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Sweden Country Report

RAPPORT NR. 98, UNIVERSITETET I STAVANGER – September 2021

September 2021
ISBN 978-82-8439-024-6
Rapport nr.98, Universitetet i Stavanger

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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 gGmbH. PAN-FIGHT is funded by the Research Council of Norway and runs from August 2020 to September 2022.

The Sweden report has been reviewed by Anna Olofsson.

Sweden Country Report[i]

Executive Summary

This report is part of a larger cross-country comparative project and constitutes an account and analysis of the measures comprising the Swedish national response to the COVID-19 pandemic during the calendar year of 2020. The notable departure of the Swedish approach to the battling of the pandemic has attracted considerable international interest, both in academic circles and in various media outlets. We deem the institutional and legal framework of the country of considerable salience to the understanding of the response to the pandemic, and for this reason, we contextualize the this response (operationalized as a set of policy outputs) within the broader Swedish political and administrative system.

Indeed, the Swedish contagion mitigation measures were a departure from that of other European countries, including its Nordic[ii] neighbors. Sweden's measures included no compulsory lockdowns and shutdowns of businesses and were mainly voluntary in the sense they did not include instruments of enforcement, such as fines or legal penalties. The legal framework, political sensibilities, and administrative system did not allow for a declaration of state of emergency (see Petridou, 2020 for more on the politics/administration dichotomy in Sweden). The Swedish strategy has not been uncontroversial and has attracted criticism in the international and domestic media (Savage, Reeves, and Estrin 2020) as well public criticism from experts (see, for example, Carlsson et al. 2020). It is also true that the number of cases per 100,000 as well as the mortality rate have been higher than those in the neighboring Nordic countries (Johns Hopkins 2021). Indicatively, as reported in Petridou (2020), close to the end of the first phase of the pandemic, Sweden had experienced a higher death rate than both its Nordic neighbors and the European Union (EU) as a whole.

This is not to say that the Swedish government sat on its hands. In terms of legislation, not only did the Swedish Parliament (Riksdag) decided on contagion mitigation measures proposed by the National Health Agency of Sweden (PHAS), it also made several budget amendments to shore up social benefits for the purpose of assisting households and viable businesses. Contagion mitigation measures fell under the following categories: (1) travel advisories (international as well as national, including a ban on incoming international travelers); (2) general regulations regarding hygiene, staying home when having symptoms, and physical distancing; (3) general regulations about working from home; (4) general recommendations regarding online teaching at high schools and universities; (5) limits on public gatherings; (6) limits on restaurant operations; (7) limits on elder care home visits; (8) general regulations regarding using mass transportation (National Institute for Economic Research, 2020).

Assessing the response in terms of success or failure is beyond the scope of this report. Our objective is to contribute to an increased understanding of the Swedish COVID-19 contagion mitigation policy at the national and subnational levels. What is more, the COVID-19 pandemic has been dynamic and unfolding over a long period of time. It is important to keep in mind that the Swedish crisis management system is premised on the tenet that operations must remain as close to non-crisis mode as possible. In summary, the Swedish response was designed to be sustainable over time and aimed at avoiding emergency measures and extraordinary institutions.

Contents

Introduction

This report provides an overview of the preparedness and subsequent response to the Covid-19 pandemic in Sweden in 2020, with an added focus on risk communication. It is one of five country reports authored in the context of the research project PAN-FIGHT, funded by the Norwegian Science Council. The remaining four countries are Germany, Norway, Switzerland, and the UK. The empirical material for this report consists of publicly available documents and online resources.

Sweden's national response to the pandemic was a departure from the national responses of other European countries and unique in its approach internationally. It attracted international criticism and was met with a certain level of misunderstanding in international media. A lack of understanding of the Swedish political social and administrative contexts has resulted in the misjudgment of the country's measures as non-existent. The sweeping character of the pandemic presents a fruitful case study for those interested in the reasons why different countries responded to the same crisis in different ways. We posit that the political and administrative systems as well as the institutional context of countries heavily influenced the pandemic response. In order to understand the particularities of the Swedish response, we must explain the specificities of the national context. We do this in the remainder of this section.

There are several features of the Swedish political system and social context that stand out and have given rise to the term 'Swedish exceptionalism'. These include the dominance of social democracy, full employment, generous redistributive policies underpinning an expansive welfare system, high levels of social equality, international competitiveness, foreign policy characterized by non-alignment and particularly high levels of social and political trust (Pierre, 2016). Even though recently Swedish exceptionalism has decreased as manifested by curtailments in the welfare state architecture and increasing social inequalities, Swedish still stands out as a paradigmatic social democracy with a consensus-oriented political system.

Swedish policymaking is characterized as open and consensual and oriented towards problem-solving. It rationalistic in the sense that policies are based on information gathered about a situation identified as a problem, usually through commissions of inquiry (Anton, 1969). Even though the degree to which Swedish policy making is open, inclusive, consensual and deliberative has decreased over the past few decades, open conflict is avoided and inflammatory rhetoric has little place in the process (Petersson 2016). Such a policy making system is a common feature among all Nordic countries, however, there exist differences (Ahlbäck Öberg and Wockelberg 2016). The East Nordic administrative tradition is mainly associated with Sweden and to a lesser extent Finland. Sweden, unlike any unitary parliamentary country, is characterized by the absence of formal ministerial rule when it comes to public agencies. This means that the responsibility of ministries centers on planning, budgeting, and drafting broad policy guidelines for the public agencies. Additionally, the operative autonomy of agencies has increased in the past decades (Einhorn and Logue 2003; Hall 2016; Petridou 2020). This phenomenon is understood as a dual executive, or dualism (Hall 2016). The Swedish constitution ensures the autonomy of agencies:

> [n]o public authority, including the Riksdag [Swedishparliament], or decision-making body of any local authority, may determine how an administrative authority shall decide in a particular case relating to the exercise of public authority vis-à-vis an individual or a local authority, or relating to the application of law (Sveriges Riksdag n.d, n.p.)

Public agencies are staffed by experts in an open recruiting process. Part of their mandate is to make policy recommendations to the government. The government is not bound by law to follow these recommendations, but traditionally this has been the case partly because it is understood that the decisions public agencies make are depoliticized and based on evidence and expertise (Petridou, 2020). Concomitantly, the state does not have the constitutional right to declare a state of emergency during peace time (Jonung and Nergelius, 2020; Petridou, 2020). This also means that, for example, the movement of the Swedish population within the country cannot be restricted by law. The government can recommend that people not travel, but does not have the authority to impose a curfew.

1 Sweden: Pre-COVID-19

1.1 Country Overview: Population, Governance & Health

Small, industrial, advanced democracies in Western Europe in general and Sweden in particular is characterized by a corporatist mode of governance. This mode involves, *inter alia,* a large public sector with a comprehensive welfare system, redistributive policies, a high degree of political involvement often through organized interest groups, proportional representation and strong voluntary associations. Sweden is a consultative democracy and epitomizes the modern welfare state through providing social services and transfer payments. It is characterized by an interventionist state that manages capitalistic market economies to minimize unemployment while it regulates the behavior of individuals, groups and firms (through policies) in order to restrict the need for welfare and thus reduce costs (Einhorn and Logue 2003).

Sweden is a decentralized unitary state and parliamentary monarchy (Kuhlmann and Wollmann 2014). There are three levels of governance in Sweden: the local or municipality level, which enjoys substantial autonomy, the national government, and the regional or county level, which acts as an intermediary between the municipality and the national government (Einhorn and Logue 2003). The state is centralized in the sense that all powers are collected at the parliamentary level, while the welfare system is based on uniformity, equality, and provision of services that is primarily public. The extensive welfare system necessitates an administration that is close to its citizens and thus requires a large degree of decentralization, where municipalities are in charge of practically all welfare services. As a result of several reforms, the number of municipalities in Sweden was reduced from around 2500 in 1951 to the current 290. Currently, there are also 21 regions, which are, *inter alia*, responsible for health care provision.

Table 1 Country characteristics, Sweden. Pre-COVID-19.

Themes	Indicators	Data	Any notes and references
Population character-istics	Population size (millions) 2019	10.38 million (ref period: Nov, 2020)	https://www.scb.se/en/finding-statistics/statistics-by-subject-area/population/population-composition/population-statistics/#_Keyfigures
	Life expectancy (average)	Women: 84.7 years Men: 81.3 years (SCB, 2019)	https://www.scb.se/contentassets/93920ea973404af7804723ba589c2a53/be0701_2020a01_br_be51br2005eng.pdf
	Life expectancy at birth	Total (years): 83 Women: 84 Men: 81 (Worldbank, 2018)	https://data.worldbank.org/indicator/SP.DYN.LE00.FE.IN
	Age profile of population (%)	0-4 years: 5.8 5-14 years: 12 15-24 years: 11 25-34 years: 14 35-44 years: 12.4 45-54 years: 13 55-64 years: 11.5 65- 74 years: 11 75-84 years: 7 85-94 years: 2.3 95+: 0.2 (SCB, 2019)	https://www.statistikdatabasen.scb.se/pxweb/en/ssd/START__BE__BE0101__BE0101A/BefolkningR1860/
	Population density per km^2 (year)	25.4 (SCB, 2019)	https://www.statistikdatabasen.scb.se/pxweb/en/ssd/START__BE__BE0101__BE0101C/BefArealTathetKon/table/tableViewLayout1/
	Official language(s)	Swedish	

Themes	Indicators	Data	Any notes and references
	Main spoken languages Main minority languages	Swedish Five languages are officially recognized as national minority languages, namely Finnish, Meänkieli (Tornedalian Finnish), Yiddish, Romany and Sami.	http://www.efnil.org/documents/conference-publications/dublin-2009/12-Dublin-Ekberg-Mother.pdf
	Population who cannot speak an official language (%)	It is difficult to estimate the number of speakers of the different minority languages since Sweden does not collect official statistics about this. (Finnish is the second largest language in Sweden)	http://www.efnil.org/documents/conference-publications/dublin-2009/12-Dublin-Ekberg-Mother.pdf
	Average household size (number of persons)	Number of persons per household: One or two dwelling buildings: 2.6, Multi dwelling building: 1.9, special housing: 1.3, Other housing: 1.9 (SCB, 2019). 2.2 (UN, 2015)	https://www.scb.se/en/finding-statistics/statistics-by-subject-area/household-finances/income-and-income-distribution/households-housing/ Sweden has the smallest average household size in the OECD. With fewer than 2 people (1.99) per household, it is well below the OECD average of 2.63. https://www.oecd.org/els/family/47710686.pdf
	Average household size (m^2)	The average living space per person in Sweden is 42 square meters (sqm) (SCB, 2019)	https://www.scb.se/en/finding-statistics/statistics-by-subject-area/household-finances/income-and-income-distribution/households-housing/
	Single person household (%)	52 % of all households (Eurostat, 2016)	https://ec.europa.eu/eurostat/en/web/products-eurostat-news/-/ddn-20170905-1
	Living in care home (%)	In 2019, 108,500 people lived in special housing (institutional care) at some time during the	https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/statistik/2020-4-6747.pdf

Themes	Indicators	Data	Any notes and references
		year. 66 percent were women and 34 percent were men	https://www.socialstyrelsen.se/en/statistics-and-data/statistics/ Note: The available LTC services in Sweden are: home help in regular housing (Home care), special housing (Institutional care), day activities, home medical services (Home nursing care), meals services, personal safety alarms, home adaptation, and transportation services for elderly and functionally impaired people.
	Living in poverty (%)	Absolute: 6% Relative: 16.4% (EAPN, 2018)	https://www.eapn.eu/wp-content/uploads/2020/04/EAPN-PW2019-Sweden-EN-EAPN-4306.pdf
	Inequality (Gini index)	28.8 (Worldbank, 2017)	https://data.worldbank.org/indicator/SI.POV.GINI?locations=SE
	Physical inactivity, adults aged 18+ (%):	25 (WHO, 2016)	https://www.who.int/nmh/countries/2018/swe_en.pdf?ua=1
	Urban population (%)	88 (Worldbank, 2019)	https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?view=chart
COVID-19 risk factors in population (for 2019)	Cardiovascular disease (%) (proportional mortality)	35 (WHO, 2018)	https://www.who.int/nmh/countries/2018/swe_en.pdf?ua=1 Note: Cardiovascular disease is the most common cause of death and among the most frequent sources of disability in Sweden
	Chronic respiratory disease (%) (proportional mortality)	26 (WHO, 2018)	
	Cancer (%) (proportional mortality)	6 (WHO, 2018)	
	Incidence of cancer (cases	651 (WHO, 2016)	https://gateway.euro.who.int/en/hfa-explorer/#BdaoBGt5Nm

Themes	Indicators	Data	Any notes and references
	per 100 000 population)		
	Prevalence of diabetes (%)	6.9 (World Health Organization – Diabetes country profiles, 2016) 4.8 (% of population with diabetes ages 20 to 79) (Worldbank, 2019)	https://data.worldbank.org/indicator/SH.STA.DIAB.ZS?locations=SE https://www.who.int/diabetes/country-profiles/swe_en.pdf
	Prevalence of obesity (%)	22 (World Health Organization – Diabetes country profiles, 2016)	World Health Organization – Diabetes country profiles, 2016: https://www.who.int/diabetes/country-profiles/swe_en.pdf Other sources: https://gateway.euro.who.int/en/hfa-explorer/#BdaoBGt5Nm (search obesity) https://gateway.euro.who.int/en/data-stories/state-of-health-2020/ *check data year https://apps.who.int/gho/data/view.main.BMI30Cv https://www.who.int/diabetes/country-profiles/swe_en.pdf
	Probability of dying between age 30 and exact age 70 from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases	Both sexes: 9.1 Male: 10.7 Female: 7.6 (WHO, 2016)	https://apps.who.int/gho/data/view.main.GSWCAH21v
Government / economy	Member of World Health Organization	Yes	https://www.who.int/countries

Themes	Indicators	Data	Any notes and references
/ transport	European Union membership (in 2020)	Member	
	Number of states/regions	21 regions (regioner) and 290 municipalities (kommuner)	
	Autonomy of states/ cantons/ nations	Sweden is a constitutional monarchy with a parliamentary democracy. Sweden is a unitary and decentralised State; the Constitution recognises local self-government in certain areas and delegates certain responsibilities to the local administrations. There are three levels of governance: central, regional (formerly counties), and municipal. The regions represents both a level of self-government and of de-concentrated State authority. Counties and municipalities do not hold legislative powers; nonetheless, they do have executive powers in taxation and administration at their respective levels	For further information: https://portal.cor.europa.eu/divisionpowers/Pages/Sweden-intro.aspx
	GDP per capita (USD)	55'819.9 (Worldbank, 2019)	https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD?locations=SE
	Unemployment level (%)	7.7% (SCB, 2020)	https://www.scb.se/en/finding-statistics/statistics-by-subject-area/labour-market/labour-force-surveys/labour-force-surveys-lfs/

Themes	Indicators	Data	Any notes and references
	Governments	The Government consists of a prime minister and 22 ministers.	
	Legislature		https://eacea.ec.europa.eu/national-policies/eurydice/content/main-executive-and-legislative-bodies-80_en
Social security	Sick pay (weekly pay and length)	If you cannot work as a result of the fact that you are sick, you can normally obtain compensation through the whole sick period. How much you receive in compensation depends on your income. Sick pay from employer: 80% of salary. With a collective agreement it can be higher.	https://ec.europa.eu/social/main.jsp?catId=1130&langId=en&intPageId=4810#:~:text=Sickness%20compensation%20and%20activity%20compensation,you%20have%20lived%20in%20Sweden.
	Sick pay (freelance and self-employed) (weekly pay and length)	Self-employed people can also obtain sickness cash benefit from the Swedish Social Insurance Agency after a waiting period.	
	Critical care beds per 100,000	Acute care hospital beds per 100,000: 235 (WHO, 2014)	https://gateway.euro.who.int/en/hfa-explorer/#UskGqt3opA

1.2 Organization of health system

Sweden has a single-payer, tax-funded, universal health care. Although health care is regulated at the national level, care is administered, planned, financed and provided by the 21 regions. This includes hospital and specialist care. Primary health care is provided in local health care centers. The quality of health care in the country is very high. Though some privatization has taken place, local health care centers and hospitals are overwhelmingly public (Blomqvist and Winblad, 2014; Rönnestad and Oskarsson 2020).

The Swedish health care system is based on the normative idea that health care must be egalitarian, accessible, evidence-based, effective, and tailored to the individual needs of patients. Good accessibility as a component of good quality care is mandated by legislation, specifically the Health and Medical Services Act. However, access to primary care remains a persistent problem. Over the decades, attempts to increase accessibility have included *inter alia* legislative change, assessments and evaluations of waiting times, as well as contractual agreements between the national government and regions, the latter in an effort to increase top-down steering (National Board of Health and Welfare, 2020).

Compared internationally, people in Sweden wait longer for primary health care. Also, they don't have a dedicated primary care physician, which has resulted in comparatively fewer people feeling that the physician they meet is aware of their personal medical history. Notably, Sweden ranks first in the use of digital tools in health care. Additionally, people with complex health problems report low levels of coordination of care, which in turn results in low levels of overall satisfaction with health care provision in the country (Inspektionen för vård och omsorg, 2020; Myndigheten för vård-och omsorgsanalys, 2020; Vårdanalys, 2020).

Sweden ranked third in the EU regarding the share of GDP spent on healthcare (11 per cent in 2015, compared to the EU average 9.9 per cent) and fifth regarding amount per capita (€3,932compared to €2,797) (OECD & European Observatory on Health Systems and Policies, 2017). 84 per cent of the healthcare is financed by taxes, compared to 79 per cent average in the EU. Private insurance makes for a very small but rapidly increasing share of the financing.

According to the Central Intelligence Agency World Factbook (2021), Sweden had 3.98 physicians per 1,000 population in 2016, which puts the country in 22nd place globally. The number is slightly higher in the Eurostat database (4.2 in 2017), compared to the EU average of 3.6 for the same year (OECD & European Observatory on Health Systems and Policies, 2017). What is more, in 2017, Sweden had 11.1 nurses per 1,000 people while the EU average was 8.4. Most physicians (70 per cent) have specialist training and almost 25 percent are working in primary healthcare (OECD & European Observatory on Health Systems and Policies, 2017). In 2019, there were 4.89 adult intensive care beds per 1,000 people, compared to the European average of 11.5 (Engerström, 2019).

1.3 Pandemic Preparedness for Sweden Prior to COVID-19

In this section, we situate the pandemic preparedness in the broader Swedish preparedness regime. Much like any other extraordinary event, the pandemic has triggered contingency management protocols that have affect a variety of sectors beyond public health.

The Swedish crisis management rationale is based on a whole-of-society approach, including private and voluntary organizations. All levels of the public sector must, by law, have competent staff working

with contingency management. Such management consists of a variety of tasks, including mandated risk-and-vulnerability assessments (RSAs). The RSA reporting cycle coincides with election cycles though they are revised annually. Municipalities report to the county boards, and they in turn report to the Swedish Civil Contingencies Agency (MSB). An overview of the main actors, roles, and responsibilities during a health crisis is provided in Table 2.

The architecture of the Swedish crisis preparedness system is based on four basic principles, three of which are mandated by law (Petridou and Sparf 2017). These are: (1) the principle of responsibility, under which entities responsible for an activity during normal times retain this responsibility in crisis or war; (2) the principle of parity, under which authorities retain their structure and location in crisis or war, and (3) the principle of proximity, under which crises should be handled at the lowest possible level of government. There is a fourth principle, that of collaboration, which is not mandated by law. The idea that the public sector must work in an integrated fashion (rather than in silos) characterizes the operations of the Swedish bureaucracy, albeit with mixed results in practice.

The Public Health Agency of Sweden (PHAS) is the national agency responsible for dealing the communicable diseases, including monitoring, production of knowledge, and coordination. It boasts the only Biosafety Level 4 high-containment laboratory in the Nordic countries (The Public Health Agency of Sweden, 2020a). At the national level, the outbreak of contagious diseases is governed by three major plans covering: (1) preparedness (The Public Health Agency of Sweden, 2019a); (2) communication (The Public Health Agency of Sweden, 2019b), and (3) access to medication (The Public Health Agency of Sweden, 2019c). The agency is also tasked with evaluating reports from subnational governments and upon determining that there is danger to public health internationally, it must notify the World Health Organization (WHO) within 24 hours. Finally, PHAS is responsible for keeping relevant agencies and subnational governments informed of measures taken in the event of an outbreak.

Supporting the preparedness of the health care system is a task for The National Board of Health and Welfare [Socialstyrelsen] (NBHW). This includes scenario building as an integral part of risk- and vulnerability analyses conducted by NBHW. As an indication, however, an analysis from 2014, treated such a scenario in perfunctory terms in the sense that it is only mentioned one without further elaboration (National Board of Health and Welfare, 2014). In the event of a public health emergency, NBHW must inform the Government Offices and MSB (National Board for Health and Welfare 2020b). More specifically, NBHW is tasked with the development and maintenance of expertise and dissemination of knowledge regarding disaster medicine and emergency preparedness in order to assist the Swedish health system and social services during extraordinary times. The Government has commissioned NBHW to coordinate and manage the stockpiles of medicine and medical supplies as needed during an extraordinary event. Vaccinations are handles at the regional level.

Finally, the Swedish Civil Contingencies Agency (MSB) is in charge of contingencty management, including major accidents, crises and the consequences of war (The Swedish Civil Contingencies Agency 2020). MSB is rarely operative during emergencies; rather, it has a supporting role vis-à-vis other public agencies or subnational governments. They provide coordination support, advise, and tools so that all relevant stakeholders share a common operating picture (Landgren and Borglund 2016). As an example, MSB sent a team to help with the coordination of the response forest fires in the municipality of Härjedalen in 2018— this did not include firefighters (operational level); rather it consisted of officials coordinating the different stakeholders (strategic/coordinating level).

In terms of previous experience with pandemics, during the period between October 2009 and April 2010, around 5.3 million individuals were vaccinated for H1N1 with Pandremix in Sweden, which is about 60% of the population (Läkemedelsverket, 2020).

Table 2 Actors, roles, and responsibilities in a pandemic. (The Public Health Agency of Sweden, 2019a)

Actor	Roles and responsibilities
The Swedish government and the Government Offices	Creates the conditions to secure access to vaccine and antiviral medication.
	Decides whether influenza should be classified as a danger to public health. As such it falls under the legal obligation to report to the authorities.
	Makes decisions regarding the strategic stockpiles of antiviral medication.
The Public Health Agency of Sweden	Coordinates the pandemic preparedness at the national level.
	Supports the planning of operations at the regional and local levels, which is where operations take place.
	Furnishes and coordinates a vaccination strategy.
	Orders and distributes vaccine and emergency medication.
	Responsible for the national emergency medicine stock.
	Furnishes recommendations on the usage of emergency medication.
	Coordinates communication regarding vaccination.
	The national point of contact.
	Monitors the development and spread of the pandemic.
	Operates and develops laboratory diagnostics for detection, classification, and resistance of pandemic influenza.
	Coordinates the epidemiologic protection in Sweden.
	Call meetings with the national pandemic group.
The National Board of Health and Welfare	The national authority for expertise on healthcare and social services. Coordinates the regional and local crisis preparedness within the jurisdiction health and social services.
	Issues instructions on prescription of medicine and the practical management of medicine.
	Supplies other authorities with data for the evaluation of effects and security of medications.
The Swedish Medical Products Agency	Approves pandemic vaccines.
	Issues recommendations for medical treatments.
	Enables licensing for pandemic vaccine and other necessary drugs. Is responsible for the release of pandemic vaccines in Sweden.
	Follows up the effect and security of emergency medicines, including pandemic vaccines.
	Evaluates the risks and benefits of drugs, including vaccines.
The Swedish Association of Local Authorities and Regions	Offers support to regions and municipalities regarding the procurement of transportation of vaccines.
	Offers support to regions and municipalities regarding coordination measures and communication channels.
The Swedish Civil Contingencies Agency	Supports the national coordination of actors during a pandemic.
	Monitors and assesses a pandemic's impact on vital societal functions and critical infrastructures.

	Supports the central authorities in their identification of vital societal functions and critical infrastructures.
The Swedish Work Environment Authority	Responsible for the regulation of biological agents and infectious agents in the work environment. Has oversight of microbiological risks in the workplace.
County Boards	Responsible for the coordination of the regional crisis preparedness.
	Follow up preparedness at the municipal level.
	Analyze and compiles the regional preparedness status.
	Identify vital societal functions within their territorial jurisdiction.
Regions and other healthcare providers	Provide healthcare.
	Vaccinate people.
	Advise the public.
	Report on occupancy rate, staffing levels, and number of influenza patients in intensive care units.
	Diagnose and report on cases.
	Plan for extended homecare and home-visits.
	Responsible for the purchase and distribution of drugs.
	Responsible for receiving and distributing emergency medicine.
	Report on vaccinations and the use of antiviral medication to the Public health agency.
	Responsible of the administrative handling of the diseased.
Epidemiologist (regionally appointed position)	Collaborates with the regional preparedness officer.
	Responsible for the general regional work on communicable diseases. Plans, organizes, leads and works for efficient coordination and equal protection.
	Responsible for regional monitoring and reporting of the epidemic to regions, the Public health agency and other affected authorities.
	Plans and distributes vaccine and other medicines.
	Produces a regional pandemic plan.
	Takes part in the preparatory work for decisions regarding ordering vaccines.
	Communicates with the local healthcare and the public.
Municipalities	Link regional and local actors
	Take measures to increase the ability to continue vital societal functions and manage extraordinary events.
	Offer support to actors managing vital societal functions within their territorial jurisdiction.
	Mandated to provide a coordinating function during an extraordinary event, initiate the production of a shared operational picture, and assure the coordination of information to the public.

2 Sweden's Response to COVID-19

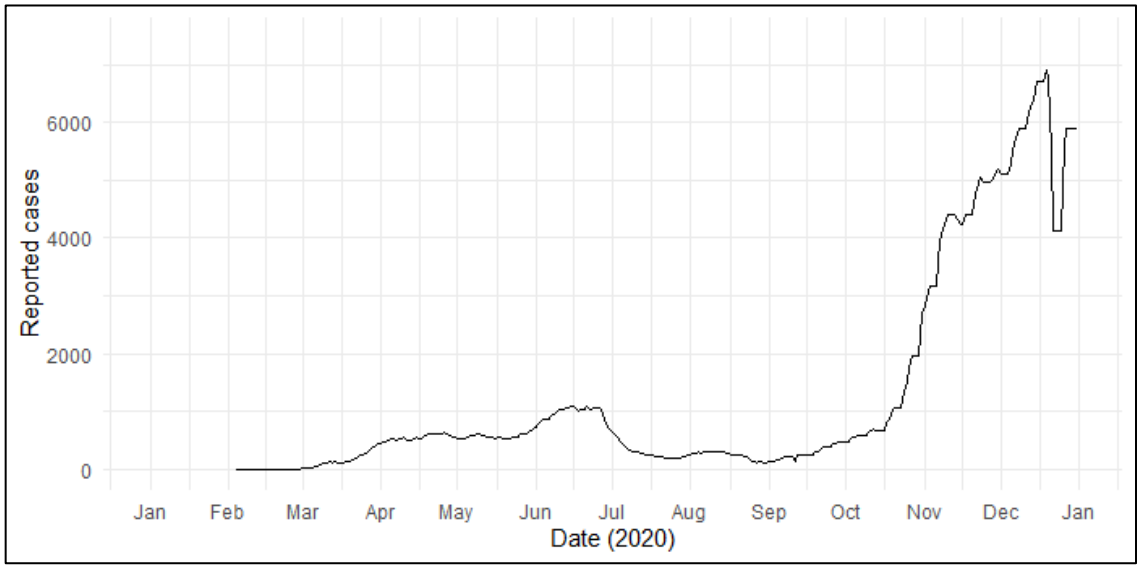
2.1 The First (Known) Case and Progression of COVID-19 in Sweden

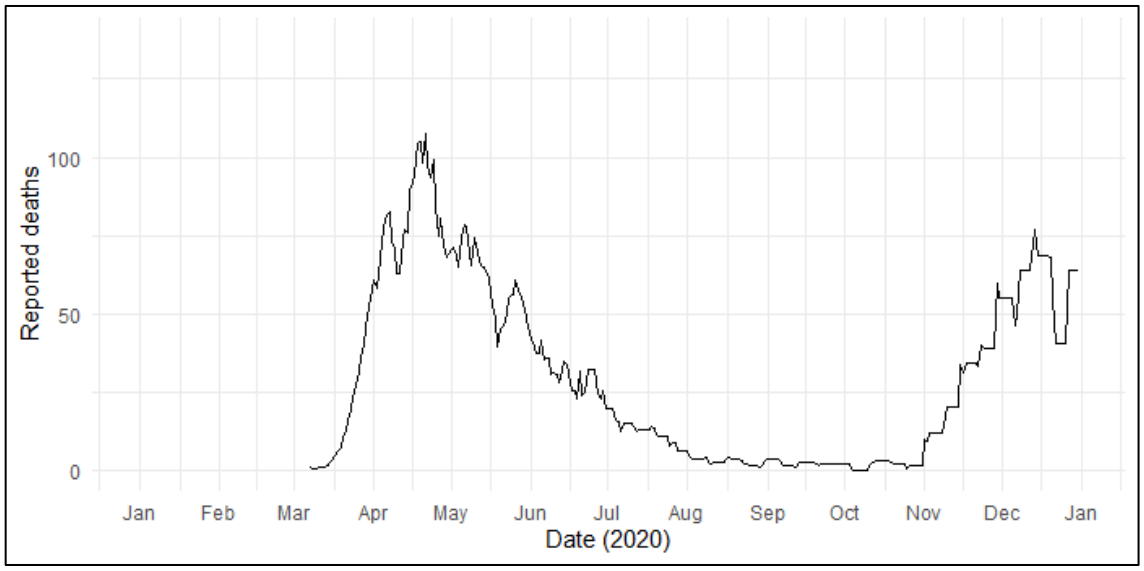
The first confirmed case of COVID-19 in Sweden was reported on January 31, 2020. On the same day, PHAS proposed that COVID-19 be declared as a danger to the public and society (Petridou and Zahariadis, 2021). On December 31, 2020, the number of deaths stood at 9,817 (Public Health Agency of Sweden 2021). During the first wave of the pandemic, the majority of the deaths occurred in nursing homes (Petridou, 2020; Petridou and Zahariadis, 2021). In June 2020, the government set up a commission of inquiry (the Corona Commission) to evaluate the contagion mitigation measures taken by the national government, the public agencies, regions and municipalities. The commission was also tasked to compare the Swedish response internationally. The first findings of the Corona Commission outlined what they saw as the failure of the state to take care of its elderly population (Government Offices of Sweden 2020). Table 3 provides an overview of key statistics concerning the progression of COVID019 cases and deaths throughout 2020.

Table 3 COVID-19 case progression timeline in Sweden. Source: https://covid19.who.int/region/euro/country/se

Event	Date
First known case	1st February 2020
First known death	12th March 2020
Peak of wave 1 (cases) 7-day average	-
Peak of wave 1 (deaths) 7-day average	
Peak of wave 2 (cases) 7-day average	-
Peak of wave 2 (deaths) 7-day average	-
Beginning of third wave	-
Cumulative Recorded Cases (by specimen date)	**Date surpassed**
100	8th March 2020
1,000	17th March 2020
5,000	3rd April 2020
10,000	12th April 2020
25,000	9th May 2020
50,000	14th June 2020
100,000	13th Oct. 2020
200,000	24th Nov. 2020
300,000	10th Dec. 2020
400,000	25th Dec. 2020
500,000	12th Jan. 2021
Cumulative Recorded Deaths	**Date surpassed**
100	27th March 2020
1,000	10th April 2020

3,000	4th May 2020
5,000	12th June 2020
7,000	28th Nov. 2020
9,000	25th Dec. 2020
11,000	22nd Jan. 2021





2.2 Emergency COVID-19 Related Legislation

Even though no emergency pandemic-related legislation passed in 2020, the Swedish government decided on a number of amendments to legislation with a temporary 'COVID-19 law', which aimed at allowing the national government the ability to enact and enforce restrictions in gatherings in public

places, places where recreational or cultural activities take place, commercial spaces, public transportation, and the hiring of spaces for private gatherings (Sveriges Riksdag, 2020). The law itself was voted to take effect on January 10, 2021 and last to September 30, 2021. This therefore limited the extraordinary powers vested, for Swedish standards, in the national government to a period of eight months. Table 4 provides an overview of key laws and regulations relevant to the management of pandemics in Sweden.

Table 4 Laws and regulations relevant to the management of pandemics in Sweden. (The Public Health Agency of Sweden, 2019a).

Name[1]	Description
Laws	
Arbetsmiljölagen (1977:1160) Work environment act	Regulates the obligations for employers and other roles liable to prevent ill-health and accidents at work. The law allows the authorities to close down a workplace if there is heightened contagion risk.
Polislagen (1984:387) The Police act	The general law regulating police-work in Sweden. During a pandemic, the Police have the right to take measures preventing the spread of the contagion.
Lag (1989:225) om ersättning till smittbärare *Compensation to disease carriers' law*	Regulates the right to compensation for disease carriers.
Ordningslag (1993:1617) General public order act	Specific provision for order and safety in public spaces and general gatherings. The law allows the authorities to close down a workplace if there is heightened contagion risk.
Epizootilagen (1999:657) Epizootics act	Regulates the prevention and fight against communicable animal diseases that can spread among animals or from animals to humans.
Zoonoslag (1999:658) Zoonoses act	Regulates the prevention and fight against diseases and infectious agents with animals that can naturally transfer from animals to humans and is not covered by the epizootic law.
Smittskyddslag (2004:168) The communicable diseases act	Regulates the obligations, rights and responsibilities regarding actions to be taken to prevent the spread of communicable diseases. Some examples are tracing, isolation, and quarantine. The law also lists and regulates what diseases are dangerous for society or the general public, what diseases are mandatory to report and trace, and the tracing conditions.
Lag (2006:544) om kommuners och landstings åtgärder inför och vid extraordinära händelser i fredstid och höjd beredskap	The purpose of this law is to decrease the vulnerabilities in municipalities and to keep a high ability to manage crises in peacetime.

Law about the necessary actions for municipalities and regions before and during extraordinary events in peacetime and heightened alert	
Lag (2006:1570) om skydd mot internationella hot mot människors hälsa Law about protection against international threats to public health	Regulates how the international health regulations of WHO are applied. The purpose of the law is to protect public health against international threats.
Hälso- och sjukvårdslag (2017:30) Health and Medical Services Act	Regulates the medical actions to prevent, investigate, and treat diseases and injuries.
Kommunallag (2017:725) Local government act	Regulates the organization and responsibilities of regions and municipalities.
Regulations and ordinances	
Smittskyddsförordningen (2004:255) The communicable diseases ordinance	Complementing ordinance to the communicable diseases law.
Förordning (2006:942) om krisberedskap och höjd beredskap Ordinance on crisis preparedness and heightened alert	Ordinance for the national authorities to work towards a decreased level of societal vulnerability. The rules specify the authorities to be functional during crises and heightened alert in peacetime. Each authority affected by a crisis should take whatever actions necessary to deal with the consequences by the very same.
Förordningen (2007:156) om skydd mot internationella hot mot människors hälsa Ordinance on protection against international threats to public health	Complementing rules about the protection against international threats against public health.
Folkhälsomyndighetens föreskrifter om anmälan av anmälningspliktig sjukdom i vissa fall (HSLF-FS 2015:7), ändrad till och med HSLF-FS 2015:26 The Public Health Agency's regulation about reporting obligations for particular diseases	Specific reporting rules for doctors and responsible persons at microbiological laboratories, and at hospitals.
Folkhälsomyndighetens föreskrifter om skydd mot internationella hot mot människors hälsa (HSLF-FS 2015:8) The Public Health Agency's regulation about the protection against international threats to public health	Rules about quarantine harbors and airports as well as proof of decontamination for ships in international traffic.
Folkhälsomyndighetens föreskrifter om underrättelseskyldighet vid internationella hot mot människors hälsa (HSLF-FS 2015:9)	Obligations for authorities, regions, and municipalities to inform and report about threats against public health.

The Public Health Agency's regulation about reporting obligations about international threats to public health	
Folkhälsomyndighetens föreskrifter om smittspårningspliktiga sjukdomar (HSLF-FS 2015:10) The Public Health Agency's regulations about what diseases are mandatory to trace	Stipulates what diseases are obligatory to trace beyond what is defined in other law.
Förordning (2015:1052) om krisberedskap och bevakningsansvariga myndigheters åtgärder vid höjd beredskap Ordinance on crisis preparedness for monitoring authorities at heightened alert	Rules for crisis preparedness for national authorities. The general purpose is to decrease the societal vulnerability.

2.3 Coordination of Response within Sweden

The Swedish response to the COVID-19 pandemic followed the preparedness architecture outlined in section 1.3 of this report. The public agencies, regions and municipalities followed the plans in place, avoiding the political quagmire of attempts to convene any kind of emergency body, including any kind of task force. Decisions were initiated at the public agency level and were depoliticized. Here we must clarify that decisions regarding legally binding contagion mitigation measures (laws and ordinances) were officially made by Riksdag, as in any advanced western democracy. These measures were proposed by PHAS and to a lesser extent NBHW— in other worlds, national public agencies. The national government followed the recommendations of the technocrats-experts staffing its public agencies. In that respect, the national government took a backseat in the response process.

Such a strategy is, of course, politically expedient during crisis, because it facilitates a distance between the government and any potentially "bad" decisions. Regardless, the decisions underpinning the Swedish response were based on expert knowledge and within the legal framework and political context of the country. The public faces of the response were chief epidemiologist Anders Tegnell and deputy chief epidemiologist Anders Wallensten from PHAS. This is in line with normal policy making and the Swedish political system, which is characterized by the absence of formal ministerial rule when it comes to public agencies (Petridou and Zahariadis, 2021).

Collaboration among public agencies at the national level was evidenced in their joint participation in a number of press conferences from the onset of the pandemic and throughout 2020. The elaborate crisis management architecture described above notwithstanding, the first findings of the Corona Commission suggested that the regions suffered from an initial lack of personal protective equipment (PPE), reported in early February 2020 by NBHW (Government Offices of Sweden of Sweden, 2020a). As a response, the biggest municipalities and regions in Sweden drafted an agreement for the joint procurement of PPE with the aid of the Swedish Association of Local Authorities and Regions. This highlights the autonomy of the municipalities, but also reveals resource differentials among the Swedish municipalities. The Swedish Association of Local Authorities and Regions (SKR) is an organization supporting all regions and municipalities in the country aimed at evening the playing field among local authorities in terms of competence and resources, even in crisis preparedness.

2.4 Timeline of Mitigation Measures

Contagion mitigation measures in Sweden in 2020 fell under the following categories: (1) travel advisories (international as well as national, including a ban on incoming international travelers); (2) general regulations regarding hygiene, staying home when having symptoms, and physical distancing; (3) general regulations about working from home; (4) general recommendations regarding online teaching at high schools and universities; (5) limits on public gatherings; (6) limits on restaurant operations; (7) limits on elder care home visits; (8) general regulations regarding using mass transportation (National Institute for Economic Research, 2020).

Advice to the public [almänna råd] were issued in a series of official documents called regulations [föreskrifter]. This type of official document is issued by public agencies, in this case PHAS. Some of these regulations, mainly at the request of the PHAS, became ordinances voted in the Riksdag. Regulations issued by the PHAS are expected to be followed by the public but don't carry penalties. Ordinances are laws and include provisions for penalties and enforcements. Table 5 provides an overview of contagion mitigation measures.

Table 5: Overview of contagion mitigation measures

Decision date	Regulations	Laws and ordinances
March		
10	Visits to care facilities are banned	
11		Gatherings over 500 people are banned
13	Wash your hands; avoid close contact with people; stay at home when sick	
16	People over 70 years to limit social contacts	
17	High schools and universities are recommended to switch to online instruction	
19	Avoid non-essential domestic travel	
21		New law giving the government ability to close schools—secondary education is under municipal jurisdiction. The national government gained the legal ability to close down schools during extraordinary times, but it did not do so as a result of the pandemic. The decision remained at the discretion of the municipalities.
21	New rules for restaurants and bars. Al guests must sit at a table. Avoid crowding.	

24	Detailed regulations for restaurants and cafes (e.g. buffets are disallowed).	
24	Be careful when doing sports (e.g., exercise outdoors)	
27		Gatherings over 50 people are banned
30	National strategy for increased testing issued	
31	Internal advisory group installed at PHAS	
April		
1	National regulations issued by PHAS	
8	PHAS gets access to mobile (anonymized, aggregated) data for the purpose of understanding mobility patterns from the major telephone operator Telia (Note: no tracking phone app was launched in Sweden due to privacy concerns)	
16	Sport events for people born 2002 and later are allowed	
June		
4	Discontinued advice against non-essential travel	
9	Avoid using public transportation. Keep distance inside sports premises. Do not participate in big social gatherings or events.	
11	Avoid using public transportation when you do not have a reserved numbered seat. Choose another means of transportation.	
17		New law on temporary contagion mitigation measures in restaurants and cafes
July		
1		New law on temporary contagion mitigation measures in restaurants and cafes

22	Guidance (information and instructions) regarding contact tracing	
October		
13	People over 70 years to avoid social contacts, not using public transportation. All people who have (or think they may have) contracted Covid-19 to stay at home and avoid physical contact. PHAS allowing regional authorities to enact stricter regulations than the ones applying nation-wide (several regions enacted stricter regulations in October and November 2020)	
November		
3	Additional and more detailed information campaign aimed at schools	
3	New regulations regarding restaurants, cafes, bars, nightclubs. Max eight people per table. At all events, people need to be seated.	
18		Temporary change to the alcohol law: Prohibition of the serving of alcohol between 22:00 and 11:00.
December		
1	Children to stay at home if someone in the household has Covid-19	
3	Recommendation that high-schools switch to online instruction	
3	Ban on visits in care-homes (qualified)	
4	National plan for vaccination issued	
8	Advice to limit contacts to a small circle during the holidays	
8	More detailed recommendations as part of the of the general recommendations to the public, such as advising against visiting shopping centers.	
21	People arriving from the UK are recommended to stay at home for at least seven days, and do self-test.	

21	Limit on maximum number of people in all public buildings and work places.	
22	Changed regulation for restaurants, maximum four people per table.	Restaurants and bars must stop serving at 20:00
22	Vaccination started	
23	People born prior to 2004 to wear face mask in public transportation during rush hours.	

Contagion mitigation measures in the form of regulations from PHAS are grouped in measures regarding personal responsibility and the responsibility of institutions or organizations, such as schools, businesses, workplaces, sports facilities, etc. (for a list of the updated documents, please see https://www.folkhalsomyndigheten.se/publicerat-material/publikationsarkiv/h/hslf-fs-202012/).

In summary, regulations concerning personal responsibility include: stay home if you are sick, wash your hands thoroughly and often, and keep up-to-date with the information issued by PHAS; limit close contact with new people and try to meet outside; keep physical distance from others and avoid crowded places; work from home to the extent that this is possible; travel in a responsible way in order to prevent the spreading of COVID-19; use face masks in public transportation during rush hours if you are born before 2004, and participate in sports in a responsible way. Businesses and schools must do all they can do mitigate contagion and comply with temporary legislation (ordinances) in place. Places visited by the public must mark the floor so people can maintain physical distance, re-arrange their furniture, offer digital options and have a limit of the maximum number of people allowed in their premises (please see this for an updated summary of measures (in Swedish) https://www.folkhalsomyndigheten.se/globalassets/publicerat-material/foreskrifter/konsoliderade/hslf-fs-2020-12-konsoliderad.pdf. This information may be also found in the official governmental channel of www.krisinformation.se

On January 31, 2020 PHAS proposed that COVID-19 be classified as a danger to the public and the society according to law (The Public Health Agency of Sweden, 2020b). On 11 March 2020, PHAS proposed to the government a ban for gatherings over 500 people, which was later reduced to a maximum of 50 people (The Public Health Agency of Sweden, 2020c; e). Moreover, on 16 March 2020, the agency recommended that people over 70 limit their social contacts while the next day high schools, colleges and universities switched to online teaching (The Public Health Agency of Sweden, 2020f). On 1 April 2020, new general regulations encouraged citizens to take responsibility in containing the virus, including recommendations for stores to take measures to prevent overcrowding in their premises and that sports organizations arrange training outdoors; the encouragement of civil society organizations to postpone annual and other meetings; recommendations for employers to take measures so that employees and visitors are able to physically distance (Petridou and Zahariadis, 2021; The Public Health Agency of Sweden, 2020f).

The Public Health Agency of Sweden issued general regulations advising against non-essential travel first at the end of February 2020 and the beginning of March 2020. On 14 March 2020, the government issued a travel advisory again non-essential international travel— these advisories were updated regularly and tended to relax over the summer. The Ministry of Foreign Affairs updates travel-related information on their website (Government Offices of Sweden, 2021b; National Institute for Economic

Research 2020a). Domestic travel has never been prohibited and guidelines governing it fall under the general regulations, such as avoiding crowds, regular hand washing, and similar preventive measures.

PHAS considers mask wearing as an insufficient protection measure and applicable only when one cannot avoid relatively close contact with others. In December 2020, PHAS issued an updated regulation recommending wearing in public transportation during rush hours. Wearing a mask at work is an issue of each individual employer (The Public Health Agency of Sweden, 2021b).

2.5 Governmental Support to Enable the Population to Adopt Best Measures

The contagion mitigation measures described above necessitated responses in other policy sectors, such as financial, educational, and social policies, including a series of budgetary measures, adjustments to sick-leave and school instruction, to name a few.

Anticipating the economic contraction, the Swedish government adopted a series of financial relief measures. Twelve amendments were approved by Riksdag beyond the two normal occasions (in the fall and spring of the fiscal year) when the annual budget is decided. More specifically, these measures aimed at supporting households and viable businesses and included transfers for furloughs, increased subsidies for sickness periods including doing away with the one-day wait period for sick-leave pay and some subsidies for people in high-risk groups. The Swedish government also addressed the specificities of vulnerable sectors including media and culture, sports, public transportation, railways, airlines and shipping, research and innovation, and higher education (Government Offices of Sweden, 2020c). Measures included a combine tax reduction of 8.49b SEK, 10.61b SEK, and 16.96b SEK in 2021, 2022, and 2023 respectively (Government Offices of Sweden 2020c). NIER, the National Institute for Economic Research [Konjunkturinstitutet] estimates that the measures taken for 2020 as a result of pandemic outbreak amounted to 194b SEK (National Institute for Economic Research, 2020b).

The pandemic had a substantial impact on the Swedish labor market in 2020. In March 2020, 42,000 people were furloughed. This number was double as that during the worst month of the financial crisis of the 1990s. The unemployment rate stood at 9.1 per cent in Q3 of 2020 and is the highest since the deep recession Sweden experienced in the 1990s (National Institute for Economic Research, 2020b). High unemployment did not affect everyone equally. As it has been the case worldwide, albeit to a varying degree, the pandemic exacerbated existing social cleavages, including generational and educational differentials as well immigration status. The unemployment rate among young people not in school and looking for full-time work was 14 per cent, whereas among older people unemployment rose at a lower rate. Unemployment among Swedish citizens and residents born outside the country rose to 20.5 per cent in Q3. It dropped to 15.7 per cent in Q4, partly because that group was overrepresented in the transportation, hospitality, and food services industries. Finally, unemployment among people without a high-school diploma rose to 30 per cent during Q3, up from an average of 20 per cent during the 2010s (National Institute for Economic Research, 2020b). NIER reports that the Swedish economy recovered at a higher rate than expected in Q3 of 2020 with a GDP increase of about 5 per cent (see also Government Offices of Sweden, 2020d). The economic recovery was much slower during Q4 due to the second wave of the pandemic in November of 2020.

The Swedish response in the education sector was premised on providing equal access to educational resources, protecting the short- and long-term mental health of children and ensuring that people were able to go to work by keeping children in school.

The national government has no authority when it comes to secondary education, which is the purview of the local authorities. Sweden is a unitary country, but the extensive welfare state architecture has

resulted in a highly decentralized and autonomous subnational (regional and local) level. This autonomy is conveyed with the idea of 'local self-government', a negotiated concept articulated in the Swedish constitution and formally governed by the Local Government Act of 1991 (SFS 1991:900) in Sweden (Montin, 2016). Local government includes both municipalities and counties/regions, which means that municipalities are not subordinate to the regional level; rather, the regional level acts as an intermediary between the local and the national levels. In practice, it is legally very difficult and politically sensitive for the central government to impinge on the jurisdiction of the country's 290 municipalities. Indicatively, though the Riksdag voted in March 2020 to allow the government to temporarily close preschools, schools, and other educational activities, no centralized shutdown order was issued. The Act allowed for the temporary shutdown of educational activities in some cases, as well as adjusting education for continuity, especially for disadvantaged students and students in vocational programs who need access to special equipment. The government made provisions for care to be available for children and students whose parents were essential workers (Government Offices of Sweden, 2021a).

Preschools and secondary schools remained open throughout 2020 on the premise that students have the right to education (Ministry of Education and Research, 2020a). The government considered that the adverse consequences to children resulting from widespread school closures outweighed any health benefits. Additionally, schools were considered safe spaces for children with precarious home situations. What is more, school closings could result in understaffing in vital societal functions due to parents staying at home to take care of the children or that grandparents would be exposed to the disease when helping out with child support (Ministry of Education and Research, 2020a). Having said this, local outbreaks have forced municipalities to adjust their school schedule. Due to the high autonomy of the local authorities in the country, the latter had the leeway to adapt to local conditions. During 2020, schools alternated seated classes, sent students home in the event of local outbreaks, and generally followed the national level recommendations while taking into account local conditions.

At the national level, in order to mitigate the economic consequences from the virus outbreak the government decided on a range of measures to support individuals' education and training (Ministry of Education and Research, 2020b). Following are some examples of budget measures affecting higher education:

- 120m SEK for extra summer school to help students who did not manage to graduate from secondary school or from high school.
- The budgetary increase for primary schools to meet the challenges posed by the COVID-19 pandemic is estimated to 1b SEK in 2021.
- Funding for higher education was increased by 683m SEK for 2020 and 862m for 2021, including student allowances and loans to increase the student numbers.
- The earnings ceiling for a student to qualify for student benefits was temporarily lifted to allow working extra in the healthcare sector without having the benefits withdrawn. Additionally, student can continue to draw benefits even if they have to interrupt their education due to Corona-related restrictions.
- Admission to university summer courses increased by 6,000 places.
- To support more young people to become eligible for university programs in healthcare and engineering, admission slots were increased by 2,000 4,000 respectively in 2020 and 2021.
- Admission to university increased by 1,300 places in 2020 and 2,600 in 2021, especially for people in need of shifting their skills set and for industries facing a major lack of personnel.
- 50m SEK was allocated to MOOCs and an additional 10m for the Swedish University Computer Network (Sunet).

- 700m SEK were allocated to municipal education centers to provide vocational training for people in need of new skills after losing their jobs due to COVID-19. Another 365m SEK is allocated in 2020 for an increased number of students, classes and programs.
- The vocational training was also expanded by 374m SEK on national level via the Swedish National Agency for Higher Vocational Education.

Adjustments were made to family policy as well, which was already quite robust in Scandinavia in general and Sweden in particular prior to the pandemic. Measures aimed at limiting further spread of the virus, ameliorating the burden on the healthcare system, strengthening economic security, and reducing negative effects to employers by including additional funding and relaxing of eligibility requirements for benefits (Government Offices of Sweden, 2020e). As of January 2021, these family policy measures were set to expire on April 30, 2021.

Parents were able to receive temporary benefits if they had to stay home from work to care for a child when the pre-school or school was closed due to COVID-19 restrictions (Government Offices of Sweden, 2020f). People in risk groups and potentially members of their household were eligible to receive SEK 804 per day for a maximum of 90 days. The purpose of the allowance was to facilitate taking time off from work in order to avoid contagion or to avoid transferring the disease to a person in a risk group (Government Offices of Sweden, 2020g).

The parental benefits for caring for a child who is ill were also adjusted. After seven days of sickness a doctors' certificate is normally required to receive allowance. This was not required during the pandemic and periods of temporary parental leave were not limited in length, though the upper limit of 120 days per year remained in place. Early childhood education and care (ECEC) was open for all children throughout 2020 though children were sent home if they exhibited any signs of sickness or cold (Dufvander and Löfgren, 2020).

From July to December 2020, the housing allowance for eligible beneficiaries was increased by 25 percent (Government Offices of Sweden, 2020h).

3 Risk Communication

3.1 Communication Sources

The primary providers of information about the pandemic on the national level are the Public Health Agency of Sweden, the National Board of Health and Welfare, and the Swedish Civil Contingencies Agency. At the regional and local levels, the regions (healthcare providers) and municipalities have communicated information through their respective communication departments.

3.2 Communication Channels

The Public Health Agency, the National Board of Health and Welfare and the Swedish Civil Contingencies Agency started broadcasting joint press briefings on March 6, 2020. Briefings were then held several times per week throughout 2020 with the three agencies and sometimes with other relevant stakeholders. The recorded briefings are available with caption and sign language interpretation on the Public Health Agency of Sweden's YouTube channel (2020a). A couple of the press briefings were geared towards children.

Health risk information and behavioral recommendations were communicated through the traditional news media, advertisements in papers, magazines, TV, outdoor signs, and online media. Most importantly, the three agencies mentioned above published their information and updates on their respective websites and social media accounts (Facebook, LinkedIn, Twitter, YouTube). The national primary healthcare hotline, 1177 Vårdguiden, provided short informational movies which could be embedded on websites, in video games, in media etc. (www.1177.se). Most of the films contained general advice, and some contained time and context-specific information, such as preparation recommendations for specific holidays.

The website www.krisinformation.se is an essential channel for information on crises and emergencies in general. The platform is run jointly by the Swedish national agencies, and the information is available in Swedish, English, easy-to-read text, and audible formats. The platform has accounts on Facebook and Twitter. The purpose stated on the site is to make it easy for the public to find verified information in the same place while lowering the risk of flawed information and rumors. The idea is also to empower individuals to make informed decisions in a crisis.

On Monday, 14 December 2020, a mass text message was sent to all the country's registered mobile phone numbers. It read as follows: "Information from the public agencies: Follow the new stricter national regulations and general advice to stop the contagion of COVID-19. Read more on the web site krisinformation.se". The message was minimal and intentionally did not include any links. Instead, it prompted the recipients to use the public information platform mentioned above.

3.3 Key National Campaign Messages Adopted

The first and second campaigns started in March 2020 with "Wash your hands—for 30 seconds" and "Stay at home if you are sick". The third campaign was titled "The 2 meters rule. As often as you can". The fourth campaign, "Summer rules", started in June 2020, which included meeting only a few people at a time and some other advice. Two parts followed in the autumn, "For those you love" and "Keep protecting yourself and others". After that came the message "Nobody that you love should end up in an ICU" and a campaign around the more stringent measures imposed. In December and over the

holiday seasons, the campaign was about avoiding crowds. In February 2021, the most recent campaign started illustrating an increased contagion and informing about the vaccination rollout (Vårdgivarguiden 2021).

The most recurrent messages throughout 2020 are listed below, issued by 1177 Vårdgivarguiden, are "5 important rules".

Table 5 The messages in the "5 important rules"-campaign. (Vårdgivarguiden, 2021)

Swedish	English
1. Träffa få. Umgås bara med dina närmaste.	*1. Meet as few people as possible.* Spend time only with those closest to you.
2. Håll avstånd Undvik platser med risk för trängsel.	*2. Keep a safe distance.* Avoid crowded areas. Try to spread out instead.
3. Stanna hemma Har någon i ditt hushåll covid-19? Stanna hemma allihop.	*3. Stay at home* Does anyone in your household have COVID-19? If so, you must all stay at home.
4. Testa dig vid symptom Beställ hemtest kostnadsfritt.	*4. Get tested if you have any symptoms* Order a free home-testing kit.
5. Res säkert Undvik att träffa nya personer på resmålet.	*5. Travel safely* Avoid meeting new people at your destination.

Finally, a wide range of adapted formats and designs were developed. These can be either contextual for a particular region or local area, or particular organizations. For instance, the Swedish Lifeguard Society, an organization promoting swimming ability, lifeguarding, and other water-related safety, issued a poster for Covid-safe behavior on the beach and by pools (Svenska Livräddningssällskapet, 2021). Some regions adapted a campaign, "2 meters are longer than you'd think", with local symbols such as a local cake (Skåne), a local sea monster (Östersund) or holiday-related symbols such as a Christmas tree and candles for Christmas. Other examples include restaurants, cafés and stores, tourist, camping and outdoor facilities, public transportation, boat traffic (MSB, 2021).

4 Summary/Conclusions

The Swedish approach to the pandemic stood out in comparison to EU countries as well as internationally. In contrast to most countries, including its Nordic neighbors, Sweden's measures were mostly voluntary, based on the normative idea of personal responsibility and that the population may be trusted to do the right thing individually and as a collective. Given the legal framework that does not allow for the declaration of state of emergency, the administrative system, including an absence of ministerial rule bestowing extreme autonomy to public agencies and the subnational level of governance, and the high levels of political trust in the country, such a response was not a surprise. The dominant crisis management rationale is that the administration's architecture must be robust enough to handle shocks without resorting to emergency structures.

What is more, Sweden, though unitary, is highly decentralized. In practice, this means that general guidelines and decisions are made at the national level, while regions and municipalities are responsible for implementing them as they see fit and according to their circumstances. This was true for contagion mitigation measures as well as risk communication strategies. In practice, the municipalities and regions follow the national advice and recommendations without notable deviation, but there is flexibility to adapt to local circumstances. For example, some municipalities have reported imposing a visitation ban to elder care facilitites earlier than the national guidelines. Others have reported closing down water parks at an early date to align with neighboring municipalities and avoid the influx of visitors from one municipality to another.

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[i] Large sections of the text are based on material and text gathered and compiled for:

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[ii] Nordic countries include Denmark, Finland, Iceland, Norway, and Sweden.