Lessons Learned from the COVID-19 Pandemic Concerning Occupational Safety and Health

Country Report - Austria

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Contents

Abstract

This report, titled “Lessons Learned from the COVID-19 Pandemic Concerning Occupational Safety and Health”, provides a comprehensive analysis of Austria’s response to the COVID-19 pandemic, with a particular focus on occupational safety and health. The report is structured into several key sections, including an introduction, measures taken, outcomes / consequences, and reflections / implications and lessons learned.

The “Reflections” chapter delves into the critical insights and lessons derived from the pandemic, emphasizing the importance of evidence-based political consulting, effective communication, gender considerations, remote work, appreciation, and workload and resilience.

The establishment of the GECKO commission highlighted the necessity of multidisciplinary and politically independent expert committees for evidence-based policy-making. The report underscores the importance of transparency and the inclusion of occupational safety and health experts in future consulting committees.

The pandemic revealed significant shortcomings in communication strategies, both in general policies and workplace-specific measures. The report advocates for better-prepared communication plans and timely dissemination of information to reduce employee stress and improve preparedness for future crises.

The pandemic exposed the persistent conservative gender roles in Austria, particularly in the division of paid and unpaid work. The report calls for efforts to create equal working conditions for all genders to prevent mental health issues and promote gender equality in the workplace.

The shift to remote work during the pandemic brought both advantages and challenges. The report suggests guidelines to mitigate mental health risks associated with remote work, including clear communication of tasks, regular meetings and ergonomic workplace assessments. It also highlights the need for advanced training in digital communication tools.

The concept of appreciation was frequently mentioned during the pandemic, particularly for essential workers. The report questions the longevity and sincerity of this appreciation and stresses the need for tangible improvements in working conditions and recognition to retain and motivate employees.

The pandemic placed unprecedented workloads on many employees, especially in essential sectors like healthcare. The report emphasizes the need for better working conditions, increased staffing, and measures to enhance employee resilience, such as regular supervision, workshops, and resilience training.

In conclusion, the report provides valuable insights into the implications of the COVID-19 pandemic on occupational safety and health in Austria. It offers recommendations for improving preparedness, communication, gender equality, remote work practices, appreciation, and resilience in the face of future crises.

1. Introduction

The COVID-19 crisis affected many people and many professions throughout Austria, Europe and the whole world. It affected both, our private and professional lives. This crisis was certainly not the first one, but every crisis comes with its own specific problems that need to be dealt with.
This report illustrates/analyses the situation in Austria during the pandemic.
First of all, we will share background information on Austria and its economy to provide you with an overview of the current situation.
After that, a special focus will be placed on measures relating to workplaces and their consequences for occupational safety and health. Topics like remote work and differences concerning measures and consequences between economic sectors, age groups and genders will be addressed.
Finally, we will share some reflections and identify lessons learned during and after the COVID-19 pandemic.

1.1 Background information on Austria and the Austrian economy

In the following paragraphs, we will provide some statistical data in order to give you an overview of the Republic of Austria and its economy.
Austria is one of the smaller European countries with a total population of almost 10 million inhabitants (9,159,993 inhabitants on 1 January 2024) (1).
In 2022, the Austrian population grew by 1.4%: from 8,978,929 inhabitants on 1 January 2022 to 9,104,772 inhabitants on 1 January 2023. This population growth was exclusively due to immigration. In 2022, a total number of 10,998 of people living in Austria became naturalised (naturalisation rate of 0.7%). As of 1 January 2023, a total number of 1,729,820 people in Austria were non-Austrian citizens (19% of all people living in Austria). (2)

This report focuses on occupational safety and health. Therefore, we will now take a closer look at the population of employable age.
At the beginning of 2023, a total of 1,761,561 Austrian inhabitants under the age of 20 were of employable age (19.3%). The working age group of the 20- to 64-year-olds counts 5,562,508 people. With 61.1%, this is the largest group of the population. 1,780,703 inhabitants (19.6%) belong to the age group of retirees (over 65 years of age). (2)
The difference between the average age of Austrian citizens and that of non-Austrian citizens is quite interesting. The average age of people with an Austrian passport is 43.2 years, while that of foreign nationals is 35.9 years. (2)

In 2020, there were 359,284 companies in Austria. The majority of those companies are small and medium-sized. 88% of all enterprises have 0-9 employees (316,513 companies). The more employees, the smaller the total number of companies with such a number of employees, the smallest fraction being those with more than 250 employees. Not even 1% of all companies belong to this group (1,260 companies). (3)
The top five economic sectors (according to the number of companies) in Austria in which companies with 0-9 employees do business are trade/retail (70,372 companies), followed by technical services (69,943 companies), the hospitality industry (39,748 companies), the construction industry (31,938 companies) and the real estate industry (24,370 companies). In the group of businesses with more than 250 employees, the top five economic sectors are production/manufacturing with 496 companies, followed by trade/retail (217 companies), other economic services (139 companies), the construction industry (88 companies) and financial and insurance services (71 companies). (3)

The bigger a company, the bigger the turnover, meaning that the highest turnover was achieved by companies with more than 250 employees (a total of 233.7 million euros). The turnover earned by smaller companies was substantially lower: an average of 35.8 million euros in companies with 50 to 249 employees, an average of 7.5 million euros in companies with 20 to 49 employees, an average of 2.8 million euros in companies with 10 to 19 employees and an average of approx. 0.4 million euros in the smallest businesses with 0 to 9 employees. (3)

1.2 Policymakers in times of the COVID crisis (GECKO)

In Austria, the so-called GECKO commission ("Kommission zur Gesamtstaatlichen COVID-Krisenkoordination") was established in December 2021 and implemented by the Federal Chancellery of the Republic of Austria. The goal of this commission was to support political decision-makers in their decision-making process. The GECKO commission's recommendations were required to be coordinated, evidence-based and intended as a support for the federal government in the political decision-making process. Before the establishment of the GECKO commission, various opinions related to COVID-19 had been communicated to the public and the politicians in power. The GECKO reports were published online and accessible to the public to ensure transparency. (4)
The GECKO commission was composed of experts from various disciplines with a focus on medicine. The other fields included law, communications, ethics, model development and crisis management. Representatives of social partners, the federal states, the Austrian Medical Chamber and the Austrian Chamber of Pharmacists were also part of the commission to ensure a holistic approach. For future commissions, the inclusion of representatives of federal institutions should be put into question, as this could weaken the commission's independence. (4)

1.3 Methods

For this review, a literature research was conducted between January and April 2024.
The research included only publications from Austrian institutions and universities as well as studies that had been conducted in Austria with the Austrian population or studies that were based on data from Austria.
PubMed was the first platform used for the literature research. In addition, we also searched literature from various Austrian institutions, including Austrian universities like the University of Vienna, the Johannes Kepler University Linz, the Danube University Krems, the Vienna University of Economics and Business, the medical universities of Vienna, Graz and Innsbruck. The Austrian Corona Panel Project, a panel study carried out by the University of Vienna, constituted a very important source of data. A lot of data was also reported via the so-called Corona-Blog and some publications.
Moreover, we searched websites of different Austrian ministries, including the Ministry of Health, the Ministry of Labour, the Ministry of Finance, and the Ministry of Defence.
Some studies and data were obtained from other federal institutions including the Federal Chancellery, the Austrian National Bank, the Austrian Economic Chamber and the Austrian Chamber of Labour.
Statistical data (especially for the background information) were found on the website and in publications of Statistics Austria.

2. Measures taken

2.1 Chronology of the pandemic – political measures affecting the general public and workplaces

The first COVID-19 infection in Austria was reported on 25 February 2020. It was the infection of a 24-year-old person from Italy. At the beginning, COVID-19 infections spread especially in Western Austria, which is why the first 14-day quarantine was imposed in five municipalities in this region. On 15 March 2020, the so-called COVID-19 Act was adopted. This act was the basis for the public restrictions that followed in subsequent months and years. This COVID-19 Act was just the first of a series of legislative packages that were adopted during the pandemic. The first nationwide "hard" lockdown was declared only a short time after the adoption of the COVID-19 Act. It started on 16 March 2020. Shops (except for basic supply) as well as public gardens and pools had to close, flight traffic was restricted and public life almost came to a standstill when bars, cafes and restaurants had to close on 17 March 2020. In rapid succession, people in Austria were advised to work from home (if possible) and sports facilities were closed. On 30 March 2020, wearing face masks in supermarkets became compulsory. The first COVID-19 wave in Austria reached its peak on 26 March 2020. (5)

As of the beginning of April, the number of new COVID-19 cases declined. In this period, the economic consequences of the restrictions became apparent, though. At the end of March 2020, the unemployment rate increased by about 4.7% compared to the end of March in the previous year. There were 199,934 new unemployed persons in Austria. Therefore, the measures were eased starting on 14 April 2020. (5)

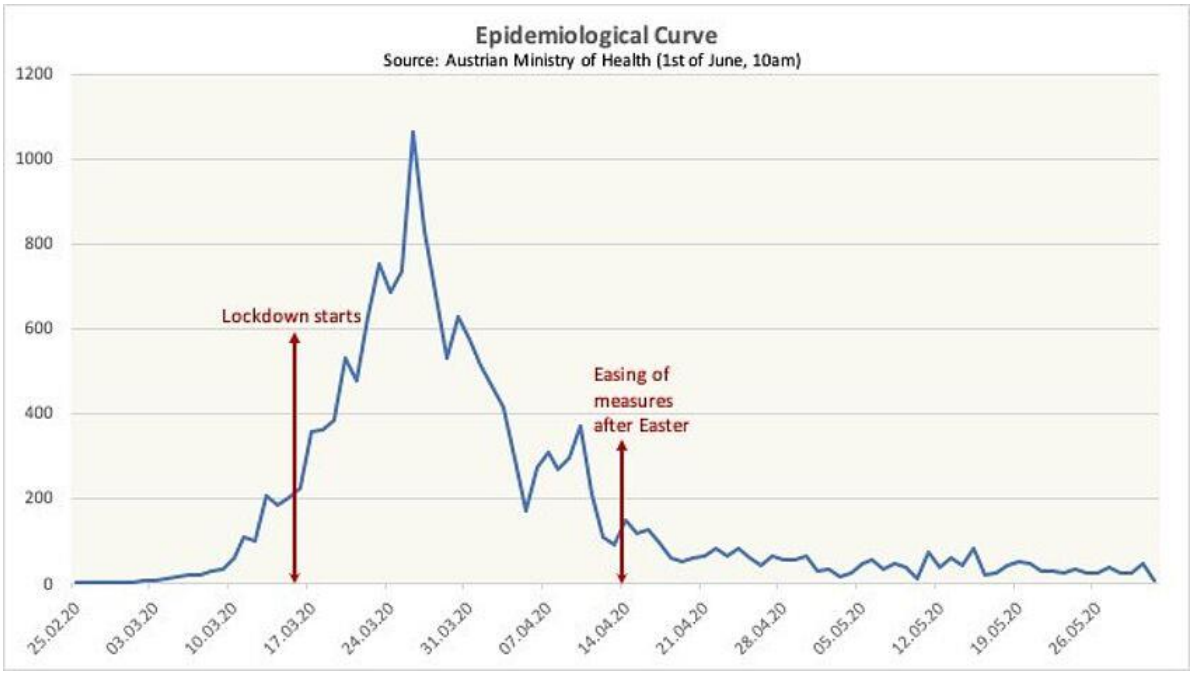

Figure 1 Epidemiological Curve, Source: Austrian Corona Panel Project (5)

An increasing number of measures was suspended, while others still remained in force (including social distancing rules and restrictions on teaching at universities and large gatherings). A detailed overview of the measures taken and the period in which they were in force is shown below: (6)

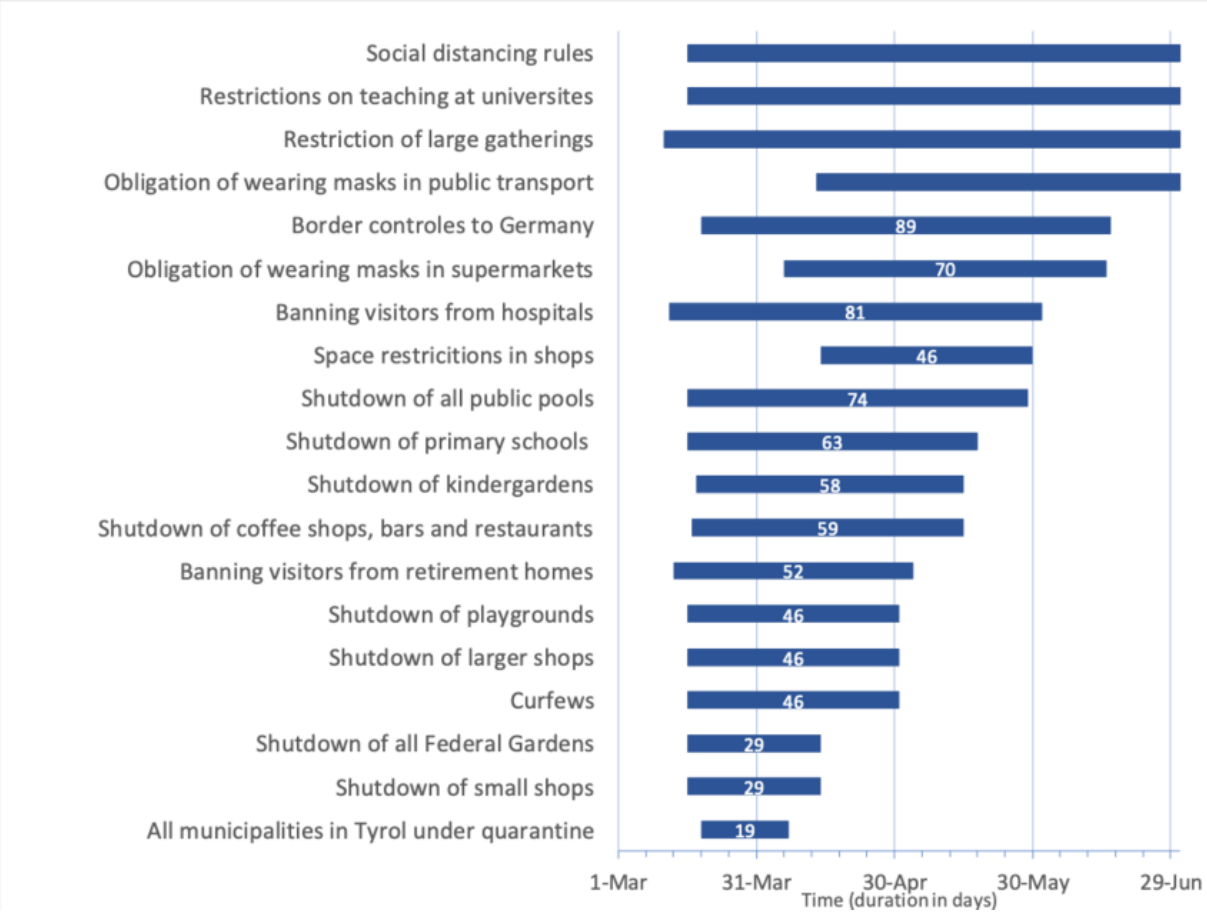

Figure 2 Various measures taken, Source: Austrian Corona Panel Project (6)

At the time when measures were eased or lifted – especially at the end of April and in May 2020 – the health risks associated with the COVID-19 pandemic were kept low, while some economic consequences – like unemployment and short-time work – were improved over time, even though they remained problematic. (6)

In the summer of 2020, there were only regional clusters and the economic situation in Austria stabilised. In autumn 2020, the COVID-19 infection rate in Austria increased again, which is why the measures were re-imposed and COVID-19 testing was stepped up, especially for travellers returning to Austria from other countries. Moreover, just before the beginning of the new school year in September, the so-called “Corona traffic lights” were introduced and implemented. This measure showed a colour-coded risk assessment regarding COVID-19 infections. The Corona traffic lights, however, failed to achieve a steering effect – probably because there was no obligation to implement specific measures depending on the colour the traffic lights showed for a certain region. (7)

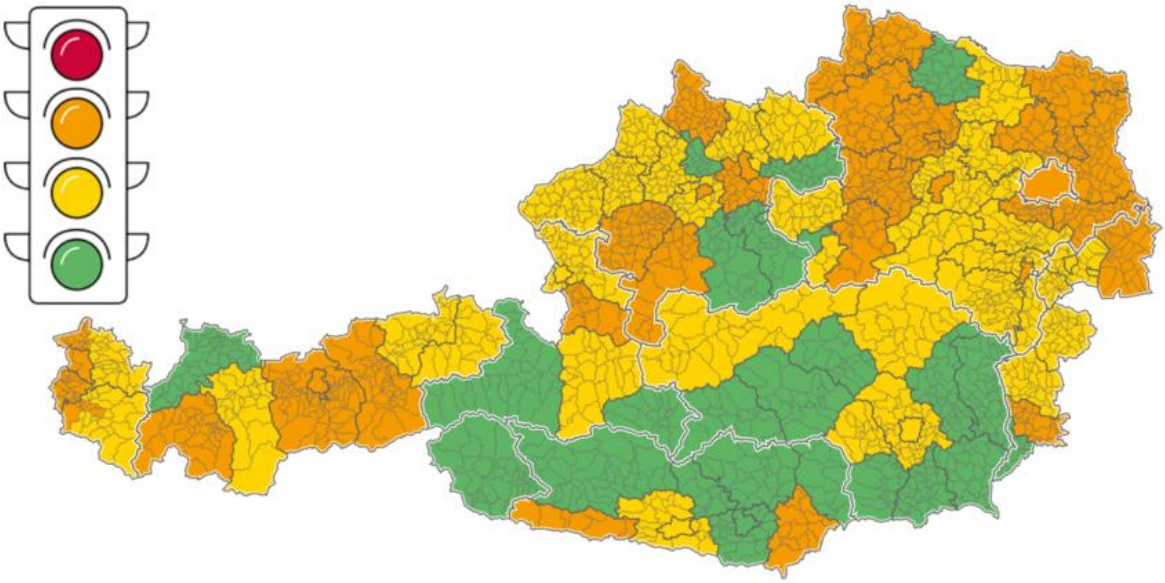

Figure 3 "Corona traffic lights", Source: Austrian Corona Panel Project (6)

The second wave of COVID-19 infections started in autumn 2020 and reached its peak in November of the same year. A lighter version of the spring lockdown was imposed, including a dusk-to-dawn curfew and the temporal closure of different food service and leisure facilities as well as museums. Universities and secondary schools implemented distance learning. At the end of 2020, the government announced that massive nationwide COVID-19 testing would be implemented. The measures of this lockdown, however, were not consistent in all of Austria. Instead, there were rather different lockdowns with varying intensity. One of the measures obliged people to wear an FFP-2 mask in all shops and stores. Contrary to the previous lockdown in spring, the Austrian political parties did not all agree on the lockdown in autumn. Political differences concerning the management of the COVID-19 pandemic started to emerge. The first public demonstration against the political measures imposed by the Austrian government took place at the beginning of 2021. (8)

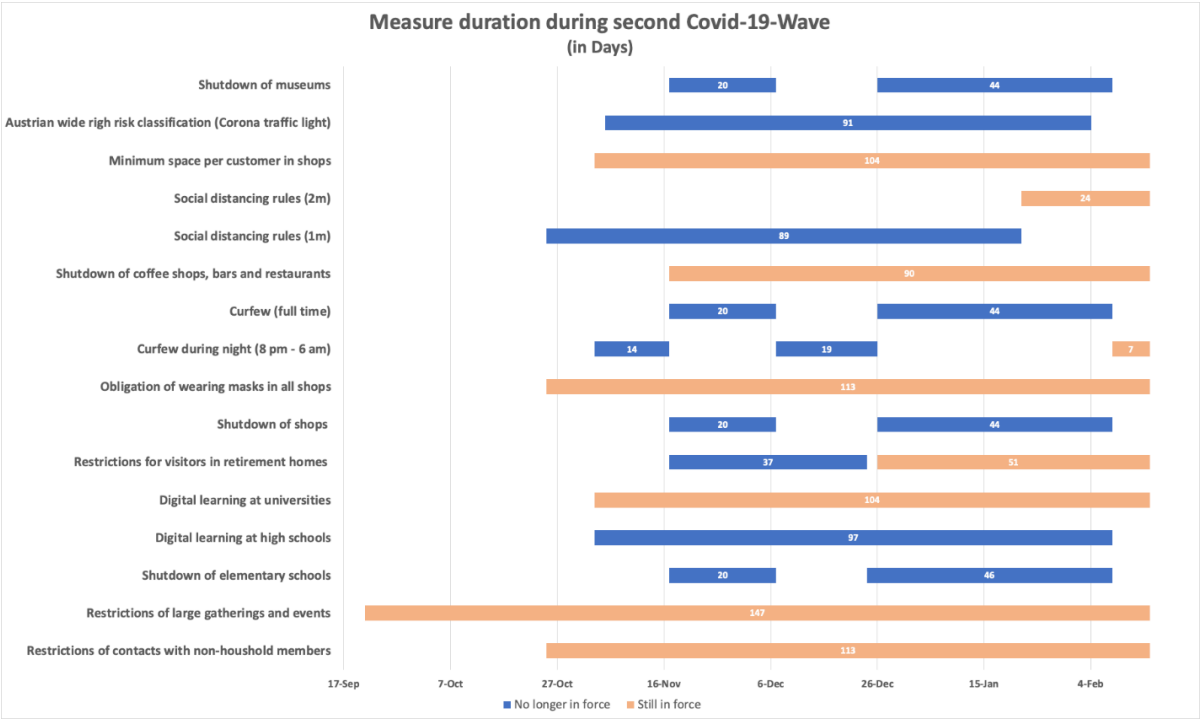

Figure 4 Measures imposed during the second COVID-19 wave, Source: Austrian Corona Panel Project (8)

On 27 December 2020, the first person in Austria received a vaccination for COVID-19 (8).

At the beginning of 2021, a new wave of infections hit Austria. An increasing number of measures was imposed on the level of the federal states or even on a regional level and not nationwide. There were regions where the lockdown remained in place and regions which started to ease the measures. The COVID-19 pandemic policy therefore became even more complex. Incidence rates varied significantly between the different federal states in Austria. After the regional lockdown in the Austria's eastern federal states, the whole country then went into a nationwide partial lockdown. Schools, museums and shops opened again. On 19 May 2021, food service establishments and businesses in the tourism sector in the whole country were allowed to open again. (9)

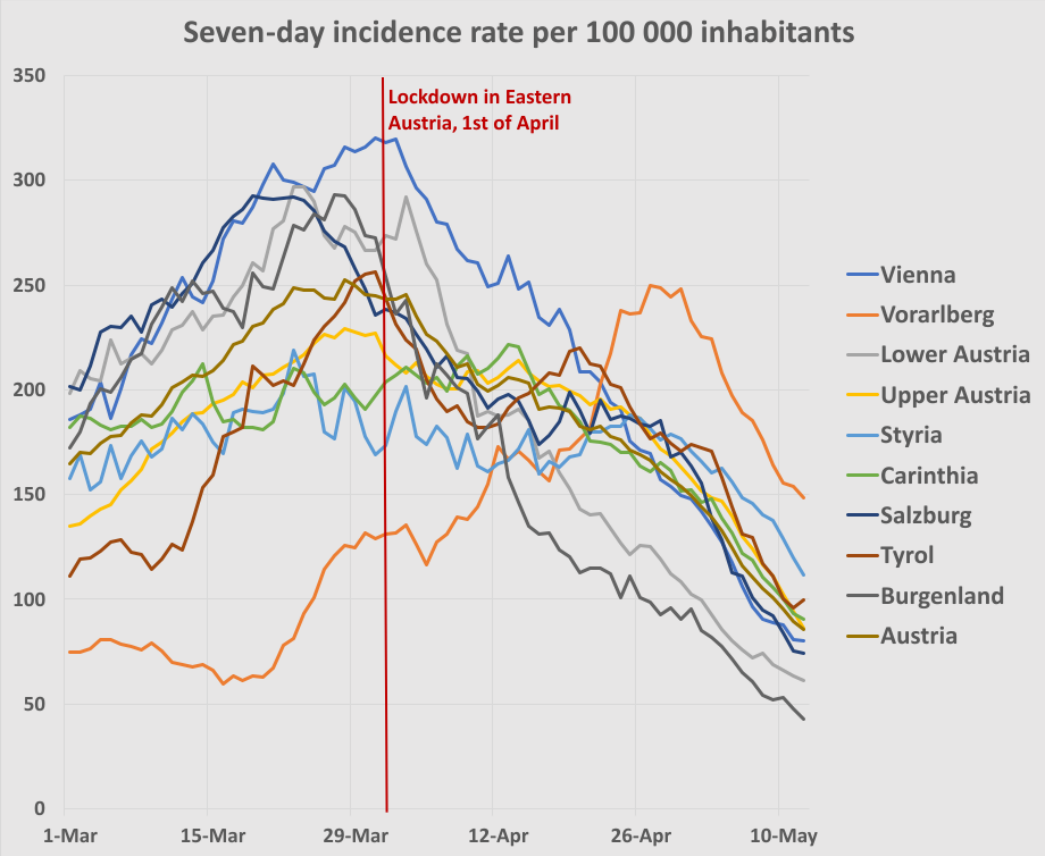

Figure 5 Regional differences regarding seven-day incidence rates, Source: Austrian Corona Panel Project (9)

The importance of testing was emphasised. Free antigen-tests were provided by pharmacies in all of Austria as of 1 March 2021. Additionally, Vienna implemented a free PCR self-testing system as of 26 March 2021. (9)

After the first person in Austria was vaccinated on 27 December 2020 (8), it took three months until March for the COVID-19 vaccination campaign to pick up speed. The first vaccination period was overshadowed by a supply shortage of the available vaccines (9).
The prioritisation of different groups of people at the beginning of the vaccination campaign was a controversial. (9)

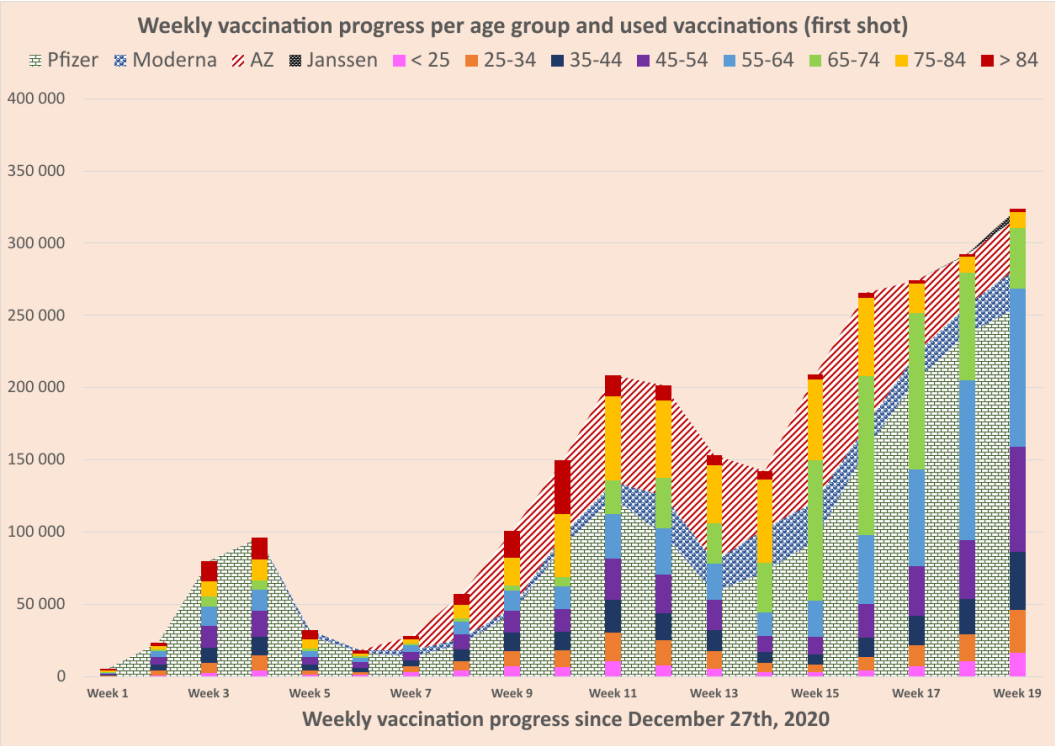

Figure 6 Weekly vaccination progress since 27 December 2020, Source: Austrian Corona Panel Project (9)

Although shops and institutions were open again, certain restrictions still remained in place. As of 19 May 2021, the so called "3 G rule" entered into force (= geimpft / vaccinated, genesen / recovered, getestet / tested) for certain sectors like the hospitality industry, cultural facilities and leisure facilities. The "green passport" was introduced in Austria in June. It could be used as a standardised digital certificate as a proof of a person's epidemiological status ("3 G status"). This "green passport" was recognised throughout the EU as of July 2021. (10)

Before the fourth wave of infections hit Austria, some measures were further eased – for example those applying to night clubs. Restrictions became linked to available capacities in intensive care units. Some restrictions applied only to those people who were not able to provide a "3 G" certificate. In some facilities, a "2 G" rule (geimpft / vaccinated, genesen / recovered) or a "2.5 G" rule (vaccinated, recovered or PCR-tested) applied. On 15 November 2021, another lockdown was imposed for non-vaccinated people. It was, however, soon extended to a general lockdown for everyone in Austria. (10) This lockdown ended at different points in time in the different federal states (11). In an attempt to reduce the lockdown's impact on the economy right before Christmas, the government agreed on a Sunday (19 December 2021) on which shops were allowed to open – something which had not happened since 2008, as shops are normally closed on Sundays in Austria (11).

Because of a new COVID-19 variant – the so-called Omicron variant –, Austria imposed stricter entry regulations. People from countries from the southern part of Africa, for example, were not allowed to enter Austria. (11)

A new coordinative and advisory body was established and presented to the public on 18 December 2021 – the so called "GECKO" commission (GECKO = *gesamtstaatliche COVID-Krisenkoordination*, general COVID crisis coordination commission). This interdisciplinary commission was tasked with scientifically analysing the current pandemic situation and providing recommendations for policy-makers based on on this analysis. (11)

In January 2022, wearing an FFP2 mask became mandatory in highly frequented outdoor areas. Furthermore, companies in the retail sector were for the first time obliged to check their

customers' "2 G" certificates. It became possible for people to test clear after 5 days of quarantine by presenting a negative PCR test result. (11)

On 22 November 2021, the federal government announced that vaccination would become mandatory as of February 2022. This gave rise to a number of public demonstrations throughout the whole country (10).
Security zones were established around hospitals, vaccination centres and test lines to protect the people working there against opponents of COVID-19 measures. The mandatory COVID vaccination law officially came into force at the beginning of February 2022. In March 2023, however, this mandate was suspended for three weeks. (11)
The act was then officially abolished on 7 July 2022 (12).
From that point on, the COVID-19 crisis received less and less public and political attention, especially since the focus was then shifted to other difficult situations: the war in Ukraine, the energy crisis, inflation and the spread of monkey-pox. (12)

2.2 Measures related to tele-work

Remote work was one of the central measures that were taken during the COVID-19 pandemic. It was an important measure, especially at the beginning of the pandemic, in order to reduce the spread of the infection while allowing people to continue to work. Between March 2020 and November 2020, 39% of Austrian employees were working from home for at least 4 weeks. (13)

When comparing the use of telework, Austria ranked 9th among EU countries. Since the COVID-19 pandemic, we have seen a significant increase in telework. Before the crisis, 16.3% of employees used this way of working. Since then, this percentage has increased to 25%. It is important to note that there are significant differences regarding the use of telework (14):

- The use of telework is high in the information and communications sector as well as in the finance and insurance sector, for example.
- Highly qualified persons can use telework more often than low-skilled workers.
- In addition, telework is used more frequently at the management level.
- A high percentage of telework can be found among employees with children under the age of 10 years. This had already been true before the COVID-19 pandemic. This may indicate that telework makes it easier to reconcile work and private life.
- Further factors include regional differences (Vienna has the highest percentage of persons working from home), the distance between an employee's home and workplace, and the size of the firm (larger firms have a higher usage of telework than smaller ones).
- It is important to point out that gender does not play a significant role in this context. (14)

Sociodemographic factors and the different types of business sectors play an important role when it comes to the practicability and usage of telework. Remote work is very low in the hospitality sector, in the manufacturing sector, in retail, in the health care system, in the warehousing industry and in the construction sector. (15)

2.2.1 Legal background and adjustments concerning remote work

Because of the increasing use of telework, the respective legal framework had to be adapted. There were questions concerning liabilities, tax deductibility and responsibilities regarding ergonomic workplace design. Therefore, legal provisions were amended by a package of measures relating to telework ("*Homeoffice-Maßnahmenpaket")* establishing the legal basis for working from home. A tax package regulated tax deductibility, for example for purchasing ergonomic workplace facilities. (14)

Section 2h of the Austrian Employment Contract Law Adaptation Act (AVRAG, "*Arbeitsvertragsrechts-Anpassungsgesetz*") defines telework as employees regularly working from home. Employers and employees have to agree on telework in writing. (16)

According to section 2h AVRAG, the employer has to provide the digital infrastructure required for regular work from home. It is, however, also possible for the employer to bear the reasonable and necessary costs for the digital work equipment provided by the employee for the performance of their work. Costs can also be reimbursed on a flatrate basis. (16)

Section 4 of the Austrian Labour Inspection Act (ArbIG, "*Arbeitsinspektionsgesetz*") prohibits that labour inspectors, who are responsible for advice and control, enter private apartments and houses (17).
Nevertheless, employers are required to regularly evaluate their employees' workplaces by sections 4 and 5 of the Austrian Health and Safety Act (ASchG, "*ArbeitnehmerInnenschutzgesetz*") (18).

Another question concerned statutory accident insurance. According to section 175 of the Austrian General Social Insurance Act (ASVG, "*Allgemeines Sozialversicherungsgesetz*") and section 90 of the Austrian Act on Sickness and Accident Insurance for Civil Servants (B-KUVG, "*Beamten-Kranken- und Unfallversicherungsgesetz*"), the apartment of an insured person working from home is defined as a workplace. Therefore, an accident that happens at home during a person's working hours is defined as a work accident. (19, 20)

2.2.2 Distance schooling

The COVID-19 crisis was an immense challenge for teachers. During the first lockdown in March 2020, many schools used digital media for distance schooling. Until then, digital education had been implemented quite slowly. The first lockdown in Austria changed this abruptly in all of Austria. It is clear that this came as an enormous challenge for everyone involved - students, parents and teachers. (21)
The communication between teachers and students had to almost instantly work via digital media. The most common communication tools were emails and platforms like MS Teams. Other communication forms via mobile phones, websites and social media were less important. In the course of time, digital platforms gained more importance. This development suggests that digital communication became more professional and uniform. (21)
The most important media used during home schooling included schoolbooks followed by videos and handouts (worksheets). Video conferences were less important. However, over time, video conferences gained more and more importance. Nevertheless, schoolbooks and worksheets continued to be used very often. This means that distance schooling is not to the same as e-learning. (21)

2.2.3 Reasons for not using remote work

In some areas of work, telework was not used. The main reason was that certain professions are simply not compatible with working from home. There are hardly any other reasons. Reasons like "no interest in telework" or "negative attitude of managers towards telework" are not very important. (13)

2.3 Measures taken for those who continued to work at their workplace

The following chapter focuses on certain jobs that can be referred to as “essential”.
Essential sectors/jobs include the following (22):

- Retail
- Cleaning staff
- Teachers (including kindergarten teachers)
- Transport
- Medical staff: nurses, medical assistants, medical doctors
- Public safety, police, fire fighters
- Bank employees

2.3.1 Health care workers

Medical staff like nurses, medical assistants or medical doctors are part of an essential sector. (22)
The obligation to wear personal protective equipment, which became a lot more important during the COVID-19 pandemic than it had been before, had a great influence on the work of health care workers. (23)
In addition, new tasks became part of their jobs, for instance carrying out COVID tests on patients. (23)

General practitioners in Austria took different measures during the crisis that allowed them to continue working. (24)
Organizational measures included a trend towards working by appointment only. Physical contact was reduced while the number of remote consultations (for instance by telephone or other digital means) increased. COVID testing of the staff played an important role. Some staff members started to work from home (especially at the beginning of the crisis) and GPs had to purchase the necessary equipment (laptops, mobile phones, etc.). (24)
Technical measures included physical barriers, for example to separate waiting areas and treatment areas, as well as transparent screens to protect assistants at the reception. Separate entrances to different areas were used or installed. It was no longer unusual to talk to patients through windows. An increasing number of doctors’ offices becameequipped with disinfectant dispersers. A good communication network among doctors was established using digital means like communication platforms such as WhatsApp or Facebook. (24)
As far as personal protective measures are concerned wearing (FFP 2) masks was of course a particularly important measure. Sometimes doctors used full-body protection in medical practices. Disinfection and keeping physical distance from one another certainly constituted other important measures. (24)

2.3.2 Retail

Without any doubt, parts of the retail sector should be classified as essential. A huge number of people in Austria work in this sector. According to Statistik Austria, 709,418 persons were employed or self-employed in the retail sector in 2021. (25)
Depending on whether a store was regarded as essential or not, it was affected by different measures during the lockdowns. Essential stores like grocery stores stayed open, while others were forced to stay closed by national policies. In the stores that stayed open during and between the lockdowns some mitigation measures were taken to slow down the spread of the virus. Hygienic measures like surface disinfection were implemented. The companies had to provide personal protective equipment like the required face masks and FFP 2 masks (depending

on the respectively applicable measures). This played an important role. Physical distancing was propagated in all of Austria and was considered particularly important in the essential sectors. Furthermore, technical measures like barriers made of acrylic glass (Plexiglas) were installed in some areas of the shops (e.g. at the cash register). (26)
Apart from that, stores had to take organisational measures, including the organisation of work. Shops and stores formed teams which worked separately from each other. Those teams had no or only little contact with one another to avoid any potential virus propagation. (26)
Even though the national policies were of course binding for everyone, the practical approach to implementing the mitigation measures varied in the different shops and stores. It was often the teams in the shops who were responsible for the implementation of measures like physical distancing, mask-wearing and further measures to protect high-risk-groups. This might be considered problematic, especially since risk perception varies quite strongly among different people. (26)

2.3.3 Cleaning staff

During the COVID-19 pandemic, cleaning staff received more attention than before. Until then the work of cleaning staff had often gone unnoticed or had remained unrecognised, partly because of their working hours before or after the regular workdays of other employees. Compared to the other essential workers mentioned in this report, cleaning staff earns the by far lowest wages in Austria with an annual income of € 12,900 (before taxes). (27)
During the COVID-19 crisis, cleaning service companies put their employees on short-time work. At the same time, however, some companies needed more staff as cleaning became more important and was publicly emphasised (e.g. in public transport systems). (27)
The increasing use of disinfection agents at workplaces to keep them hygienically clean particularly affected this sector. In addition, wearing personal protective equipment, like facial masks and protective gloves, became even more important than before the crisis. (27)

3. Outcomes / Consequences

3.1 Health situation during the pandemic

3.1.1 Verified infections

The first case of a COVID-19 infection in Austria was discovered in late February 2020 (28). By the end of June 2022, over 4 million people (4,060,792) in Austria had been infected with the coronavirus (28). Austria had a total population of 9,104,772 on 1 January 2023. (29) This means that almost half of the nation's population got infected between February 2020 and June 2022 (43% based on the population on 1 July 2022) (28).
Moreover, many Austrians were also reinfected. 390,032 people contracted COVID-19 at least twice. 9,555 people were infected three times and 93 people were infected four times. (28)
The percentage of infected people varied in different regions. The region with the lowest percentage is Jungholz in Tyrol with 23.2%, while the highest percentage is found in Kirnberg in Lower Austria with 62.8%. The situation in Ischgl, Tyrol, is quite interesting. This county was struck quite hard at the beginning of the crisis, but only showed 35.1% of verified infections on 1 July 2022. (28)
In addition to regional differences, there are also sociodemographic variations. The highest percentage of infected people was found among the school age population. More than two-thirds of the nine- to twelve-year-olds were infected at least once. Even about 70% of the eleven-year-olds had a verified COVID-19 infection. The percentage of verified infections among older students (15 to 18 years of age) is slightly lower with 62%. This could be due to the adjustment to distance learning in this age group during the later stages of the pandemic. (28)
Among all population groups, pupils and students showed the highest percentage of infections (65.3%). Persons in employment showed a rate of 51.6% of people with a verified infection. Low infection rates were found among retirees (25%) and unemployed people (26.9%). At this point, however, it must be added that students and employees were PCR tested on a regular basis. Therefore, infections were detected more easily and officially verified. (28)
There are also differences among different family constellations. The highest percentage of verified infections was seen among partners with children in the same household (54.4%) followed by partners without children (35.9%). Single households showed the lowest infection rates (31%). (28)

3.1.2 Life expectancy

The COVID-19 crisis also affected life expectancy. During the last five decades life expectancy had increased on average by about 2.5 years for men and 2.07 years for women per decade. The COVID-19 pandemic put an abrupt end to this trend. Between 2019 and 2020, life expectancy decreased by about 0.6 years for men and by about 0.47 years for women. The new life expectancy for people born in 2021 is 78.8 years for boys and 83.76 years for girls. (28)

3.2 Consequences for different business sectors

In many of the essential jobs people had been faced with challenging working conditions even before the COVID-19 pandemic. These conditions became even worse during the crisis. (22)

3.2.1 Health care workers

Between the start of the COVID-19 pandemic and the third infection wave, the working conditions of most health care workers deteriorated. Many workers in this sector claimed that they were experiencing a greater workload and more challenges at work. This was due to different circumstances, including an increasing shortage of staff, more organisational requirements and the constant wearing of personal protective equipment. A high percentage of health care workers reported that they felt psychologically distressed, showing symptoms / feelings such as fear, worries, sleeping disorders... (23)
In this context it should be stated that laboratory workers were also under high pressure because of an increased workload and wearing personnel protective equipment for extended periods of time – sometimes for more than 8 hours a day (30).
Due to staff shortages, staff was also redeployed to other facilities. This resulted in additional stress, especially when nurses were sent to work at COVID-19 wards without a training in managing infectious diseases. (31)
Due to a lack of prevention and control guidelines (concerning personal protective equipment, infection control strategies for patient transfers, medical procedures producing aerosols...), the units that treated COVID-19 patients were often left to make their own decisions. This lack of preparatory measures resulted in troubles for health care workers. (31)
In many cases, supervision was not available – a situation that was severely criticised by health care workers, even those that did not need supervision themselves. (31)
Moreover, many workers in this sector also felt physically strained. They mentioned conditions like exhaustion and intensified or additional pain, for example. (23)
While 64% stated that they had thought about quitting their job and looking for a job in an entirely different sector, 45% even stated that they had continuously thought about doing so. These statements and figures are alarming in the face of Austria's significant shortage of nursing staff.(23)

General practitioners claimed that there had been an increase in patient contacts at the beginning of the pandemic. In many cases, the architectural situation in doctors' offices did not allow for complying with current requirements. Therefore, general practitioners had to acquire additional space if possible. Sometimes patients had to be examined in cars, or general practitioners used garages and tents for their work. (24)
The previously mentioned trend towards the use of an appointment system in medical practices resulted in additional administrative work. (24)
Especially at the beginning of the pandemic, there was a shortage of the required personal protective equipment, especially of disinfectants, masks and protective gloves . (24)
Health care workers stated that the beginning of the pandemic was the most challenging time due to a lack of information and guidance. Communication was insufficient. General practitioners complained about the lack of a contingency plan as well as incorrect or inappropriate recommendations for treating patients outside their offices, for instance regarding masks with valves or the closing of their offices. By contrary, GPs reported that the communication among GPs had worked well. They exchanged information about strategies for coping with the challenges they faced. This kind of self-help was mentioned as an advantage. They still stated that they wished for a more structured sharing of information. They also mentioned a wish for more intense communication with hospitals and nursing homes. GPs also identified a functioning team in their offices as essential for resilience. (24)
All in all, the pandemic was characterised by many uncertainties in many areas with a number of immediate consequences. (24)

3.2.2 Retail

The situation for employees in the retail sector during the lockdowns varied greatly depending on whether a company had been labelled as essential or not. Employees of companies whose shops stayed open during the lockdowns described work as stressful and overburdening, especially the days before the first lockdown. Time pressure and stress at work were the consequences of an increasing workload. Nevertheless, there has not been a relevant increase of working hours and customers rushed to the stores only in the beginning. This rush quickly subsided. Due to the efforts to control the pandemic situation, employees in stores were faced with a higher burden over an extended period of time. The hygiene measures and additional challenges like intensified digitalisation with online shopping as a direct consequence resulted in increasing time pressure and stress at work. Even though the measures installed to mitigate the spread of the virus were an additional burden, the positive aspects outweighed the negative ones in the eyes of the employees. (26)

The pandemic and the measures taken to mitigate the spread of the virus also resulted in a shortage of staff. Reasons included the applicable national and international travel restrictions as well as sickness (especially of course COVID-19 infections) and employees in COVID-19 quarantine. Home-schooling constituted another aggravating factor. Employees had to stay at home to care for their children. (26)

Moreover, employees in the retail sector also described to have suffered from a psychological burden. This was partly due to the control function that the staff of shops and stores had to exercise. On the one hand, the staff had to check if the customers were wearing masks and complying with the applicable (constantly changing) mitigation policies like physical distancing. On the other hand, this control function is not compatible with the polite manners that employees in the retail sector are used to. Furthermore, there were no effective ways for employees to intervene if someone did not obey the currently applicable measures. That caused distress and constituted a psychological burden. Over the time, however, the control function was outsourced to security companies. A measure that was widely welcomed by the employees. (26)

3.2.3 Cleaning staff

Because of the COVID-19 pandemic cleaning staff has received more attention. It became more important to our society that workplaces are kept hygienically clean and safe, especially in places like hospitals or medical practices. (27)

Many companies put their employees on short-time work during the pandemic. Some employees lost their jobs while other companies needed more workers, trying to put a focus on cleaning and demonstrate their cleaning efforts (for example in public transportat systems). (27)

As a consequence, there were some fears among the cleaning staff, like the fear of infection and of new fields of work. Moreover, they were faced with a sudden change in workplaces, working hours and duties. This led to greater visibility. On the positive side, the appreciation of this profession increased during the pandemic. The important question is: will this appreciation last and will it have an impact on the wages earned in this field? (27)

Of course, the risk of infection was greater than in other professions, since the work had to be done on site and could not be performed at home. Additionally, the workers frequently had to use public transport, which was another risk factor for infection. (27)

Because of the more frequent use of disinfection agents, workers had a more frequent contact to chemicals, potentially hazardous chemicals with the ensuing risks for skin and respiratory system. (27)

The personal protective equipment needed was not always available at the time, and when it was available, it was sometimes described as an additional burden (for example permanently wearing face masks). Also, there were often discussions about who was responsible for providing personal protective equipment, as the legal situation was not quite clear to everyone when it came to outsourced work. (27)

3.3 Consequences of telework

Telework gained more and more importance over time, especially due to digitalisation, which has an enormous impact on work in general and has increased work flexibility. Because of the COVID-19 pandemic and the lockdowns in Austria, telework was extended. In general, the share of employees who worked at least partly from home increased significantly. (14)
In many companies, the way of working, especially regarding communication, has changed. Cooperation between employees was still efficient despite reduced physical contact. The advantages of working from home were recognised. These advantages include the saving of costs and time as employees do not have to travel to and from work, more flexible working hours, better reconcilability of family and work. (14)
During the first 50 days of COVID-19 mitigation measures in Austria, the quality of life of people working from home improved more frequently than for those who could not. This statement was confirmed regardless of age and level of education. (32)
Nevertheless, it should be pointed out that the presence of children in a household resulted in a less positive connotation of remote work in the affected group. (33)

3.3.1 Differences between employers and employees

When it comes to the assessment of the favourable and unfavourable effects of remote work, there is quite a significant difference between employers and employees. (13)
Employees especially reported that they were more productive when working from home. They also mentioned a better organisation of work, the acquisition of new knowledge and the visibility of working results as positive effects. On the other hand, employees complain especially about the lack of social interaction and other social factors related to work as well as a more complicated onboarding of new employees. More people claim to receive less support in solving problems when working from home. Furthermore, team spirit and work atmosphere are often claimed to have deteriorated due to telework. Many advantages of remote work that are mentioned by employees do not concern work itself, but rather work in connection with other aspects of daily life like household, partnership, health and leisure time. Employees appreciate the better work-life balance and that they do not need to travel to or from work. (13)
Employers tend to see fewer positive effects of telework. Nevertheless, employers also mention the acquisition of new knowledge and greater productivity as positive effects. However, the majority of employers consider the effects of home office rather negative. A vast majority of employers thinks that telework has a positive influence on other aspects of life like health, work-life balance and stress, though. (13)

3.3.2 Lack of work place evaluation

Even though employers are obliged by law to evaluate their employees' workplaces at home, only a small minority (6.2%) of employees state that their workplaces at home have indeed been evaluated. This percentage is higher at management level (22%). This suggests that employees frequently have to organise and arrange their workplaces on their own to make sure that they are ergonomic. (14)

3.3.3 Desk sharing

As a consequence of the more frequent use of telework, desk-sharing has become more wide-spread in companies. Desk-sharing is intended to solve some problems regarding space and costs for companies. (14)

3.3.4 Working sick and presenteeism

The fact that there is a potential risk that people work sick when they work from home should also be discussed. It constitutes a risk for people's health if they work from home even though they feel too sick to go to the office. (14)
However, this topic is quite complex and it is difficult to answer the question how home-based telework and presenteeism are connected. It is suggested that in the time before the COVID crisis, telework was often only used to work even more and not for just shifting regular working hours from the office to another place like an employee's home. Recent study results suggest that home-based telework and presenteeism are not per se directly connected. It is more likely that indirect work control causes employees to increase their efforts and therefore might cause them to work more, work overtime and even work sick. The type of telework which is associated with indirect work control more frequently results in work intensification and sickness presenteeism. (34)

3.3.5 Distance schooling - consequences for teaching staff

Distance schooling meant an enormous challenge for everyone involved – students, parents and teachers. An important question concerned the framework in which distance schooling had to take place. This framework was essential for the resources and also determined the challenges that the teaching staff had to face when schools were shut. (21)
Because of the abrupt closing of schools, there was only little time for the teaching staff to prepare for this new situation. The general communication could have been better. Only 40.6% of the teachers state to have been informed appropriately before the first lockdown. They stated, however, that communication and information concerning the opening of schools had been better. Compared to the first lockdown, the availability of information improved during the second lockdown – but only concerning technical details, not as far as didactic procedures were concerned. When the second lockdown was imposed, teachers felt better prepared for the COVID classes, both professionally and methodically. (21)
Teachers identified the constantly changing national policies as a stress factor. Constantly changing frameworks made it more difficult to plan and prepare for classes. (35)
Another challenge teachers had to face during distance schooling was the presence of students. 11% of students were not reachable for their teachers during the first lockdown. Therefore, the communication between students and teachers was complicated in some respects. Student-teacher communication improved over time, though. (21)

All these factors made things more difficult for the teaching staff. More than half of the teachers claim that their wellbeing suffered during the first lockdown. This situation even worsened during the second lockdown. (21)
The work effort increased significantly compared to "normal" schoolwork. An enormous personal effort (time and energy) of the teaching staff was necessary to tackle the challenges of home schooling. (21, 35)
This increasing workload was partly due to administrative duties. Furthermore, the adaptation of materials for digital use meant a lot of extra work – in addition to the more challenging communication with students. Overall, planning and preparing digital lessons was more time consuming than preparing for regular lessons. (35)
Teachers felt that their pedagogical/didactical methods were strongly limited, even though there was a great range of methods and approaches. This is partly due to the fact that teachers received only little guidance at the beginning of the COVID-19 crisis. (21)

On the positive side, teachers claim to have had a more intense individual exchange with students as well as more options to organise and design their own lessons. Furthermore, they also underlined the greater flexibility in comparison to regular school lessons. (21)

Moreover, a majority of the teachers state that they have made great progress in using digital tools for teaching. About a third of teachers claim to have improved personally when it comes to their organisation and time-management skills. Furthermore, many teachers indicate that they have learned to lower their own demands and make the best of a given situation. (35)
To conclude, it can be stated that the COVID-19 crisis has changed many aspects of schooling. Digital tools have become more important. The pandemic seems to have had a boosting effect on digitalisation in schools. (21)

3.3.6 Consequences of the lockdowns regarding work-related accidents

During the first two lockdowns in Austria that were imposed because of the COVID-19 pandemic, there was a significant reduction in work-related accidents. This means that € 327,000,000 were saved. This sum, of course, does not offset the other costs caused by the pandemic . (36)

3.4 Consequences for different genders

3.4.1 Essential sectors

There is a clear gap between different genders in the essential sectors. Typically, the share of female employees is high in essential sectors. The biggest gap between the number of male and that of female workers can be seen in childcare, in the retail sector, among cleaning staff, in nursing care and among medical assistants. By contrary, jobs in public safety and transportation are mainly held by male employees. This “gender segregation” at the workplace is still quite visible in Austria and has even intensified as a consequence of increasing work flexibility. (22)

3.4.2 Gender and remote work

Female and male employees assessed remote work in similar ways with the exception of the career path. Women tend to think that their promotion prospects could be diminished when they work from home. On the other hand, women rate their own improvement concerning the organisation of work because of telework more positively than men. (13)

3.4.3 Paid versus unpaid work

Before the COVID-19 crisis, gender norms were still quite conservative in Austria. A crisis often boosts change, but the COVID-19 pandemic did not have an effect to improve gender equality and the equal distribution of unpaid work. The proportion of men taking on a larger share of household duties was higher in those groups that work from home alone or together with their female partner. The involvement of men in childcare, however, only increased when the female partner was not able to work from home. Especially during the home-schooling periods in Austria, the burden of additional childcare was mostly shouldered by mothers and not by fathers. Therefore, it can be concluded that the traditional gender roles prevailed during and after the crisis. (37)
The distribution of paid and unpaid work between men and women may have economic consequences such as persisting gender pay and gender pension gaps (38).

In a study conducted in Vienna, the majority of women confirm a setback when it comes to splitting duties and resources at home. While the situation during the first lockdown was partly seen as a general slow-down in all areas, the burden of unpaid work grew over time. (39)

3.5 Consequences for people of different age groups

During the first 50 days of COVID-19 mitigation measures in Austria, the quality of life improved more frequently for younger and highly educated persons. At the same time, however, this group of people more often stated that they perceived a decrease in their work productivity. (32)

3.5.1 Differences among age groups regarding remote work

Generally, young people appreciated remote work more frequently than older individuals. This is presumably due to the fact that the younger generations have more digital competences and are generally more flexible. It is particularly noteworthy that younger employees do not assess the consequences of remote work regarding different social aspects as negatively as older individuals. It can be concluded that it was easier for the younger generation, which is generally a lot more technophile, to transfer social communication into the digital. (13)

3.6 New ways of working – measures that are here to stay

3.6.1 Remote work

It can be suggested that the pandemic caused significant changes that are here to stay. After the use of telework reached its peak during the pandemic, the percentage of employees being able to work from home has stabilised as follows:

- 33% of those working from home do so regularly on more than 2 days a week.
- 24% work from home on 2 days a week.
- 19% work from home on 1 day a week.
- 24% use telework if needed.

Furthermore, some employees state they would like to be able to work from home although they are presently not able to do so. (14)
About two-thirds of employees and employers using telework are of the opinion that working from home has proven useful during the pandemic and therefore still use it. For this reason, working from home will remain possible in the future. (14)
There will not be a general change from working at the office to working remotely. We will rather see a coexistence of the two different ways of working – the new digital way of working and the traditional one. A vast majority of employees prefers one to two days of mobile work per week and only a minority of employees would like to work from home all the time. In combination with a generally more flexible working situation, remote work options will probably support an ideal distribution of working hours. (13)
The wish for remote work is quite strong among employees, stronger than among employers. A majority of employees claims that the possibility of working from home will be a crucial factor in their decision to work for a certain company. (13)

3.6.2 Accelerating digitalisation and remote work

It is also important to note that the increase of digitalisation during the COVID-19 pandemic has accelerated the use of telework. In many companies, employees were provided with the required digital and technical infrastructure (mobile devices, etc.) during the pandemic. This financial investment allows to keep telework in place also in the long run. Companies have also created their own frameworks for remote work in their employment contracts. This is another factor that makes it possible to continue to use telework also after the end of the pandemic. (14)
A field in which digitalisation has made great and fast progress is the health care sector with telemedicine, remote care, e-prescription, digital triage and patient empowerment. Before the crisis, digital health solutions had been blocked for a long time because of conflicting interests. This has definitely changed now. (40)

3.6.3 Technical measures

Employees in the retail sector are positive that the technical measures that were implemented in stores will remain in place. The thin barrier walls of acrylic glass (Plexiglas) will probably stay in place even after the pandemic. (26)

4. Reflections – implications and lessons learned

The COVID-19 pandemic will definitely not be the last crisis that we have seen. The question therefore is how we want to face the next crisis. The pandemic and other difficult situations prove to be quite important to bring about changes and improvements. There are many lessons we have learned from this particular crisis, some of them concerning occupational safety and health.

4.1 Evidence-based political consulting and occupational safety and health

Especially during times of crisis evidence-based policy making gains in importance. The implementation of the multidisciplinary committee referred to as “GECKO” was an important step to professionalise evidence-based political consulting. The pandemic has clearly shown us how many people and professions can be affected by a crisis. Therefore, establishing a consulting committee which consists of many different disciplines is only reasonable. It is, however, essential that such an expert commission remains politically independent. It should be possible for the committee to decide on its own on the topics that it considers of relevance. It is therefore absolutely significant that strategic-operative considerations are communicated very clearly in the reports. In this context, general transparency and the publication of all reports are of great importance. It is to be suggested that future consulting committees should also be multidisciplinary, depending on the problem at hand. (4)
The institutions that are part of PEROSH are concerned with occupational safety and health. Many policies during the COVID-19 crisis affected the workplace. Therefore, the voice of institutions dealing with health and safety at the workplace should also be heard. Since future evidence-based political consulting committees will probably again be multidisciplinary, an integration of experts from occupational safety and health institutions like the PEROSH member institutes seems reasonable if workplaces are affected again.

4.2 Communication

All in all, in the beginning (until April 2020), the Austrian citizens were quite content with the federal government and its measures to overcome the COVID-19 pandemic. The way in which the government communicated its policies and measures to the citizens themselves, however, was not seen very positively. The way in which the information was communicated by the national media was criticised. (41)
It was not only the communication concerning general policies that was criticised, though. The communication concerning measures that affected workplaces could have been better, too.
For instance, teachers complained about not having had been provided with enough information when schools were closed during lockdowns. The information was insufficient and there was not enough time to prepare for distance schooling. (21)
In the future, it is therefore of great importance to either have a prepared “road map” and working materials that can be used for distance schooling. This of course also applies to other fields of work. It seems essential to give employees the required time to prepare for such a tremendous change in the workplace and to adapt accordingly. Good, timely and comprehensive communication is required to achieve good results and reduce the pressure experienced by employees.

4.3 Gender

The COVID-19 pandemic revealed that the allocation of roles between the genders in Austria is still quite conservatives/gender roles in Austria are still quite conservative. Especially the division of paid and unpaid work when two partners work from home indicates that a lot remains to be done in terms of gender equality.
Women in Vienna complained about having to do loads of unseen work in the background and about a lack of appreciation. They also denounced the fact that many problems had to be solved on an individual basis as there were no predefined concepts (e.g. for childcare). (39)
Certainly, this is not a topic to be solved by occupational health and safety specialists; equal working conditions for everyone should, however, be the overall goal for all of us – not only to prevent mental health problems in specific groups. PEROSH member institutions could therefore play a role in creating workplaces that meet the needs of all genders. This affects physical as well as psychological aspects.

4.4 Remote work

Based on scientific literature and the Austrian law some guidelines can be created to reduce (mental) health risks that might arise because of remote work (42).
There should be a written remote work agreement between employer and employee. The advantages (e.g. autonomy, reconcilability of private and professional life) and disadvantages should be communicated clearly. (42)
Generally, comprehensive information and instructions for working from home are essential. For example, employees should be given the information they need to track their working records and to stick to their working hours. Additionally, tasks and “to-dos” should be communicated on a regular basis providing clear and detailed information. Besides, there should be regular meetings with colleagues and superiors to talk about tasks and “to-dos” and to avoid social isolation. (42)
In order to be able to use new online communication media, employers and employees need advanced and further education on those communication skills and media. (14)
Furthermore, employers should also ensure that employees have an ergonomic workplace at home. This has to be checked beforehand with the help of occupational safety and health specialists. (42)
Ergonomic workplaces should be actively promoted. This may be done through information campaigns or with the help of the social partners and relevant national institutions. (14)
PEROSH institutions should play a crucial role in this context.
Additionally, it seems reasonable to implement minimum standards for the provision of work equipment. These standards should, for example, include a minimum screen size and the provision of ergonomic office furniture. (14)
The evaluation of psychological stress and strains should include the situations of remote work. Moreover, it is of utmost importance for employers to avoid any surveillance of their employees. When working from home, employees themselves should check their working hours and make sure that they observe their rest periods. Regular breaks from work throughout the day are of high importance, especially when people do a lot of screen work. Furthermore, it should be avoided that work is interrupted by aspects of private life. (42)
Some companies seem to take those legal requirements and further recommendations seriously. There is, however, still room for improvement regarding occupational safety and health and remote work. In the future, special emphasis should therefore be placed on the ergonomic and the psychological situation in connection with remote workplaces to avoid negative consequences for employees.

4.5 Appreciation

A word that was used a lot during the whole COVID-19 crisis was “appreciation”. Appreciation is indeed of high importance to many workers throughout many different fields of work. Appreciation helps people to get through difficult times, not just in their private but also in their professional lives. It is important for occupational safety and health, especially because of mental health. The word “appreciation” was used very often to present the people who had to work throughout the pandemic – even during the lockdowns – and to underline the importance of their work and that everyone else should show their gratitude. The question is: How long will this appreciation last and did people really mean it? Was it just words? Will it have a monetary impact? In order to keep nursing staff in their jobs, for example, we have to see that it is no longer enough for them to identify with their job. More than 40% of the nursing staff want more recognition and appreciation. It is high time to make sure that working conditions are improved and that they receive appreciation on every level. (23)

4.6 Workload and resilience

During the pandemic, employees faced very different problems regarding their work situation. On the one hand, many people were afraid of losing their jobs, especially those in the so-called lockdown sectors that remained closed during the lockdowns. On the other hand, other employees were faced with a workload they had never seen before.
The situation for health care workers, for instance, became quite critical (as reported in the “Outcomes” section). More than 90% of the nursing staff wish for a higher salary and 75% of them claim that more staff is required in order to improve their working conditions. Almost 50% wish for a better work-life balance. (23)
Improvements of the situation in the health care sector, but also in other system relevant sectors, are overdue. The pandemic has shown us that employees are able to shoulder a lot of work in times of crisis – for a limited period of time. It cannot be a permanent solution to have people overstrain themselves. In some sectors, for instance in the health care sector, good working conditions are essential to keep people in their jobs. An improvement of working conditions will be necessary as an incentive for new people to choose these jobs. Of course, this is not only a topic for occupational safety and health specialists, as they are not in charge of hiring. It is a topic of national importance. Nevertheless, it gives rise to precarious health situations that occupational safety and health specialists have to deal with. In order to stop the downward spiral, national stakeholders should really start thinking about how to improve the situation for those working in essential sectors.
The crisis has also caused a lot of psychological stress – for instance for health care workers (23). It seems reasonable to make every effort to reduce this kind of stress. When working in certain fields, it will never be possible to eliminate or reduce all external stressors. We can, however, try to improve the employees’ resilience. Regular supervisions, workshops and resilience training as well as a regular evaluation of psychological stress and strain at work should become good practice. Helping people to help themselves is key in this respect.

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