586/>. Accessed 7 March 2021.

[3] The Norwegian Medicines Agency. "Our goals and tasks". <https://legemiddelverket.no/english/about-us/our-goals-and-tasks>. Accessed 15 February 2021.

[4] Government of Norway. 1995 (Updated 2015). "Medical Equipment Act". ("Lov om medisinsk utstyr"). <https://lovdata.no/dokument/NL/lov/1995-01-12-6>. Accessed 7 March 2021.

[5] Government of Norway. 1994 (Updated 2020). "Medicines Act". ("Legemiddeloven"). <https://lovdata.no/dokument/NL/lov/1992-12-04-132>. Accessed 7 March 2021.

[6] Government of Norway. 2006 (Updated 2021). "Regulations on medical equipment". ("Forskrift om medisinsk utstyr"). https://lovdata.no/dokument/SF/forskrift/2005-12-15-1690/*#*; Accessed 7 March 2021.

[7] Government of Norway. 2010 (Updated 2021). "Regulations on medicinal products". ("Forskrift om legemidler"). <https://lovdata.no/dokument/SF/forskrift/2009-12-18-1839>. Accessed 7 March 2021.

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

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

5.1.1 Official IHR reporting

5.1.1a

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

Yes = 1, No = 0

Current Year Score: 1

2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a

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

Yes = 1, No = 0

Current Year Score: 1

Pandemics are integrated into Norway's national risk reduction strategies. The risk management strategy was developed in response to the National Risk Analysis 2014, which includes pandemic risk analysis. The analysis mentions that the Norwegian Surveillance System for Communicable Diseases (MSIS) has contributed to the monitoring of infectious diseases in Norway for almost 40 years and that annually there are around 16,000 individual reports of infectious diseases in groups A and B, which are regarded as the two most infectious categories. The document further elaborates on Norway's emergency preparedness, stating that Norway has a well-established disease control regime, which includes the associated regulatory framework, plans, reporting requirements and routines. This provides a framework and conditions for handling the outbreak of an infectious disease. The risk analysis also presents a case study on the assessment of likelihood of a future influenza pandemic including consequence assessments for nature and the environment, the economy, societal stability, and capacity to govern, among other things. [1] The 2018 National Health Preparedness Plan, the AMR strategy and AMR plan have been

developed within the context of the national risk management strategy and link to the risk analysis. [2, 3, 4]

[1] Norwegian Directorate for Civil Protection (DSB). 2014. "National Risk Analysis 2014".

https://www.dsb.no/globalassets/dokumenter/rapporter/nrb_2014.pdf. Accessed 15 February 2021.

[2] Government of Norway. 2015. "National Strategy against Antibiotic Resistance: 2015-2020".

<https://www.regjeringen.no/contentassets/5eaf66ac392143b3b2054aed90b85210/antibiotic-resistance-engelsk-lavopploslig-versjon-for-nett-10-09-15.pdf>. Accessed 15 February 2021.

[3] Government of Norway. January 2018. "National health preparedness plan".

https://www.regjeringen.no/globalassets/departementene/hod/fellesdok/planer/helseberedskapsplan_010118.pdf. Accessed 14 February 2021.

[4] Norwegian Directorate for Civil Protection (DSB). "Risk, Vulnerability and Preparedness". ("Risiko, sårbarhet og beredskap"). <https://www.dsb.no/lover/risiko-sarbarhet-og-beredskap/>. Accessed 15 February 2021.

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

5.2.1 Cross-border agreements

5.2.1a

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

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

Current Year Score: 2

Norway has cross-border agreements with regards to public health emergencies, and there is no evidence of any gaps in the implementation. Norway is party to the Nordic Health Preparedness Agreement of 2002, alongside Denmark, Sweden, Iceland, Finland, as well as the autonomous territories of the Faroe Islands, Greenland, and Åland. [1] The parties to this agreement are required, insofar as possible, to: provide each other with assistance in a crisis situation; inform and consult each other regarding measures that are implemented in crisis situations; promote cooperation by removing obstacles in national rules; and cooperate on exchange of experience and increase of expertise. [1] Furthermore, Norway has access to the European Center for Disease Prevention and Control, which, among other things, provides support during public health emergencies. [2] In addition, Norway has an observer status in the European Union's Health Security Committee, which provides a platform for the health ministries of member states and observer states to co-ordinate national responses to cross-border public health emergencies. [3,4] Norway also officially signed an agreement with Finland and Sweden in 2012 to formalize cross-border services in healthcare. As part of the agreement, ambulances and helicopters are made available for emergency public health situations across all countries. [5]

[1] Nordic Co-operation. "Mandate for the Nordic Group for Public Health Preparedness (the Svalbard Group)".

<https://www.norden.org/en/information/mandate-nordic-group-public-health-preparedness-svalbard-group>. Accessed 15 February 2021.

[2] European center for Disease Prevention and Control. "ECDC activities on epidemic intelligence and outbreak response."

[<https://www.ecdc.europa.eu/en/about-us/what-we-do/ecdc-activities-epidemic-intelligence-and-outbreak-response>]. Accessed 9 August 2020.

[3] European Commission. "Health Security Committee members."

[https://ec.europa.eu/health/preparedness_response/risk_management/hsc/members_en]. Accessed 9 August 2020.

[4] European Parliament and Council of the European Union. Decision No 1082/2013/EU of 22 October 2013. "On serious

cross-border threats to health and repealing Decision No 2119/98/EC." [<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02013D1082-20131105>]. Accessed 9 August 2020.

[5] European Commission. March 2018. "Study on Cross-Border Cooperation: Capitalising on existing initiatives for cooperation in cross-border regions".

https://ec.europa.eu/health/sites/health/files/cross_border_care/docs/2018_crossbordercooperation_annex_en.pdf. Accessed 15 February 2021.

5.2.1b

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

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

Current Year Score: 2

Norway has cross-border agreements on to animal health emergencies as part of a regional group, and there is no evidence of gaps in implementation. As a member of the European Economic Area Agreement (EEA), Norway is entitled to request assistance from the European Union's Veterinary Emergency Team. [1, 2] The members of this team are experts in "veterinary sciences, virology, wildlife, laboratory testing, risk management and other relevant areas". [1]

[1] European Commission. "Veterinary Emergency Team". [https://ec.europa.eu/food/animals/animal-diseases/emergency-team_en]. Accessed 7 March 2021. [2] European Commission. Decision No 2007/142/EC of 28 February 2007. "Establishing a Community Veterinary Emergency Team to assist the Commission in supporting Member States and third countries in veterinary matters relating to certain animal diseases." [<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32007D0142>]. Accessed 7 March 2021.

5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

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

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

Current Year Score: 2

2021

Biological Weapons Convention

5.3.1b

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

Yes = 1, No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1c

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

Yes = 1 , No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d

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

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

Current Year Score: 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 Norway has allocated national funds to improve capacity to address epidemic threats within the past three years. According to the Ministry of Health and Care Services, the Norwegian Government proposed a total of NOK 6.335 million (USD 740,000) from the 2021 state budget to strengthen hospitals all over the country in 2021. These funds, among other things, will be used for the capacity building of hospitals including a significant increase in the use of video and telephone consultations on a permanent basis, an emergency stockpile for medicines and purchase of infection control equipment. In order to improve long-term capacity to address epidemic threats, the government also proposed to strengthen both the Norwegian Directorate of Health's and the Norwegian Institute of Public Health's emergency preparedness work with additional funds of NOK 90.6 million (USD 10.6 million) and NOK 94.1 million (USD 11 million) respectively. The proposal states that the Norwegian Directorate of Health shall provide better and daily register data for infection monitoring, development of an emergency register for crisis management, and information campaigns aimed at the population and the health service. The National Institute of Public Health will, among other things, cover the upgrade of the National Vaccination Register (SYSVAK) to ensure electronic registration and sharing of vaccination status. [1]

[1] Ministry of Health and Care Services. 7 October 2020. "The government is equipping the health service for further efforts to tackle the coronavirus". ("Regjeringen ruster helsetjenesten for videre koronainnsats").

<https://www.regjeringen.no/no/aktuelt/regjeringen-ruster-helsetjenesten-for-videre-koronainnsats/id2768686/>. Accessed 20 February 2021.

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

5.5.2a

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

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

Current Year Score: 0

2021

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 public evidence that Norway has emergency public funding mechanisms that it can access in emergencies. According to the Health and Social Preparedness Act of 2000, expenses incurred during a health emergency response "shall be defrayed by the state" and the state can demand that municipalities and regions incur the extra cost associated with the response. [1] However, this act does not mention an emergency funding mechanism. [1] The large Norwegian sovereign wealth fund is set up to support the government if oil prices fall or the economy contracts, but it does not have a mandate to provide funding during a health emergency. [2] The Ministry of Health and Care Service does not have any additional relevant information. [3] Norway is not eligible for pandemic support from the International Development Association or the World Bank. [4]

[1] Government of Norway. 2000. "Health and Social Preparedness Act". ("Lov om helsemessig og sosial beredskap").

<https://lovdata.no/dokument/NL/lov/2000-06-23-56>. Accessed 15 February 2021.

[2] Norges Bank Investment Management. "About the fund" <https://www.nbim.no/en/the-fund/>. Accessed 15 February 2021.

[3] Ministry of Health and Care Services. "Ministry of Health and Care Services".

<https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 15 February 2021.

[4] International Development Association. "Borrowing countries". <http://ida.worldbank.org/about/borrowing-countries>. Accessed 3 March 2021.

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

5.5.4a

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

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

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

Current Year Score: 1

In the past three years, senior leaders in Norway have made public commitments to support other countries to improve capacity to address epidemic threats by providing financing or support, and to improve Norway's own domestic capacity to address epidemic threats. In March 2020, the country's prime minister, Erna Solberg, announced that Norway would allocate NOK 2.2 billion (USD 260 million) to the Coalition for Epidemic Preparedness Innovations (CEPI) "to speed up the development of a coronavirus vaccine, and to make sure we are prepared for the next pandemic". CEPI was established in 2017, in the aftermath of the ebola crisis, to develop vaccines to stop future epidemics faster than has been possible using traditional approaches. In relation to the same funding, in March 2020, Dag-Inge Ulstein, the Norwegian minister of international development, said that "the current global situation is highly dramatic, and over the next few weeks and months we are expecting the vast scale of the crisis and of the needs of poor and vulnerable countries with weak health systems to become clear". [1] Previously, in December 2017, the Norwegian government pledged NOK 420 million (USD 50 million) to the United Nations emergency response fund in 2018. [2]

[1] Government of Norway. 18 March 2020. "Norway mobilises international support for vaccine development effort". ("Norge mobiliserer til vaksinedugnad"). https://www.regjeringen.no/no/aktuelt/dugnad_vaksine/id2694054/. Accessed 7 March 2021.

[2] Government of Norway. December 2017. "Norway to provide NOK 420 million to the UN emergency response fund in 2018". https://www.regjeringen.no/en/aktuelt/release_cerf/id2581499/. Accessed 14 November 2018.

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 Norway has, in the past three years, invested finances to support other countries to improve capacity to address epidemic threats. Norway is a founding member of the Coalition for Epidemic Preparedness Innovations (CEPI), which is headquartered in Oslo. The country is a leading player in global health and, together with Japan, Germany, the Bill & Melinda Gates Foundation and the Wellcome Trust, it invested NOK 4 billion (USD 460 million) in CEPI in 2017. [1] In February 2021, Norway announced that it will contribute an additional NOK 200 million (USD 23 million) towards CEPI's research and development efforts to future-proof vaccines against current and future variants of the SARS-CoV-2 virus. [2] Moreover, the Norwegian Government has so far supported the global pandemic response by contributing to the World Health Organization's and its partners Access to COVID-19 Tools (ACT) Accelerator with NOK 4.5 billion (USD 520 million). Of the

funding that has been approved, NOK 1 billion (USD 120 million) has been allocated to vaccines under the International Finance Facility for Immunisation (IFFIm). This mechanism provides rapid funding to partners, with payments spread over the period from 2021-2030. This support comes in addition to other contributions to the COVAX facility, which is the vaccine pillar of the ACT-Accelerator, through Gavi, the vaccine alliance, and CEPI. In total, Norway has now contributed close to NOK 3.5 billion (USD 410 million) to the development and distribution of COVID-19 vaccines in developing countries. NOK 780 million (USD 90 million) has been allocated to the other three pillars of the ACT Accelerator, which are: treatment, diagnostics and strengthening health systems to ensure delivery of vaccines and other medications. This support comes in addition to the allocation of NOK 95.2 million (USD 11 million) to the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). Funding channelled through GFATM will be used to alleviate the impacts of COVID-19 on AIDS, tuberculosis and malaria and to strengthen health systems in poor countries. [3,4] According to the Global Health Security Tracker, Norway disbursed USD 685 million of funding to developing countries between 2018 and 2020. [5]

[1] Government of Norway. 18 Januar 2017. "Norway in a global coalition for the prevention of epidemics and pandemics". ("Norge i global koalisjon for forebygging av epidemier og pandemier").

<https://www.regjeringen.no/no/aktuelt/cepi/id2527201/>. Accessed 3 March 2021.

[2] Government of Norway. 24 February 2021. "Norway gives 200 million to develop new coronavirus vaccines". ("Norge gir 200 millioner til Å utvikle nye koronavaksinerå"). <https://www.regjeringen.no/no/aktuelt/norge-gir-200-millioner-til-a-utvikle-nye-koronavaksiner/id2836284/>. Accessed 3 March 2021.

[3] Ministry of Foreign Affairs. 17 December 2020. "Norway increases support for pandemic response". ("Åker stÅtten til pandemibekjempelse"). https://www.regjeringen.no/no/aktuelt/pm_covax/id2814817/. Accessed 18 February 2021.

[4] World Health Organisation. "The ACT Accelerator funding tracker". <https://www.who.int/initiatives/act-accelerator>. Accessed 18 February 2021.

[5] Global Health Security Tracking. "Funder profile - Norway". <https://tracking.ghscosting.org/details/1017/funder>. Accessed 17 March 2021.

5.5.4c

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

Yes = 1 , No = 0

Current Year Score: 1

2021

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

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

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

5.6.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence of a plan or policy for Norway to share genetic data, clinical specimens or isolated specimens with international entities. The Ministries of Agriculture and Food, Defense, Foreign Affairs, Health and Care Services, and Justice and Public Security do not have publicly available information about sharing genetic data, epidemiological data, clinical specimens, and/or isolated specimens (biological materials) with international organizations or other countries. [1, 2, 3, 4, 5]

[1] Ministry of Agriculture and Food. "Ministry of Agriculture and Food" <https://www.regjeringen.no/en/dep/lmd/id627/>. Accessed 16 February 2021.

[2] Ministry of Defence. "Ministry of Defence". <https://www.regjeringen.no/en/dep/fd/id380/>. Accessed 16 February 2021.

[3] Ministry of Foreign Affairs. "Ministry of Foreign Affairs". <https://www.regjeringen.no/en/dep/ud/id833/>. Accessed 16 February 2021.

[4] Ministry of Health and Care Services. "Ministry of Health and Care Services". <https://www.regjeringen.no/en/dep/hod/id421/>. Accessed 16 February 2021.

[5] Ministry of Justice and Public Security. "Ministry of Justice and Public Security". <https://www.regjeringen.no/en/dep/jd/id463/>. Accessed 16 February 2021.

5.6.1b

Is there public evidence that the country has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years?

Yes = 0 , No = 1

Current Year Score: 1

There is no public evidence that Norway has not shared samples in accordance with the PIP framework in the past year. The World Health Organization has not reported any non-compliance in the past two years by Norway. [1] There is no further evidence on top international and local media outlets.

[1] World Health Organisation. "Virus sharing". http://www.who.int/influenza/pip/virus_sharing/en/. Accessed 16 February 2021.

5.6.1c

Is there public evidence that the country has not shared pandemic pathogen samples during an outbreak in the past two years?

Yes = 0 , No = 1

Current Year Score: 1

There is no public evidence that Norway has not shared pandemic pathogen samples during an outbreak in the past two years. Neither the World Health Organization, nor any major international or Norwegian media outlets have reported that Norway has not shared pandemic pathogen samples during an outbreak in the past two years, including in the context of COVID-19. [1]

[1] World Health Organisation. "Norway". <http://www.euro.who.int/en/countries/norway>. Accessed 16 February 2021.

Category 6: Overall risk environment and vulnerability to biological threats

6.1 POLITICAL AND SECURITY RISK

6.1.1 Government effectiveness

6.1.1a

Policy formation (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 3

2020

Economist Intelligence

6.1.1b

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

Input number

Current Year Score: 4

2020

Economist Intelligence

6.1.1c

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

Input number

Current Year Score: 4

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: 84

2020

Transparency International

6.1.1f

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

Input number

Current Year Score: 4

2020

Economist Intelligence

6.1.1g

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

Input number

Current Year Score: 4

2020

Economist Intelligence

6.1.2 Orderly transfers of power

6.1.2a

How clear, established, and accepted are constitutional mechanisms for the orderly transfer of power from one government to another?

Very clear, established and accepted = 4, Clear, established and accepted = 3, One of the three criteria (clear, established, accepted) is missing = 2, Two of the three criteria (clear, established, accepted) are missing = 1, Not clear, not established, not accepted = 0

Current Year Score: 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: 4

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

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

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

Current Year Score: 3

2021

Economist Intelligence

6.1.4b

What is the level of illicit arms flows within the country?

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

Current Year Score: 3

2020

UN Office of Drugs and Crime (UNODC)

6.1.4c

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

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

Current Year Score: 4

2021

Economist Intelligence

6.1.5 Armed conflict

6.1.5a

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

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

Current Year Score: 4

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

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

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

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

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

Current Year Score: 4

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: 0.96

2018

United Nations Development Programme (UNDP); The Economist Intelligence Unit

6.2.3 Social inclusion

6.2.3a

Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)

Input number

Current Year Score: 0.2

2017

World Bank; Economist Impact

6.2.3b

Share of employment in the informal sector

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

Current Year Score: 0

The latest available figures indicate that less than 25% of Norway's employment is in the informal sector. A 2011 report from the World Bank stated that 12.3% of Norway's population was employed in the informal sector according to the latest available figures, from 2009. [1] The statistical databases maintained by the World Bank and the International Labor Organization do not provide statistics on informal employment in Norway. [2, 3, 4] There is no evidence of relevant statistics on the websites of the Statistisk Sentralbyrå (the national statistical agency), the Ministry of Finance or the Ministry of Labour and Social Affairs. [5, 6, 7]

[1] Mihails Hazans. December 2011. "Informal Workers across Europe. Evidence from 30 European Countries." World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/3681/WPS5912.pdf?sequence=1&isAllowed=y>. Accessed 18 February 2021.

[2] World Bank. "Norway". <https://data.worldbank.org/country/norway>. Accessed 18 February 2021.

[3] International Labor Organization. "Country profiles". <https://ilostat.ilo.org/data/country-profiles/>. Accessed 18 February 2021.

[4] International Labor Organization. "Statistics on the informal economy". <https://ilostat.ilo.org/topics/informality/>. Accessed

18 February 2021.

[5] Statistics Norway. <https://www.ssb.no/>. Accessed 18 February 2021.

[6] Ministry of Finance. <https://www.regjeringen.no/en/dep/fin/id216/>. Accessed 18 February 2021.

[7] Ministry of Labour and Social Affairs. <https://www.regjeringen.no/en/dep/asd/id165/>. Accessed 18 February 2021.

6.2.3c

Coverage of social insurance programs (% of population)

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

Current Year Score: 3

2016, or latest available

World Bank; Economist Impact calculations

6.2.4 Public confidence in government

6.2.4a

Level of confidence in public institutions

Input number

Current Year Score: 2

2021

Economist Intelligence Democracy Index

6.2.5 Local media and reporting

6.2.5a

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

Input number

Current Year Score: 2

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.28

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: 3

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: 82.62

2019

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016

Input number

Current Year Score: 0.18

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: 82.76

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: 291.3

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 17.27

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 13

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 23.1

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: 98.05

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: 5817.63

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: 2

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