



Universitetet
i Stavanger

Sanjana Arora, Olena Koval

Norway Country Report

REPORT NO. 121, UNIVERSITY OF STAVANGER
AUGUST 2022

Reports from UiS

Rapport no. 121
Publisher University of Stavanger
www.uis.no
Project title PAN-FIGHT
ISBN 978-82-8439-111-3
ISSN (online) 2387-6662
DOI <https://doi.org/10.31265/USPS.232>

Licence: [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)



This report has been written as part of the research collaboration project Fighting pandemics with enhanced risk communication: Messages, compliance and vulnerability during the COVID-19 outbreak (PAN-FIGHT). Project initiator and coordinator is The University of Stavanger, and main project partner institutions are the University of Geneva, Mid-Sweden University, King's College London and DIALOGIK Germany. PAN-FIGHT is funded by the Research Council of Norway and runs from August 2020 to September 2022.

The Norway report has been written with editorial support from Ole Andreas Engen, Jacob Kringen, Siri Wiig and Kristin S. Scharffscher.

Executive summary

This report is part of a larger cross-country comparative project and constitutes an account and analysis of the measures comprising the Norwegian national response to the COVID-19 pandemic during the year of 2020. This time period is interesting in that mitigation efforts were predominantly of a non-medical nature. Mass vaccinations were in Norway conducted in early 2021.

With one of the lowest mortality rates in Europe and relatively lower economic repercussions compared to its Nordic neighbours, the Norwegian case stands unique (OECD, 2021; Eurostat 2021; Statista, 2022). This report presents a summary of Norwegian response to the COVID-19 pandemic by taking into account its governance, political administration and societal context. In doing so, it highlights the key features of the Nordic governance model and the mitigation measures that attributed to its success, as well as some facets of Norway's under-preparedness.

Norway's relative isolation in Northern Europe coupled with low population density gave it a geographical advantage in ensuring a slower spread of the virus. However, the spread of infection was also uneven, which meant that infection rates were concentrated more in some areas than in others. On the fiscal front, the affluence of Norway is linked to its petroleum industry and the related Norwegian Sovereign Wealth Fund. Both were affected by the pandemic, reflected through a reduction in the country's annual GDP (SSB, 2022).

The Nordic model of extensive welfare services, economic measures, a strong healthcare system with goals of equity and a high trust society, indeed ensured a strong shield against the impact of the COVID-19 pandemic. Yet, the consequences of the pandemic were uneven with unemployment especially high among those with low education and/or in low-income professions, as well as among immigrants (NOU, 2022:5). The social and psychological effects were also uneven, with children and elderly being left particularly vulnerable (Christensen, 2021). Further, the pandemic also at times led to unprecedented pressure on some intensive care units (OECD, 2021).

Central to handling the COVID-19 pandemic in Norway were the three national executive authorities: the Ministry of Health and Care services, the National directorate of health and the Norwegian Institute of Public Health. With regard to political-administrative functions, the principle of subsidiarity (decentralisation) and responsibility meant that local governments had a high degree of autonomy in implementing infection control measures. Risk communication was thus also relatively decentralised, depending on the local outbreak situations. While decentralisation likely gave flexibility, ability to improvise in a crisis and utilise the municipalities' knowledge of local contexts, it also brought forward challenges of coordination between the national and municipal level. Lack of training, infection control and protection equipment thereby prevailed in several municipalities.

Although in effect for limited periods of time, the Corona Act, which allowed for fairly severe restrictions, received mixed responses in the public sphere. Critical perceptions towards the Corona Act were not seen as a surprise, considering that Norwegian society has traditionally relied on its 'dugnadskultur' – a culture of voluntary contributions in the spirit of solidarity. Government

representatives at the frontline of communication were also open about the degree of uncertainty coupled with considerable potential for great societal damage. Overall, the mitigation policy in Norway was successful in keeping the overall infection rates and mortality low, albeit with a few societal and political-administrative challenges.

The case of Norway is thus indeed exemplary with regard to its effective mitigation measures and strong government support to mitigate the impact of those measures. However, it also goes to show how a country with good crisis preparedness systems, governance and a comprehensive welfare system was also left somewhat underprepared by the devastating consequences of the pandemic.

Contents

- Executive summary 4
- 1 Introduction..... 7
- 2 Norway: Pre-COVID-19 8
 - 2.1 Country overview: Population, governance & health 8
 - 2.2 Organization of health system 13
 - 2.3 Pandemic preparedness for Norway prior to COVID-19 14
 - 2.4 Prior experience with pandemics 14
- 3 Norway’s response to COVID-19 15
 - 3.1 The first known case and progression of COVID-19 in Norway 15
 - 3.2 Emergency COVID-19 related legislation 20
 - 3.3 Coordination of response within Norway 21
 - 3.4 Timeline of mitigation measures..... 22
 - 3.5 Governmental support to enable the population to adopt best measures..... 26
- 4 Risk Communication 28
 - 4.1 Official Communication Sources 28
 - 4.2 Communication channels 28
 - 4.3 Key campaign messages adopted 29
- 5 Concluding remarks..... 30
- 6 References..... 32

1 Introduction

This report forms part of the deliverables produced by the international research project Fighting pandemics with enhanced risk communication: Messages, compliance and vulnerability during the COVID-19 outbreak (PAN-FIGHT), funded by the Norwegian Research Council. It provides an overview of the preparedness and subsequent response to the COVID-19 pandemic in Norway in 2020 and focuses on risk communication. It is one of five country reports, the others being Germany, Norway, Switzerland, and the United Kingdom. The empirical material for this report consists of publicly available documents and online resources.

In April 2022, the Norwegian Corona Commission, which was established to conduct a comprehensive review and evaluation of the management of the pandemic by the Nation's authorities, presented its findings in a second report to the Prime Minister of Norway. Overall, the report pointed out the "well-handling" of the pandemic in Norway (NOU, 2022:5). The Norwegian case is certainly exemplary, especially considering the relatively higher infection rates and mortality among its neighbouring countries of Sweden and Denmark (Statista, 2022). It is beyond the scope of the report to assess whether the overall measures adopted were right or wrong. However, this report presents an overview of the Norwegian crisis response in light of its political administrative and institutional context.

Norway is wealthy society with a mixed economy, combining strong public sector services with an open market (OECD, 2022) The political culture is consensual and rationalistic, where most relevant parties such as the civil society, political parties and private sector engage in joint decision making (Fonnesbæk Andersen and Thisted Dinesen, 2018). Adding to the legitimacy and sustainability of Norwegian political-administrative culture, is the high level of public trust in a number of institutions such as the Parliament, the judiciary and the police (OECD, 2022). A notable trademark of Norwegian culture is also the "dugnadskultur", which implies a culture of voluntary work and solidarity. This combination of trust and willingness to accept and comply with government guidelines, a strong "dugnadskultur" in the population accompanied by a certain degree of social control constitutes an important prerequisite to a deeper and more substantial analysis on how Norway handled the pandemic (Norsk Sosiologisk tidsskrift 3, 2022).

Norway has historically aligned itself to the west Nordic governance model, similar to that of Denmark. Thus, ministries in Norway are formally responsible for their subordinate agencies based on the principle of ministerial responsibility. Agencies are fairly integrated into the ministries, and government ministers can, generally, instruct agencies what to do (Askim, Bjurstrøm and Kjærvik, 2019).

In addition, ad-hoc advisory commissions have played a particularly vital role in the formulation of public policy, to the point that they have been described as a core element of the consensual Nordic model of government (Arter 2008; Christensen & Holst, 2017). To enable a more nuanced understanding of the Norwegian response to the COVID-19 pandemic prior to the rollout of vaccines, we will discuss its key demographic and administrative features in the next sections.

2 Norway: Pre-COVID-19

2.1 Country overview: Population, governance & health

A unique feature of the Nordic countries is their social-democratic model of welfare state (Esping-Anderson, 1990). Norway is characterized by extensive and universal coverage of public goods and services, high trust in institutions, low level of income inequality and considerable gender equality, all of which attribute to the idea of Nordic exceptionalism (Martela et al., 2020). Further, to enable a high degree of labour market participation, Norway has an active labour market policy (Government, 2021).

It is one of the most sparsely populated countries in Europe, relatively isolated in Northern Europe, with nearly 5.5 million inhabitants spread out across almost 400,000 thousand square kilometres. Norway is a constitutional monarchy and parliamentary democracy with three different administrative levels: state, counties and municipalities. Following an administrative reform that came into effect on January 1st 2020, the country is administratively subdivided into 11 counties and 356 municipalities. County governors are the state's representative in the 11 counties and they are responsible for implementing decisions and guidelines from the Government. County governors are also an important link between the 356 municipalities and central authorities (Statsforvalteren, 2021).

Several coordinating mechanisms are also established vertically. County governors follow up government policies and regulations in several key sectors and domains, including health and societal safety. They provide support for the implementation of state policies at the municipal level. Several coordinating mechanisms are in place along vertical lines, including regular meetings and conferences administered and hosted by the Directorate for Civil Protection (SBE, 2018).

Norway has the principle of local self-government. Thus, local governments have a relatively high degree of autonomy from the national government and they are responsible for several services such as primary education, primary health services and elderly care (Ladner, Keuffer, and Baldersheim, 2016). Norway's Infection Control Act places infectious disease expertise at local government level. In line with this, local governments are autonomous and can respond to a health crisis by implementing a range of local measures such as local quarantines, travel restrictions, assembly restrictions and closure of kindergartens, schools, businesses and events. While the elected municipal council has these responsibilities, the chief medical officer can also implement such measures during urgent cases (Askim and Bergström, 2022).

A core principle of the Norwegian governance system is that of individual ministerial responsibility. This implies that the minister has the ultimate responsibility for actions within his or her ministerial portfolio. This creates powerful sector ministries and a strong vertical coordination, but a weaker

horizontal coordination between policy areas. Coordination by hierarchy therefore generally dominates over network mechanisms (Førde et al., 2019).

Table 1. Country characteristics (pre-COVID-19).

Themes	Indicators	Data	Notes and references
Population characteristics	Population size (millions)	5,421,241	https://www.worldometers.info/world-population/norway-population/
	Life expectancy (average)	82.94 years (both sexes)	https://www.worldometers.info/world-population/norway-population/
	Age profile of population	0-15 years: 19% 16-18 years: 4% 19-34 years: 21% 35-66 years: 41% 67-74 years: 8% ≥75 years: 7%	https://www.ssb.no/en/befolkning/statistikker/folkemengde/aar-per-1-januar
	Population density	15 people per km ²	https://www.worldometers.info/world-population/norway-population/
	Official languages	Norwegian (Bokmål and Nynorsk), Sami	
	Main spoken languages	Norwegian (Bokmål and Nynorsk), Sami	
	Population who cannot speak an official language (%)	4.6 % (predominantly non-western immigrants, which is approx. 72% of the immigrant population in Norway, around 250,000 people)	https://www.ssb.no/utdanning/artikler-og-publikasjoner/mange-innvandrere-er-daarlige-til-aa-lese-norsk
	Number of private households and	2,475,168 private households	https://www.ssb.no/en/befolkning/statistikker/familie

	average number of persons per household	2.15 persons per private household	https://www.ssb.no/en/befolkning/statistikker/familie
	Average household size (m ²)	The average living space per person in Norway is 58 square metres (SSB, 2013). Percentage of persons who live in a spacious dwelling with several rooms: 91.1 %	https://www.ssb.no/en/bygg-bolig-og-eiendom/statistikker/borforhold
	Single person household (%)	About 18 % or 974,168 (living alone)	
	Living in care home (%)	45,138 people in 2019 In 2017 it was about 42,000 persons, 67 years or older, registered as living in care homes, with 30,845 being permanent residents	https://www.ssb.no/statbank/table/12003/tableViewLayout1/ https://www.pensjonistforbundet.no/side/64-fakta-om-eldre-i-norge
	Living in poverty (%)	24 % belong to a household not able to afford an unexpected expense	https://www.ssb.no/en/sosiale-forhold-og-kriminalitet/statistikker/fattigdom/aar
	Inequality (Gini index)	27.7 (2019)	World Development Indicators The World Bank
	Physical activity (%) above recommended among persons aged 18+	68,3 % (2016)	GHO By category Prevalence of insufficient physical activity among adults - Data by country (who.int)
	Urban population (%)	83.4 % (4,521,838 people in 2020)	https://www.worldometers.info/world-population/norway-population/
Prevalence of known COVID-19 risk factors in population	Cardiovascular disease (%)	21 % lives with cardiovascular disease or with a high risk of developing one. Approximately 1.1 million Norwegians use therapeutic drugs to either	https://www.fhi.no/en/op/hin/health-disease/cardiovascular-disease-in-norway---/

		prevent or treat cardiovascular disease.	
	Chronic respiratory disease (%)	About 6 % (150,000) the of population over 40	https://www.fhi.no/nettpub/hin/ikke-smittsomme/kols/
	Cancer (%)	Over 5.4 % (294,000) have or have had cancer	https://www.kreftregisteret.no/Temasider/om-kreft/
	Diabetes (%)	Between 5.8 % and 6.3 % (316,000–345,000) live with diabetes, about 1.1 % (60,000) have undiagnosed diabetes	https://tidsskriftet.no/2020/11/kronikk/hvor-mange-har-diabetes-i-norge-i-2020
	Obesity (%) over 18 years old	Female 22.5 % Male 23.6 % (2016)	https://knoema.com/atlas/Norway/Male-obesity-prevalence
	Smoking (%)	8 % are daily smokers (2021) 15 % are daily users of snus (2021)	Tobacco, alcohol and other drugs (ssb.no)
	Population over 65 years of age (%)	15,8% (2022)	Statistisk sentralbyrå (ssb.no)
	Member of World Health Organization (y/n)	Yes	
	European Union membership	No	
	Number of states/regions	4 Regional health authorities, 11 counties, 356 municipalities	
	Autonomy of states/regions	The counties play a key role, and the County Governor is the state's representative in the county with a mandate to follow up decisions, goals and guidelines from the Parliament and the Government.	Statsforvalteren.no (fylkesmannen.no)

Government / economy / transport	GDP per capita	US\$75,419.6 GDP per capita	https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=NO
	Unemployment level	4.4 % (2020)	https://www.nav.no/no/nav-og-samfunn/statistikk/arbeidssokere-og-stillinger-statistikk/nyheter/800-faerre-arbeidssokere-den-siste-uken
Social security	Sick pay (weekly pay and length)	Employed persons will receive sick pay that equals their regular salary (up to a set level) from day one of the sick leave. The first 16 days are covered by the employer. For the days beyond that, the employer will continue to pay sick leave but is entitled to reimbursement from the state. The maximum period of sick pay is 52 weeks.	https://www.nav.no/no/person/arbeid/sykmeldt-arbeidsavklaringspenger-og-yrkesskade/sykepenger/sykepenger-til-arbeidstakere
	Sick pay (freelance and self-employed) (weekly pay and length)	Self-employed persons are similarly entitled to sickness benefits from the state from day 17. For the first sixteen days, they can receive sickness benefits if they have signed an insurance.	Sykepenger til selvstendig næringsdrivende og frilansere - nav.no
	Unemployment support	Although various regulations may apply (including reschooling programmes), Norwegian residents who have been temporarily laid off or lost their job can normally apply for unemployment benefit.	https://www.nav.no/arbeid/en/dagpenger-og-eos/

2.2 Organization of health system

The Norwegian healthcare system is semi-decentralised and provides universal access to high-quality care (Ringard et al., 2014). Municipalities are responsible for providing primary healthcare services and social services. The state is responsible for specialist healthcare services through four Regional Health Authorities. Counties are responsible for statutory dental care. Although there is an apparent division of responsibilities when it comes to type of care, there have been efforts to improve coordination between primary and specialist care such as the 2012 coordination reform, which established a mandatory network of governance structures (Sperre Saunes et al., 2020)

The Norwegian healthcare system is predominantly state funded. Public sources account for over 85% of total health expenditures, which is mostly financed by the central and local governments and the National Insurance Scheme (NIS) (Haarmann, 2018). Private health expenditure accounts for 15% of the total health expenditure and is mainly financed by household out-of-pocket payments. However, exemptions and ceilings on out-of-pocket payments ease the financial burden of care upon individuals. Dental care is an exception, where the level of protection is much lower and private costs are high (Ringard et al., 2014; Debesay et al., 2019).

Per capita spending on health in Norway has remained among the highest in Europe for a decade. The spending measured in relation to GDP, however, is only slightly above the EU average. In 2019, Norway spent 10.5 % of its GDP on health, which is in line with other Scandinavian countries and slightly higher than the EU average. The country also spends more on long term care than other European countries (OECD, 2021)

An important feature of the Norwegian healthcare system is the Regular General Practitioner Scheme, introduced in Norway in 2001. The aim of this was to improve access to GP services and to promote continuous and stable doctor-patient relationships (Hansen et al., 2013; Stortingsmelding nr 23, 1996-97). GPs act as gatekeepers, referring patients to specialist health care services (Ringard et al., 2014).

Equity in health care provision is an important policy goal in Norway (Meld. 13, 2018–2019). While Norway has more doctors per 1 000 population than most EU countries (OECD, 2021), the country faces some challenges in terms of differences in accessibility to general practitioners as well as unequal distribution of hospitals, to the detriment of people living in rural and sparsely populated areas (Kasper et al. 2017; Sperre Saunes, 2020). The number of nurses per capita has increased over the past two decades and is also well above the EU average, but the workforce dropout rate for nurses is high, especially among those working in long-term care (OECD, 2021).

It should be noted that prior to the COVID-19 pandemic, the proportions of both acute (310 per 100 000 population) and intensive care unit (ICU) beds (5.5 per 100 000) in hospitals were lower than the EU averages (360 acute beds per 100 000 and 12.9 ICU beds per 100 000), while the occupancy rate of acute care beds was 80 % – one of the highest in Europe (OECD, 2021).

2.3 Pandemic preparedness for Norway prior to COVID-19

The crisis management approach in Norway is based on an “all hazards” approach which essentially implies that the civil security system aims to cover and plan for a wide range of potential threats, and to deal with these threats through organised prevention, preparedness, response and recovery strategies (Lægreid & Rykkja, 2016)

In addition, four central principles form the basis of the Norwegian crisis management: liability (or responsibility), decentralization (or subsidiarity), conformity (or similarity), and cooperation. The principle of responsibility refers to the fact that the authority or organisational entity that is responsible for the day-to-day operation of an area is also responsible for the management in crisis and disaster events. This includes strategic as well as operative responsibilities. The decentralization principle emphasizes that a crisis should be dealt with at the lowest possible operational level. This places important tasks at the level of the municipalities. The principle of conformity implies that regular operational procedures should prevail in the event of a crisis. This means that organizational structures and command chains are normally not altered. The principle of cooperation states that all government authorities are independently responsible for ensuring cooperation with relevant actors and bodies in their work to ensure prevention, preparedness and crisis management (SBE, 2018; Lægreid & Rykkja, 2016).

During a pandemic, there are three national executive authorities in Norway. First, the Ministry of Health and Care Services (MH) is the central crisis management ministry responsible for handling an epidemic or pandemic in Norway. It also has the responsibility for national health-related preparedness. The Ministry of Health and Care Services’ legislation also deals with proposed amendments from other ministries or proposals for new laws and regulations. It should be noted that at the beginning of epidemic, MH was the lead ministry. However, when the crisis expanded into other policy arenas, this role was assigned to the Ministry of justice and public security (Christensen & Lægreid, 2020).

The second executive authority is the Norwegian Directorate of Health (NDH) which is responsible for the overall coordination of the health and care sector's efforts, and it implements infection control measures. And lastly, the Norwegian Institute of Public Health (NIPH) monitors any epidemic or pandemic situation and supervises and advises state and local authorities on infection control.

2.4 Prior experience with pandemics.

Following the H1N1 flu pandemic in 2009-2010, the Norwegian authorities reviewed their handling of that pandemic. The Norwegian directorate of civil protection conducted an investigation and published an extensive report based on experiences from the H1N1 2009 pandemic. The report covers various issues related to the decision-making authorities on national and regional levels (DSB, 2010). One of the key issues in the report relates to the side effects of vaccination. It particularly includes information about serious side effects, such as narcolepsy and hypersomnia, which had been experienced in Norway following administration of the Pandemrix® vaccine. The report stated that the relationship

between the eight reported cases of narcolepsy and the implementation of vaccination remained uncertain.

By 31 December 2009, Norway had registered 29 deaths caused by the H1N1 2009 flu pandemic. Notably, the death rate in Norway related to H1N1 was higher than in most of the Western European countries, including Sweden and Denmark. Most deaths occurred in people aged between 0 and 60 years of age, 80 percent of whom had underlying illnesses (DSB, 2010).

3 Norway's response to COVID-19

3.1 The first known case and progression of COVID-19 in Norway

By 31 December 2020, Norway had recorded 436 COVID-19 related deaths and over 50,000 COVID-19 related cases. The first case in Norway was recorded on 21 February 2020 and the first death on 12 March 2020 (More detailed information about known cases and deaths are presented in Table 2, Figures 2– 5). By early 2021, Norway counted a total of 580 COVID-19 related deaths. Even when Norway's population of only 5.4 million had been taken into account, these numbers were low compared to neighbouring Nordic countries. For instance, Sweden, with a population double that of Norway, had around the same time reported over 12,100 COVID-19 related fatalities (WHO, 2021). The spread of Covid-19 infection rates in Norway were also geographically uneven with Oslo, the capital, having the highest number of cases per capita throughout (Christensen, 2021)

Life expectancy in Norway was the highest in Europe in 2020, as the country was less affected by the COVID-19 pandemic in the first year than nearly all other European countries. Infection and death rates from COVID-19 in 2020 were low, attributed to rapid and strong containment measures (OECD, 2021). Further, low population density was also seen as a reason for the slower spread of coronavirus in Norway than in many other countries (NOU, 2022:5) Norway has had one of the lowest infection rates in Europe throughout all three waves of the pandemic (Financial times, 2022) . As of April 2022, Norway had the lowest number of confirmed COVID-19 deaths in the Nordic countries (3061), compared to 18,884 deaths in Sweden, 6,296 deaths in Denmark, and 4,277 in Finland (Statista, 2022). Further, throughout 2021, the economic impact of the infection control measures was in the lower end compared to the EU average (Eurostat, 2021).

Indeed, such statistics reflect the general success of the handling of corona pandemic in Norway. The "good handling" of the pandemic in Norway has also been reflected through the findings of the Corona Commission, which was established to conduct a comprehensive review and evaluation of the management of the pandemic by the Norwegian authorities. The Commission carried out its work independently from the Prime Minister's Office and the Government, and presented its findings in a second report to the Prime Minister in April 2022 (NOU, 2022:5). Below, we summarise the key conclusions from the report.

Broadly speaking, the Corona Commission attributed several factors unique to the Norwegian social, structural and cultural contexts as responsible for this success, in addition to the measures implemented by authorities. Firstly, a high level of generalised trust and social capital was attributed as a facilitator for voluntary commitment to government guidelines (Toshkov, Yesilkagit, and Carroll, 2020). Moreover, the provision of full sick pay on account of the generous welfare schemes in Norway possibly attributed to higher compliance to stay at home and quarantine measures. A universal high quality healthcare system further ensured access to primary health care, which in turn could have helped in infection control (NOU, 2022:5).

However, despite the success, the report also characterised several weaknesses in the authorities' handling of the pandemic, which highlight their unpreparedness. Despite a strong healthcare system, the pandemic led to heavy pressure on some intensive care units at times. This isn't surprising considering that the number of ICU beds was low even prior to the pandemic (see section 2.2).

Further, driven by the principle of responsibility and decentralisation, municipalities in Norway are responsible for locally organised infection control and testing measures. This is considered a strength owing to their familiarity with local contexts. However, municipal health authorities were found to be inadequately equipped (NOU, 2022:5). At the local level, 74 out of 356 municipalities did not have an operational plan for infection control, and training was lacking. Overall, the crisis revealed that the necessary resources, a central part of governance capacity, had not been invested in preparedness for an epidemic. The main bottleneck was a lack of infection control equipment, respirators, and testing equipment (Christensen & Lægreid, 2020). This is interesting to note, given that prior to the pandemic, Norway had been ranked sixteenth of 195 countries based on their level of preparedness for handling an infectious disease outbreak, according to The 2019 Global Health Security Index. Sweden, which witnessed a considerable large share of mortality and infection rates, had been ranked seventh (Cameron et al. 2019).

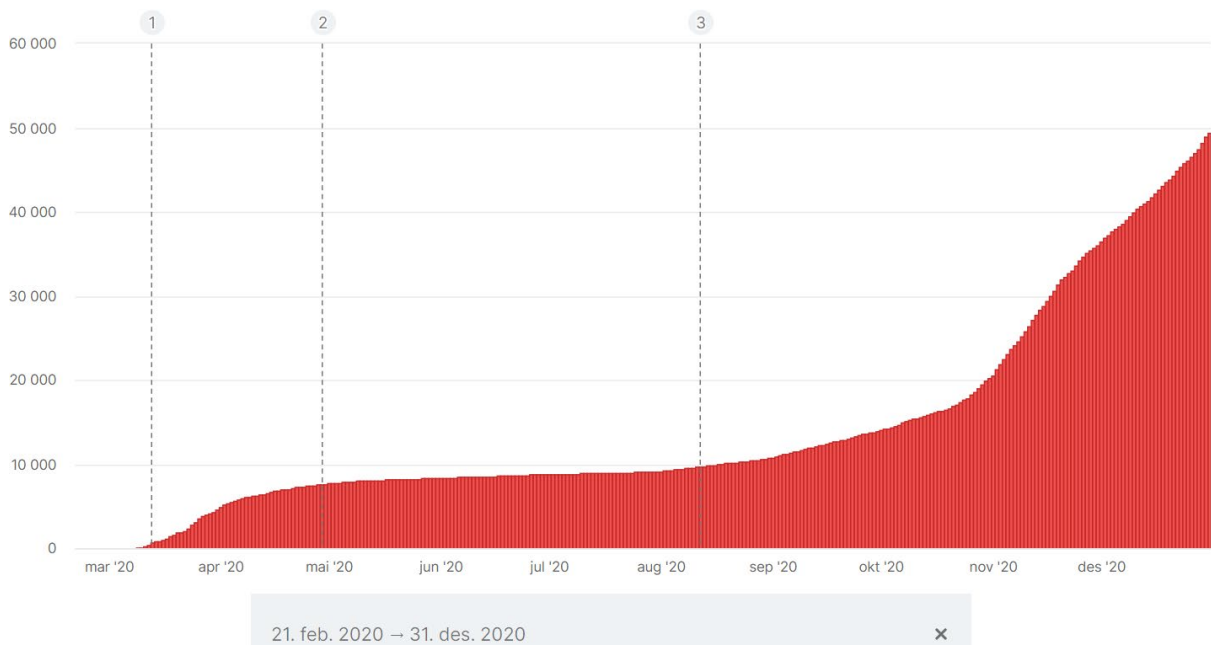
Vaccination, however, was highlighted as a successful effort. Indeed, by the end of August 2021, 55 % of the population had received two doses (or equivalent) – a proportion close to the EU average (OECD, 2021). Norway participated in the EU vaccination initiative, but vaccination started slowly due to a lack of vaccines. However, by November 2021, about 70% of the population was fully vaccinated, which is comparable to the vaccination rates of most OECD members (WHO, 2021). Nevertheless, the Corona Commission report highlighted the lack of strategic distribution of more vaccines to areas with higher COVID-19 prevalence.

Table 2. Key dates of known COVID-19 related cases and deaths.

Event	Date
First known case	21. 02. 2020 (NIPH, 2020)
First known death	12. 03. 2020

Peak of wave 1 (cases) 7-day average	Week 13 2020. Registered 2089 cases per week
Peak of wave 1 (deaths) 7-day average	Week 15 2020. Registered 62 deaths per week
Peak of wave 2 (cases) 7-day average	Week 46 2020. Registered 4237 cases per week
Peak of wave 2 (deaths) 7-day average	Week 50 2020. Registered 33 deaths per week
Evidence of wave 3 Cases and deaths, 7-day average	Week 1 2021. Registered cases 4758 per week Registered 36 deaths per week From https://www.vg.no/spesial/corona/?utm_source=coronav-new-front
Cumulative case numbers: 1 1,060 10,052 20,034 30,083 40,003 50,256	February 28 March 16 August 17 October 30 November 17 December 10 January 1 (NIPH, 2020)
Cumulative number of deaths: 2 102 201 305 401 436	March 12 April 7 April 23 November 19 December 16 December 31 From https://www.vg.no/spesial/corona/?utm_source=coronav-new-front

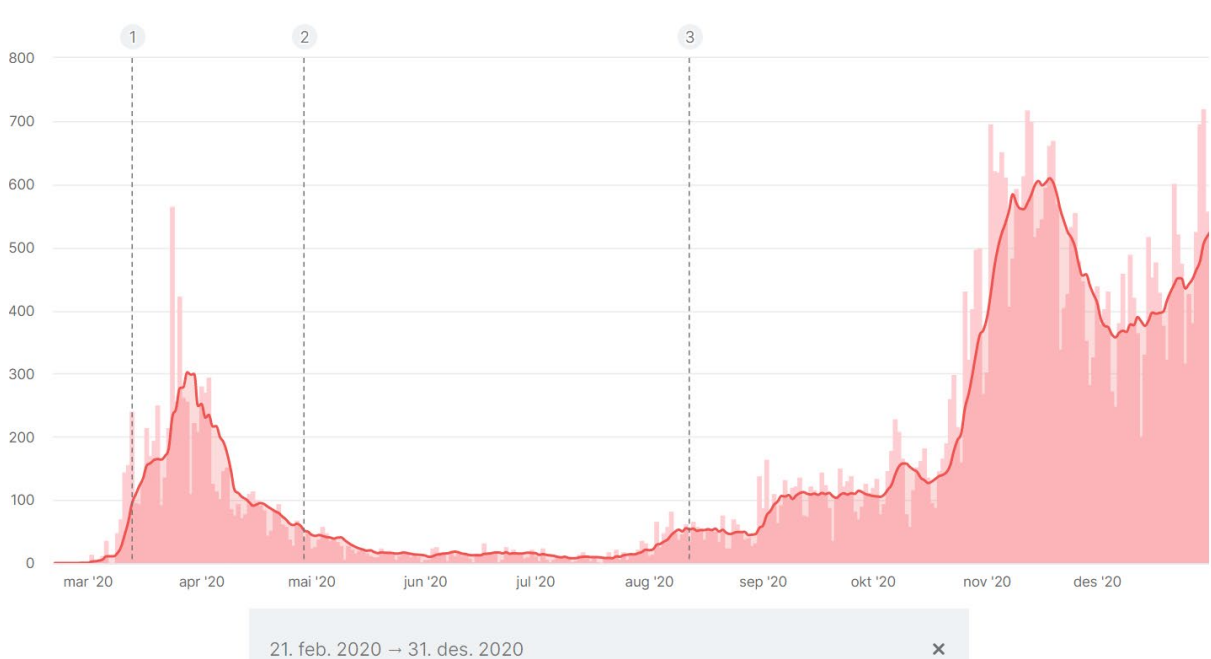
Figure 1. Timeline of cumulative registered COVID-19 cases in Norway.



*1, 2, 3 are implemented changes in testing. Based on data from MSIS and NIPH.

Source: <https://www.fhi.no/sv/smittsomme-sykdommer/corona/dags--og-ukerapporter/dags--og-ukerapporter-om-koronavirus/>

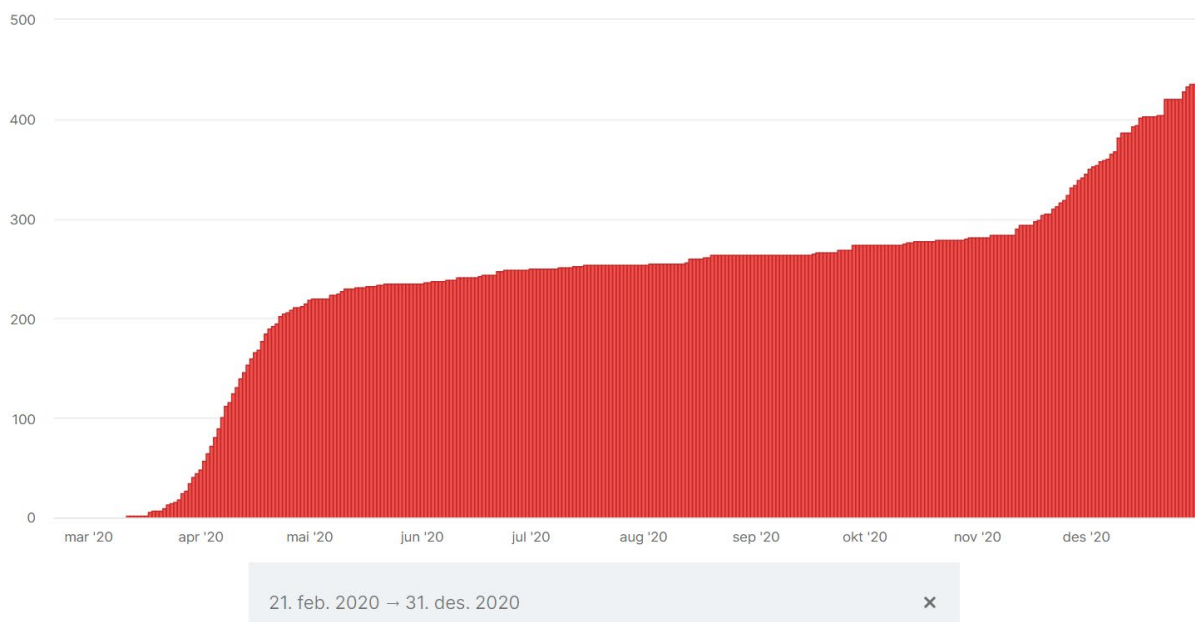
Figure 2. Timeline of registered COVID-19 cases in Norway.



*1, 2, 3 are implemented changes in testing. Based on data from MSIS and NIPH.

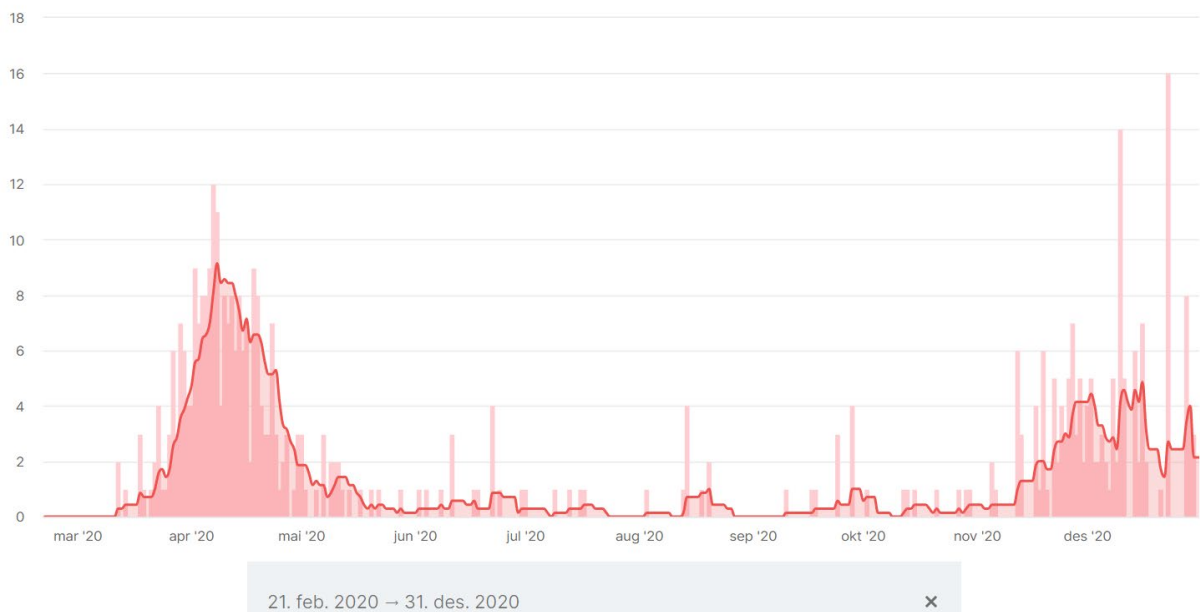
Source: <https://www.fhi.no/sv/smittsomme-sykdommer/corona/dags--og-ukerapporter/dags--og-ukerapporter-om-koronavirus/>

Figure 3. Timeline of cumulative deaths in Norway.



Based on data from MSIS and NIPH. Source: <https://www.fhi.no/sv/smittsomme-sykdommer/corona/dags--og-ukerapporter/dags--og-ukerapporter-om-koronavirus/>

Figure 4. Timeline of deaths in Norway.



Based on data from MSIS and NIPH. Source: <https://www.fhi.no/sv/smittsomme-sykdommer/corona/dags--og-ukerapporter/dags--og-ukerapporter-om-koronavirus/>

3.2 Emergency COVID-19 related legislation

There is no formal constitutional procedure for declaring a national state of emergency and no such concept exists in Norwegian law¹ (Holmøyvik, et al., 2021). The primary public health measures have relied on legislation that existed prior to the pandemic. Norway had existing ordinary legislations such as The Infection Control Act 1994 and the Health Preparedness Act 2000. See Table 3 for detailed information on laws and regulations in Norway.

In addition to the above mentioned ordinary legislations, Norway issued a Coronavirus Act (2020), authorising the government to carry out restrictive measures to address the effects of COVID-19. The first set of measures were implemented on March 12, 2020 and were based on a precautionary approach that prioritised health over economic and social factors (Christensen & Lægreid, 2020). The precautionary principle in Scandinavia guides official plans and procedures and forms part of general contingency plans. Following this principle, the first set of measures included closing day care centres, schools, and educational institutions, a ban on cultural events, closed gyms and swimming pools, a halt to all service provisions that involved being less than one meter away from another person, and prohibiting visits to recreational cabins and cottages, among others. Behavioural measures such as recommendations to keep physical distance, encourage handwashing, quarantine, stay home when ill, work from home, and avoid public transportation were also included (Arora et al., 2021).

Contrary to a decentralised political administrative structure, the first set of measures were standardized national regulations instead of being locally flexible (Christensen & Lægreid, 2020). The Corona Act also meant that the government could make binding decisions and implement quarantine and travel bans as well as other stringent measures. The Corona Act 2020 came into force on 27 March 2020. Though subject to a one-month sunset clause, it was extended by Parliament on 27 April 2020 and expired on 27 May 2020 (Holmøyvik et al., 2021). Despite being a topic of much debate, it was adopted unanimously by the Parliament. After the Corona Act 2020 expired on 27 May 2020, infection control measures have been based on the Infection Control Act 1994² and the Health Preparedness Act 2000 (Holmøyvik et al., 2021).

¹ However, the Health Preparedness Act 2000 requires the Government to declare a public health emergency for one month at a time, but its effects are limited to the health sector only.

² It was amended on June 23rd authorising the Government to make regulations to prevent the spread of COVID-19 by restricting the right to free movement and by isolating people both confirmed and suspected of being infected with COVID-19

Table 3: Laws and regulations relevant to the management of pandemics in Norway (Saunes et al., 2022)

Epidemic acts	Infection Control Act. Adopted in 1994 First amended to cater for COVID-19 related legal needs in February 2020 Revised several times in 2020
National Preparedness Acts	Emergency preparedness Act 1950 Emergency Health Preparedness Act 2000 Activated in March 2020
COVID Act	Adopted on 27 March (Sunset clause 27 May)
National Emergency Plans	National health preparedness plan 2018
Pandemic plans	National plan control communicable diseases 2019

3.3 Coordination of response within Norway

In this section, we present two key issues relevant to understanding the coordination of response within Norway: 1) the passing of the Corona Act and 2) decentralized administration and resulting heterogeneity of response.

The initial decision to lock down the country on March 12th 2020 was formally taken by the Norwegian Directorate of Health and overlooked the Constitution's requirement that it is the cabinet that must make such decisions (Graver, 2020). This was also in contrast to the existing communicable diseases legislation emphasising that volunteer preventive measures should be applied first, whenever possible (Lovdata, 2022). The Government's reason for putting forward the bill was that there was not enough time during the current pandemic crisis to follow the provisions in the Norwegian Constitution for enacting legislation (Stortinget, 2020). The Corona Commission report also pointed out that the authorities did not ensure that the infection control measures were in line with human rights and the Constitution. The decisions to introduce comprehensive infection control measures on March 12th 2020 should have been taken by the Government, not the Directorate of Health, and this was in fact a breach of the Norwegian Constitution (NOU, 2022:5). Critical perceptions towards the Corona Act were also voiced in the academic community. For example, law professor Hans Petter Graver (2020) suggested that the Corona Act put basic legal principles and civil rights to a serious test. Early in the pandemic, Graver (2020) raised significant questions about what an enabling law such as the Corona Act means for a liberal democratic society in the short and long term, and he questioned whether the measures were proportionate and forceful.

The second issue pertains to the principle of responsibility and subsidiarity in crisis management in Norway (see section 2.3) which led to a heterogeneous response by local governments (Askim & Bergström, 2022). A heterogenous response does not necessarily imply negative consequences, especially considering that it is the municipalities which have more knowledge and familiarity with the

local contexts and thereby could conduct contact tracing and implement infection control measures more effectively. However, according to the findings cited in the Corona Commission report, the Government and the Directorate of Health had been slow in informing municipalities and obtaining their input about decisions to be carried out at the local level. Moreover, there were shortages of protective equipment, especially in municipal health services but also specialist health services, despite the fact that this was also stated in the evaluations of SARS epidemic in 2003 and the Ebola outbreak in 2015 by the Directorate of Health (NOU, 2022:5).

Despite the above stated lack of preparedness and coordination issues between the national and the municipal level, the cooperation between employer organisations, government and unions was good and trust-based (NOU, 2022:5).

3.4 Timeline of mitigation measures

The overall COVID-19 handling strategy in Norway was a combination of mandatory regulations and softer advice (Christensen & Lægheid, 2020). On March 12th 2020, the Norwegian Directorate of Health (Helsedirektoratet, 2020) adopted comprehensive measures to prevent the spread of COVID-19. The Norwegian prime minister Erna Solberg expressed in her speech that the measures taken in Norway were the strongest and most intrusive measures ever taken in peacetime in Norway. Schools and kindergartens were closed, quarantines introduced, and most restaurants and bars had to close until further notice (see table 3 for a detailed timeline of measures). Quarantines upon entry to Norway were implemented as well. These measures were initially intended to last for two weeks. However, they were first extended to certain degree to June 2020, followed by a new set of major, although more localized COVID-19 mitigation measures at the end of 2020 (Government, 2020).

In general, the rules and recommendations in Norway were implemented at two levels: local (municipalities) and national. The rules were based on regulations and were supposed to be followed. Violations of the rules were punishable. Local rules may be found on the web pages of the municipalities (Helse Norge, 2021). The Government decided that certain suggested measures could be introduced locally if an outbreak occurs. Infection control measures can also be introduced for a larger region or for the whole country, if it becomes necessary to maintain control of the infection. The Government encourages the municipalities to follow up on their responsibility to check that the infection rules are followed at events (Government, 2020). During the pandemic the municipalities in Norway had various degrees of lock down, all dependent on the COVID-19 outbreak in the area.

Table 4: Timeline of mitigation measures

Month	Measures
February-March 2020	<p>Measures at the level of the municipalities</p> <p>Several big cities expressed worries related to the outbreak of COVID-19 weeks before March 12th 2020. Oslo and Bergen had closed the schools and kindergartens before March 12th 2020. Several events, such as public gatherings, were cancelled.</p>
March 2020- the first wave	<p>National measures</p> <p>March 12th 2020 - The Norwegian Directorate of Health adopted comprehensive measures to prevent the spread of COVID-19.</p> <p>Kindergartens, schools, and educational institutions were closed from March 12th 2020 until and including March 26th 2020. The measures were designed so that extensions were possible.</p> <p>Closure and forbiddance of various events and activities: cultural and sports events and organized sports activities both indoors and outdoors, gyms, swimming pools, and similar.</p> <p>Closure of all businesses in the catering industry, except for restaurants where food is served, i.e., canteens and restaurants that could facilitate visitors to stay at least 1 meter away.</p> <p>Companies that offer hairdressing services, skin care, massage and body care, and similar services had to close.</p> <p>Prohibition to visit recreational cabins and cottages.</p> <p>Prohibition to travel abroad for health personnel working with patient treatment.</p> <p>Quarantine upon entry to Norway.</p> <p>Work at home. The Norwegian Directorate of Health requests people not to visit people in institutions with vulnerable groups (Helsedirektoratet (a), 2020).</p> <p>Keeping 2m distance, washing hands, quarantine/ staying home when ill, max. 5 persons could gather, home office if possible, avoid public transport</p>
April 2020	<p>National measures</p> <p>Comprehensive measures adopted on March 12th 2020 continued until April 13th 2020.</p> <p>On April 7th 2020, it was decided that all the adopted comprehensive measures to prevent the spread of COVID-19 would continue until April 20th 2020 (Helsedirektoratet, 2020, b).</p> <p>After 26 days of complete lockdown and from April 20th 2020, the Norwegian Government began easing several measures: partly opened kindergartens, allowed staying in the cabins, opened primary schools and SFO (after school programme), hairdressers could open, the Government planned to open</p>

	<p>secondary schools, the universities were open to some students and staff who had a good reason to be physically present at the locations.</p> <p>General recommendations from the Government regarding keeping 2m distance, washing hands, quarantine/staying home when ill, max. 5 persons could gather together, home office if possible, and avoid public transport.</p>
May 2020	<p>National measures</p> <p>A maximum of 20 people could stay together with 1m of distance, sports halls could open, the ban on travel abroad for health personnel was lifted, travel abroad was still discouraged, quarantine when returning from abroad, the ban on cultural and sports and other events that did not meet basic requirements for infection control would apply until June 15th 2020.</p> <p>General recommendations from the Government regarding keeping distance, washing hands, keeping down the number of people met, and staying home when ill continued.</p>
June 2020	<p>National measures</p> <p>Open for events with up to 200 people, intention to open fitness centres, intention to open water parks and swimming pools in general to the public, series games in top football leagues allowed from June 16th 2020, with exceptions in the COVID-19 regulations.</p> <p>General recommendations from the Government regarding keeping distance, washing hands, and staying home when ill continued.</p> <p>Measures at the level of the municipalities</p> <p>The municipalities could themselves make assessments of the need for any local adaptations where the potential for infection was greater.</p>
July 2020 - August 2020	<p>National measures</p> <p>General recommendations from the Government regarding keeping distance, washing hands, keeping down the number of people one meets, and staying home when ill continued.</p> <p>Measures at the level of the municipalities</p> <p>The municipalities could themselves make assessments of the need for any local adaptations where the infection rate was greater.</p>
September 2020	<p>Measures at the level of the municipalities</p> <p>Increase in localized outbreaks of COVID-19</p> <p>Local restrictions relevant</p> <p>Home office still encouraged</p> <p>Encouragement to avoid public transport if possible</p>

	<p>The maximum number that can be gathered at public events was reduced back to 50 people</p> <p>Stricter recommendations on distance. The number of persons at private gatherings could possibly be reduced to a maximum of 5-10 people, depending on the situation</p> <p>Permitted opening hours in restaurants, bars and cafes were temporarily limited. Full closure could also be considered as a temporary measure depending on the situation.</p> <p>Recommendation on the use of face masks in situations where keeping distance is not possible</p> <p>Encouragement to let as many events as possible take place outdoors</p> <p>Make all teaching at the universities digital</p> <p>National measures</p> <p>The Government did not want to introduce further national restrictions at this time.</p> <p>General recommendations from the Government regarding keeping distance, using face mask, washing hands, keeping down the number of people we meet, and staying home when ill continued.</p>
<p>October 2020</p>	<p>National measures</p> <p>October 26th 2020: New national restrictions were introduced, including general recommendations from the Government about keeping distance, washing hands, keeping down the number of people we meet, and staying home when ill.</p> <p>Measures at the level of the municipalities</p> <p>The Government encouraged the municipalities to follow up on their responsibility to check that the infection rules were followed.</p> <p>Several municipalities introduced stricter measures locally due to the infection situation.</p>
<p>November 2020 - the second wave</p>	<p>National measures</p> <p>National restrictions continue. General recommendations from the Government regarding keeping distance, washing hands, keeping down the number of people met, and staying home when ill continue.</p> <p>Measures at the level of the municipalities</p> <p>Several municipalities have introduced stricter measures locally due to the infection situation.</p>

<p>December 2020</p>	<p>National measures</p> <p>All the flights from and to the UK are cancelled due to the new and mutated corona virus.</p> <p>Norway received 10,000 vaccine doses on 26 December 2020, and the first vaccination took place on 27 December 2020.</p> <p>It is decided that nursing home residents would be the first to be vaccinated (NIPH, 2021).</p> <p>Encouragement from the Government to install the new Smittestopp App (the new version) from the Norwegian Institute of Public Health, which may be downloaded from https://www.helsenorge.no/smittestopp.</p> <p>General recommendations from the Government regarding keeping distance, washing hands, keeping down the number of contacts, and staying home when ill continue.</p> <p>At the same time, the Norwegian government opened for looser restrictions before Christmas and people could be gathered as 10 guests' groups twice during Christmas.</p> <p>But then though restrictions were implemented in January 2021 as the infection numbers increased.</p> <p>Measures at the level of the municipalities</p> <p>Several municipalities have introduced stricter measures due to the local COVID-19 outbreaks.</p>
----------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

3.5 Governmental support to enable the population to adopt best measures

As mentioned further above, Norway is an affluent country with high incomes from the petroleum industry and the related Norwegian Sovereign Wealth Fund. However, COVID-19 restrictions and recommendations had severe implications on the Norwegian economy and society as a whole. In the time period between February 2020 and November 2021, the COVID-19 pandemic caused a reduction in mainland GDP of NOK 214 billion in 2019 money (SSB, 2022). A mere two weeks into the lockdown period, on March 24th 2020, 10.4% of the labour force were registered as fully unemployed. By comparison, two weeks earlier the unemployment rate had been 2.3% (Christensen, 2021). To mitigate the impact of COVID-19, the Norwegian government introduced several economic, labour market and other societal support measures. They were introduced between March and June 2020 and were extended through the second and third waves.

Initially, measures introduced in the labour market were aimed at the individual level. The Norwegian Parliament changed the regulations governing state support related to temporary layoffs with immediate effect, allowing laid-off workers to be paid full wages up to the income support limit of NOK 600,000 for the first 20 days. After that, the benefits amounted to 80% of income below NOK 300,000 and 62.4% of income between NOK 300,000 and 600,000. The Government reduced the employers' responsibility for paying wages from 15 to 2 days, after which the Government assumed responsibility.

After the employer-funded period, the employees attained the right to unemployment benefits if they were laid off at a level of at least 40% of their working time and if their income in the previous year was above the minimum of 75,000 NOK (Ingelsrud, 2021). In line with the principle of responsibility, the welfare administration agency, NAV, which is subordinate to the Ministry of Labour and Social Affairs, assumed operational management of the wage-compensation program for temporarily laid-off people (NAV, 2020).

The Parliament also swiftly changed the welfare and work regulations, including an extension of welfare coverage for both employees and the self-employed (Ingelsrud, 2021). The eligibility criteria for sickness benefits for self-employed people and freelancers were relaxed. Taking into account the implications of school closures, distant learning and parents working from home, the number of days allowed off work with pay to care for family members (so-called care days) days was doubled to forty under the care benefit days program (Christensen, 2021).

To support businesses, government-guaranteed loans and the possibility of deferring payment of direct and indirect taxes were offered. Further, changes in bankruptcy rules temporarily allowed businesses in danger of bankruptcy increased protection from their creditors (Hjelseth et al., 2021).

Despite extensive economic support measures, the impact of the pandemic was uneven among different social groups. Risks of layoffs or dismissals during the first phase of the crisis was found to be higher among persons with lower education, low-salary positions, hourly wage positions and/or where certain social factors were at play (Alstadsæter et al., 2020). This was also highlighted by the Corona Commission report, which concluded that unemployment had been highest among people without a professional degree, who had worked in low-income positions and/or had been born outside Norway (NOU, 2022:5).

Moreover, while restrictions of social contact turned out to have a significant negative impact on children young, people and senior citizens, researchers have pointed to limited focus and resources were directed towards these groups (Christensen, 2021). Such uneven social and psychological negative consequences on such vulnerable groups was also pointed out in the Corona Commission report.

4 Risk Communication

This section presents an overview of the main sources of communication (by both organisations and key individuals), channels used for communication, and key messages used throughout 2020 in Norway.

4.1 Official Communication Sources

Communication at the national level was done by the representatives of the Norwegian Government, including the Ministry of Justice, the Ministry of Health and Care Services, the Norwegian Directorate of Health, and the Norwegian Institute of Public Health.

At the regional level, the Norwegian Directorate of Health specified that municipalities in Norway were responsible for COVID-19 related communication with the population. The content had to be adapted to the current situation.

The Norwegian Directorate of Health and the National Institute of Public Health created a communication package for use during local outbreaks, covering among others:

- Checklist of information measures in the municipality during a COVID-19 outbreak. These measures were to be assessed and adapted to the current situation.
- Suggestions for social media posts that could be used by municipalities in Norway, including templates and links directly to relevant material under each post. The municipalities were not able to change the content of the material but were free to adjust the text of the items according to local needs.

Municipalities, if they wished, could receive assistance from the health authorities by submitting a request for this via an ordinary outbreak notification to the National Institute of Public Health.

4.2 Communication channels

Health risk was communicated to the public both through traditional channels, such as newspapers, televised press conferences, bus stop posters, leaflets, and online communication platforms such as Facebook, chat services, FAQ lists, emails and text messages to people's mobile phones. Key information was compiled and made available for the general population at the websites listed in the table below.

Table 5: Official communication channels

Organization	Website
Helsenorge.no	https://www.helsenorge.no/en/coronavirus/
Norwegian Institute of Public Health	https://www.fhi.no/en/
Government.no	https://www.regjeringen.no/no/tema/Koronasituasjonen/id2692388/

Municipality level. (Example here: The city of Stavanger)	https://www.stavanger.kommune.no/helse-og-omsorg/informasjon-om-koronavirus/
Organizational level. (Example here: The University of Stavanger)	https://www.uis.no/nb/viktig-korona-info-ved-uis

4.3 Key campaign messages adopted

A common theme throughout the Norwegian government's COVID-19 communication was the high level of uncertainty, and how measures were adopted in accordance with the precautionary principle, described further above. Although many COVID-19 mitigation messages were adopted and implemented throughout Norway in 2020, we have selected certain messages that were recurrent in the public sphere and which appeared in the above-mentioned channels of communication.

Table 6: Key messages

Norwegian	English translation/explanation
Hold deg hjemme. Redd liv.	Stay at home. Save lives.
Last ned smittestopp	Download the infection stop app.
Korona-dugnad	Encouragement for collective effort during the COVID-19 pandemic.
Du kan bære smitte uten at du vet det selv. Takk for at du tar hensyn!	You can carry the infection without knowing it. Thank you for your kind consideration!

Table 7: Messages during the pandemic

Key messages	Timeframe
Keep the distance	Constant, but has varied during the pandemic, depending on the distance in m (ranging between 1 m and 2m >) and the number of allowed social contacts at a time
Avoid face to face contact	Constant
Wash your hands	Constant
Use antibacterial products	Constant
Wear a face mask where it is recommended	Changed from "not recommended" in March 2020 to "compusory" by the end of 2020. The messages regarding the usage of a face mask vary across the country (municipalities), depending on the severity of the outbreak and the ability to keep 1 m distance, and type of

	social interaction (face mask in public transport and taxis).
Stay at home if you are sick	Constant
Test yourself if you have symptoms	Constant
Avoid using public transport	Constant
Avoid unnecessary travel	Constant
Follow advice from your municipality	Constant

Overall, risk communication in Norway was conducted simultaneously at several levels within different dimensions, resulting in a more complex model, rather than a simple linear process.

5 Concluding remarks

The mitigation policy in Norway was successful in keeping the overall infection rates and mortality low. To curb the economic and societal impact of the pandemic, a wide range of government measures helped support individuals, families and businesses. The impact of the pandemic was however uneven and left some groups such as children and senior citizens more vulnerable to the social and psychological consequences. Given the principle of local self-government, Norway is highly decentralized. The municipalities were relatively autonomous but encountered challenges in being fully prepared, reflected through their experienced shortages of infection control and protective equipment. Risk communication, depending on the local outbreak situation was also thus decentralized.

A controversial aspect of the Norwegian response towards the COVID-19 pandemic was the passing of the Corona Act, which resulted in the most severe restrictions in the country in modern peacetime. The restrictions included closing day care centres, schools and other educational institutions, a ban on cultural events, closed gyms and public swimming pools, a halt to all service provisions that involved being less than one meter away from another person, and prohibiting visits to recreational cabins and cottages, among others. Behavioural measures such as recommendations to keep physical distance, frequent handwashing, quarantine, stay home when experiencing symptoms, work from home, and avoid public transportation were also included. While passed unanimously and activated for a limited time period, the Corona Act was a topic of much public debate.

A common denominator through the pandemic, is the application of the decision rule when dealing with uncertainty, the so-called precautionary principle. In Scandinavia, this principle guides official plans and procedures and it forms part of general contingency plans. For instance, the principle shall be applied when authorities are faced with a threat that is unknown, with a potential for major destruction and/or serious societal damage. In line with this, it makes sense to introduce measures even without a full overview of consequences. This is the mindset that the Norwegian government followed in 2020 (and the other European countries in our study as well), and this principle and strategy

was communicated to the population. Although some measures in hindsight can seem unreasonable, people understood the authority's overall purpose because they experienced the same uncertainty. It is reasonable to claim that the authorities' communication strategy and transparent speech acts about uncertainty contributed to a higher acceptance of the precautionary principle and thereby the measures taken. Moreover, the Norwegian population has high trust in the authorities. The "dugnadskultur" in Norway also encourages social discipline, self-regulation and perhaps therefore a lower tolerance for behaviour that deviates from "the normal". Thus, in a crisis such as the COVID-19 pandemic where trust and legitimacy are vital, the Norwegian case goes on to show how contextual factors are fundamental elements in shaping and contributing to the crisis response.

6 References

- Alstadsæter, A., B. Bratsberg, G. Eielsen, W. Kopczuk, S. Markussen, O. Raaum, K. Røed (2020). "The First Weeks of the Coronavirus Crisis: Who Got Hit, When and Why? Evidence from Norway." *Covid Economics* 15: 63–87. doi: <https://doi.org/10.3386/w27131>
- Arora, S., Debesay, J., & Eslen-Ziya, H. (2022). Persuasive narrative during the COVID-19 pandemic: Norwegian Prime Minister Erna Solberg's posts on Facebook. *Humanities and Social Sciences Communications*, 9(1), 1-10. doi: <https://doi.org/10.1057/s41599-022-01051-5>
- Arter, D. (2008). *Scandinavian Politics Today*, 2nd edn. Manchester: Manchester University Press
- Askim, J., K. H. Bjurstrøm, and J. Kjærvik (2019). "Quasi-Contractual Ministerial Steering of State Agencies: Its Intensity, Modes, and How Agency Characteristics Matter." *International Public Management Journal* 22 (3): 470–498. doi: <https://doi.org/10.1080/10967494.2018.1547339>.
- Askim, J., & Bergström, T. (2022). Between lockdown and calm down. Comparing the COVID-19 responses of Norway and Sweden. *Local Government Studies*, 48(2), 291-311.
- Christensen, T. (2021). The Social Policy Response to COVID-19—The Failure to Help Vulnerable Children and Elderly People. *Public Organization Review*, 21(4), 707-722. doi: <https://doi.org/10.1080/03003930.2021.1964477>
- Christensen, J., & Holst, C. (2017). Advisory commissions, academic expertise and democratic legitimacy: The case of Norway. *science and public policy*, 44(6), 821-833. doi: <https://doi.org/10.1093/scipol/scx016>
- Christensen, T., & Lægreid, P. (2020). Balancing governance capacity and legitimacy: how the Norwegian government handled the COVID-19 crisis as a high performer. *Public Administration Review*, 80(5), 774-779. doi: <https://doi.org/10.1007/s11115-021-00560-2>
- Debesay, J., Arora, S., & Bergland, A. (2019). Migrants' consumption of healthcare services in Norway: Inclusionary and exclusionary structures and practices. *Inclusive consumption* 4 doi: <https://doi.org/10.18261/9788215031699-2019-04>
- DSB (2010). *Rapport. Ny Influenza A (H2N1) 2009. Gjennomgang av erfaringer in Norge. [Report. New influenza A (H1N1) 2009. Review of experiences from Norway]*. Retrieved from <https://www.dsbinform.no/DSBno/2010/Rapport/Pandemirapport/?page=2>
- Eurostat (2021). Newsrelease Euroindicators. Available from https://ec.europa.eu/eurostat/documents/portlet_file_entry/2995521/2-02022021-AP-EN.pdf/0e84de9c-0462-6868-df3e-dbacaaad9f49f
- Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Princeton University Press. doi: <https://doi.org/10.1177/095892879100100108>

- Financial times (2022). Coronavirus tracked: see how your country compares. Available from <https://ig.ft.com/coronavirus-chart/?areas=swe&areas=dnk&areas=nor&areas=eur&areas=gbr&areasRegional=usny&areasRegional=usca&areasRegional=usfl&areasRegional=ustx&cumulative=0&logScale=0&per100K=1&startDate=2020-09-01&values=cases>
- Fonnesbæk Andersen, R. and P. Thisted Dinesen (2018), "Social Capital in the Scandinavian Countries", in Nedergaard, P. and A. Wivel (eds.), *Routledge Handbook on Scandinavian Politics*, pp. 161-173, Routledge, London. doi: <https://doi.org/10.4324/9781315695716-13>
- Førde, J. S., Lægreid, P., Rubecksen, K., & Rykkja, L. H. (2019). Organizing for Societal Security and Crisis Management in Germany, The Netherlands, Norway, Sweden and the UK. In *Societal Security and Crisis Management* (pp. 27-51). Palgrave Macmillan, Cham. doi: https://doi.org/10.1007/978-3-319-92303-1_2
- Graver, H. P. (2020). COVID-19 Regulation in Norway and state of exception. *COVID-19 and Constitutional Law. Mexico: Universidad Nacional Autónoma de México*, 167-175.
- Hansen, A. H., Halvorsen, P. A., Aaraas, I. J., & Førde, O. H. (2013). Continuity of GP care is related to reduced specialist healthcare use: a cross-sectional survey. *Br J Gen Pract*, 63(612), 482-489. doi: <https://doi.org/10.3399/bjgp13X669202>
- Haarmann, A. (2018). The Evolution and Everyday Practice of Collective Patient Involvement in Europe. *Cham: Springer*. doi: <https://doi.org/10.1007/978-3-319-64595-7>
- Helsedirektoratet (2020). Helsedirektoratet har vedtatt omfattende tiltak for å hindre spredning av Covid-19. Retrieved from <https://www.helsedirektoratet.no/nyheter/helsedirektoratet-har-vedtatt-omfattende-tiltak-for-a-hindre-spredning-av-covid-19>
- Helse Norge (2021). *Overview of rules and recommendations*. Content provided by the Norwegian Directorate of Health. Retrieved from <https://www.helsenorge.no/en/coronavirus/overview-of-rules-and-recommendations/>
- Holmøyvik, E., Høgberg, B. M., & Eriksen, C. C. (2021). Norway: Legal Response to Covid-19. *The Oxford compendium of national legal responses to Covid-19*.
- Hjelseth, I. N., Solheim, H., & Vatne, B. H. (2021). *Government support schemes during the Covid-19 pandemic have had a dampening effect on corporate credit risk* (No. 3/2021). Staff Memo.
- Ingelsrud, M. H. (2021). Standard and non-standard working arrangements in Norway—consequences of COVID-19. *Labour & Industry: a journal of the social and economic relations of work*, 31(4), 387-404. doi: <https://doi.org/10.1080/10301763.2021.1979449>
- Kasper, J., A. R. Lager, M. Rumpsfeld, S. Kienlin, K. Hoel Smestad, T. Bråthen, H. Ankell, et al. (2017). 'Status Report from Norway: Implementation of Patient Involvement in Norwegian Health Care.' *Zeitschrift Für Evidenz, Fortbildung Und Qualität Im Gesundheitswesen* 123– 124 (June): 75–80. doi: <https://doi.org/10.1016/j.zefq.2017.05.015>.
- Ladner, A., N. Keuffer, and H. Baldersheim (2016). "Measuring Local Autonomy in 39 Countries (1990–2014)." *Regional & Federal Studies* 26 (3): 321–357. doi: <https://doi.org/10.1080/13597566.2016.1214911>.

- Lovdata. Lov om vern mot smittsomme sykdommer [read 2020-5-3] Available from <https://lovdata.no/dokument/NL/lov/1994-08-05-55>.
- Lægreid, P., & Rykkja, L. H. (2016). Organizing for Societal Security and Crisis Management. Available from https://norceresearch.brage.unit.no/norceresearch-xmlui/bitstream/handle/11250/2627131/Rapport%204-2016%2C%20Laegreid%20and%20Rykkja_ed.s.pdf?sequence=1&isAllowed=y
- Martela, F., Greve, B., Rothstein, B., & Saari, J. (2020). The Nordic exceptionalism: What explains why the Nordic countries are constantly among the happiest in the world. *World happiness report*, 129-146.
- OECD/European Observatory on Health Systems and Policies (2021), Norway: Country Health Profile 2021, State of Health in the EU, OECD Publishing, Paris, doi: <https://doi.org/10.1787/6871e6c4-en>.
- OECD (2022), *Drivers of Trust in Public Institutions in Norway*, Building Trust in Public Institutions, OECD Publishing, Paris, doi: <https://doi.org/10.1787/81b01318-en>
- Ringard, Å., A. Sagan, I. Sperre Saunes, and A. K. Lindahl (2014). Norway: Health system review. *Health Systems in Transition*.
- SBE (2018). *DSBs retningslinjer for varsling og rapportering på samordningskanal*. Retrieved from DSB website <https://www.dsb.no/lover/risiko-sarbarhet-og-beredskap/andre-dok/retningslinjer-for-varsling-og-rapportering-pa-samordningskanal/>
- Sperre Saunes, I., Karanikolos, M., Sagan, A., & WHO (2020). Norway: health system review. Retrieved from <https://www.who.int/publications/i/item/HiT-22-1-2020>
- SSB (2022). Covid-19, the economic costs of the pandemic and the role of fiscal policy. Available from <https://www.ssb.no/en/nasjonalregnskap-og-konjunkturer/konjunkturer/artikler/covid-19-the-economic-costs-of-the-pandemic-and-the-role-of-fiscal-policy>
- Statsforvalteren (2021). *Om oss*. Retrieved from <https://www.statsforvalteren.no/portal/Om-oss/>
- Statista (2022). Cumulative number of coronavirus (COVID-19) deaths in the Nordic countries. Available from <https://www.statista.com/statistics/1113834/cumulative-coronavirus-deaths-in-the-nordics/>
- Statista (2022). Cumulative number of coronavirus (COVID-19) cases in the Nordic countries. Available from <https://www.statista.com/statistics/1102257/cumulative-coronavirus-cases-in-the-nordics/>
- Stortinget (2022). The Corona Act. Available from <https://www.stortinget.no/en/In-English/About-the-Storting/News-archive/Front-page-news/2019-2020/the-corona-act>
- Stortinget (2020). *Regjeringen vurderer innstramminger*. [Press release, No126/20]. Retrieved from <https://www.regjeringen.no/no/aktuelt/regjeringen-vurderer-innstramminger/id2741067/>

Stortinget (2022). Labour market measures. Available from

<https://www.regjeringen.no/en/topics/labour/labour-market-and-employment/innsikt/labour-market-measures/id86897/>

Stortingsmelding nr. 13 (2018–2019). Muligheter for Alle — Fordeling Og Sosial Bærekraft. Retrieved from <https://www.regjeringen.no/no/dokumenter/meld.-st.-13-20182019/id2630508/sec1>.

Stortingsmelding nr 23. (1996-97). *Om legetjenesten i kommunene og fastlegeordningen (On general practitioner services in the municipalities and the Regular General Practitioner Scheme)*.

Retrieved from https://www.regjeringen.no/no/dokumenter/st-meld-nr-23_1996-97/id191061/

Toshkov, D., K. Yesilkagit, and B. Carroll. 2020. "Government Capacity, Societal Trust or Party Preferences? What Accounts for the Variety of National Policy Responses to the COVID-19 Pandemic in Europe?" *OSF Preprints*. doi: <https://doi.org/10.31219/osf.io/7chpu>.

World Health Organization. (2021). *The current COVID-19 situation*. Retrieved from <https://www.who.int/countries/swe/>

World Health Organisation, 2021. WHO Coronavirus (COVID-19) Dashboard. Retrieved from <https://covid19.who.int/?mapFilter=vaccinations>