DUTCH
SAFETY BOARD

Summary

Approach to COVID-19 crisis

Part 2: September 2020 through to July 2021

Summary

Approach to COVID-19 crisis

Part 2: September 2020 through to July 2021

The Hague, October 2022

The reports issued by the Dutch Safety Board are publicly available on www.safetyboard.nl.

Photograph cover: ANP/Robin Utrecht
Photo source in report: Arie Kievit

The Dutch Safety Board

When accidents or disasters happen, the Dutch Safety Board investigates how it was possible for these to occur, with the aim of learning lessons for the future and, ultimately, improving safety in the Netherlands. The Safety Board is independent and is free to decide which incidents to investigate. In particular, it focuses on situations in which people's personal safety is dependent on third parties, such as the government or companies. In certain cases the Board is under an obligation to carry out an investigation. Its investigations do not address issues of blame or liability.

	Dutch Safety Board		
Board members:	S. Zouridis E.A. Bakkum		
Secretary Director:	C.A.J.F. Verheij		
Visiting address:	Lange Voorhout 9 2514 EA The Hague The Netherlands	Postal address:	PO Box 95404 2509 CK The Hague The Netherlands
Telephone:	+31 (0)70 333 7000		
Website: E-mail:	safetyboard.nl info@safetyboard.nl		

N.B: The full report is published in the Dutch language. This summary contains English translations of the most relevant parts. If there is a difference in interpretation between the Dutch and English versions, the Dutch text will prevail.

CONTENTS

Summary **5**

Consideration **12**

Recommendations **17**

10 Insights from an ongoing crisis **20**
10.1 Context: advising and decision-making during recurrent waves 20
10.2 The advisory process: demarcation of roles, thoroughness, promptness and certainty 21
10.3 Decision-making in the face of ever-changing circumstances 25
10.4 Implementation under changing circumstances 27
10.5 Communication and public support during a protracted crisis 28
10.6 Learning ability 32

11 Conclusions **35**

SUMMARY

In May 2020, the Dutch Safety Board decided to conduct an investigation of the response to the COVID-19 crisis by the government and other parties involved. The Board conducted the investigation partly at the request of the Cabinet. The objective is to draw lessons for the future. The investigation is in a number of parts, each examining a specific time period. The first sub-report, covering the period to 1 September 2020, was published in February 2022. This second sub-report is concerned with the period from 1 September 2020 to 1 July 2021.

This sub-report examines the Dutch government's approach to the COVID-19 crisis during a period in which, following the relatively uneventful summer of 2020, the Netherlands was confronted with a further wave of infections. It was a period marked by further concerted efforts to tackle recurrent surges in the infection rate. By examining the various components of the crisis management approach in detail, it becomes possible to gain insight into the background to, and interrelationship between, the various decisions made. Such an analysis is necessary to understand how and why the COVID-19 crisis evolved as it did. Based on its findings, the Dutch Safety Board offers a number of recommendations to improve the response to future pandemics and other crises.

The focus of this second sub-report is the vaccination programme, including the international cooperation involved in the joint procurement of vaccines and the manner in which vaccination was made available to the Dutch population. The Board's investigation also examined three measures implemented during this period to control the spread of the virus: the facemask requirement in enclosed public areas, the closure of primary and secondary schools, and the nationwide curfew.

Development and acquisition of vaccines

When the COVID-19 pandemic reached the Netherlands in early 2020, no effective vaccine existed. Researchers and pharmaceutical companies worldwide were working around the clock to develop one. All countries were dependent on these pharmaceutical companies, which were therefore able to make demands such as a full waiver of their (legal) liability. They also declined to make any firm undertakings with regard to delivery dates. To strengthen their position, the member states of the European Union and the European Commission opted to work together in their negotiations with the vaccine developers. All member states were keen to acquire enough doses of an effective vaccine as quickly as possible. Cooperation could accelerate this process. Member states had come to appreciate the added value of joint action – largely due to its absence – during the Mexican flu pandemic of 2009. In 2014, the European Commission instituted arrangements to facilitate the joint procurement of vaccines in subsequent pandemics. However, the starting position in 2020 was not directly comparable to that in 2009. At the time of the Mexican flu outbreak, effective vaccines were already available and in plentiful supply. This was not the case with COVID-19, for which a vaccine had yet to be developed.

The process of developing, assessing and approving a vaccine generally takes many years. In this crisis, the various actors – including the pharmaceutical companies, the European Medicines Agency (EMA) and the European Commission – were able to fast track the process to a significant degree. The EMA closely monitored vaccine development and conducted several interim evaluations. This 'rolling review' methodology enabled it to shorten the assessment process, whereupon the European Commission could issue the necessary 'marketing authorization' sooner than would ordinarily be the case. At each stage, all parties involved (including the Dutch government), expressly weighed the benefits of saving time against any potential safety risks. Joint procurement of vaccines precluded competition between the member states within the European Union.

Modifications to the order of vaccination

As the development of vaccines continued, the Health Council of the Netherlands (*Gezondheidsraad*) addressed the question of who should be the first to be vaccinated. This was necessary because vaccines were likely to be in short supply at first; there would not be enough doses for everyone. The Health Council generally takes over a year to produce an advisory on new vaccines or medicines. It was now required to do so within a much shorter period. In November 2020, the Health Council issued an advisory, which called for priority to be given to the 'medically vulnerable': people for whom infection with COVID-19 would bring an increased risk of serious illness or death, primarly the elderly and those with a serious condition. Where these people could not be vaccinated, the Health Council advised that care staff and informal carers with whom they had direct contact should be among the first to be vaccinated. The Health Council proposed a vaccination schedule based on descending order of age. After the Cabinet had adopted this advice in late November, the Ministry of Health, Welfare and Sport (VWS) started to receive representations from various other groups who wished to be prioritized. In early January 2021, the Minister of VWS moved frontline staff in the acute care sector and later also the general practitioners 'up the list'. This decision was in keeping with the advice of the Health Council, which had called for certain groups of care workers to be given priority should any overburdening of the healthcare sector seem imminent. By late December, this was indeed the case. The Netherlands was now in a 'hard lockdown' and the healthcare system was under severe strain. The decision to prioritize these groups nevertheless attracted public criticism. As the vaccination programme progressed, the Minister of VWS made several further changes to the running order, often prompted by medical-scientific advice from the Health Council. Mid-April 2021 the minister also gave priority to members of police Mobile Units, Olympic and Paralympic athletes, and the staff of Dutch diplomatic missions, on grounds other that medical science. This move attracted further public criticism.

Relatively late start to vaccination programme

The Netherlands' vaccination programme began on 6 January 2021. At around the same time, a public information campaign was launched to encourage people to get vaccinated. For some time, the impression was that the Netherlands had been late in beginning its vaccination programme and that progress was slow. The majority of European countries had started late December 2020. The Netherlands' relatively late start can be attributed to a decision made at an early stage of the preparations. The

Ministry of VWS and the National Institute for Public Health and the Environment (RIVM) had wanted the vaccinations to be administered by general practitioners, just like the annual 'flu jab'. This is a tried and tested method, and one which was suited to the AstraZeneca vaccine. In November 2020, however, the Ministry of VWS realized that this approach was not going to work because the BioNTech/Pfizer vaccine would become available first, with AstraZeneca following some time later. The BioNTech/Pfizer is supplied in large packaging units and requires a storage temperature of approximately -70 degrees Celsius. It would therefore be impossible to distribute in small quantities via the finely meshed GP network. An alternative scenario, with large-scale vaccination centres and appropriate logistic facilities, had yet to be devised even though vaccinations were due to start within six weeks. The uncompromising focus on the AstraZeneca scenario had precluded the consideration of any alternatives. It was not until December that Municipal Health Departments (GGDs) were instructed to set up large-scale vaccination centres. They were to be ready by early January. The GGDs are familiar with vaccination and had gained relevant expertise in the logistics of large-scale locations from running the COVID-19 testing centres during the first year of the crisis. It was necessary to create a national registration system with secure ICT linkages between the relevant parties. This too was not without its problems. Nevertheless, the vaccination programme quickly gained speed and caught up with neighbouring countries within the first few months of 2021.

The Health Council's advice regarding the allocation of vaccines to certain target groups did much to determine the further course of the vaccination programme, which was largely dependent on which vaccines were available at any given moment. The GGDs were regularly required to adjust their schedules because deliveries from some pharmaceutical companies proved somewhat unpredictable. It was therefore not always possible to invite people according to plan. Moreover, each vaccine has its own specific characteristics, which make it more suitable or less suitable for certain target groups than others. This is apparent, for example, when the AstraZeneca vaccine was reported to have rare but serious side effects. As a precaution, the Minister of VWS suspended its use on the advice of the Medicines Evaluation Board (CBG). Following further advice from the Health Council, the minister decided that vaccination with AstraZeneca could resume in the over-sixty age groups, for whom the benefits of vaccination outweighed the risks of an extremely rare but serious side-effect.

Vulnerable members of society

Many people who considered themselves vulnerable were excluded from the definition of 'medically vulnerable high-risk groups' applied by the Health Council. As a result, they were not given the vaccination priority that they had hoped for and expected. Many felt that they had been unfairly disadvantaged given that they did indeed meet the criteria for, say, the annual flu jab. They had dutifully followed government advice to avoid social contact, sometimes to the point of imposing complete self-isolation for fear of infection. Several patient representative groups protested to the government. In April 2021, the Minister of VWS expanded the definition of medically vulnerable high-risk groups to include everyone qualifying for the annual flu vaccination, who would therefore also be prioritized for the COVID-19 vaccine. In practice, this was primarily of significance to those under the age of sixty, since by this time the more senior age groups had already reached the front of the queue.

Throughout the vaccination programme, RIVM monitored the vaccination coverage rate, more commonly known as the 'take-up' rate. In May 2021, when it became apparent that the take-up rate in some villages and neighbourhoods remained below the national average, the first steps were taken to develop a more targeted communication campaign to address those whom television, radio and social media had failed to reach. By the end of June 2021, 72 per cent of adults in the Netherlands had received their first injection.

Relationship with measures

As the vaccination programme got underway, the Outbreak Management Team (OMT) and RIVM warned that the Cabinet should not be overly optimistic about the speed with which vaccinations would protect the public. The measures then in place would remain necessary for some time. In its public statements, the Cabinet mentioned the uncertainties but adopted an optimistic tone, saying that "there is light at the end of the tunnel", and "jab by jab, a return to normality is coming ever closer." When it later became clear that a high vaccination coverage rate did not necessarily mean that no further measures were needed, a feeling of disillusionment affected some sections of society. This did nothing to foster support for the government's approach.

Facemask requirement, school closure and curfew

In the summer of 2020, the infection rate once again showed a markedly upward trend. This prompted the government to announce various measures intended to curb the spread of the virus. One such measure was the facemask requirement. Its introduction was preceded by a long discussion. In many neighbouring countries, facemasks had been a familiar sight for several months. In May 2020, the government had considered making facemasks mandatory but held back for fear of a shortage in the healthcare sector. Although this shortage abated in the following months, the Cabinet remained reticent. The OMT had stated that scientific articles provided insufficient evidence that facemasks had significant added value in terms of reducing virus transmission. The OMT did not exclude the possibility that they would indeed have an effect, but feared that making their use mandatory might adversely influence compliance with other measures. The effect of social distancing (the 'six-foot society') would then be cancelled out. The scientific studies cited by RIVM's Corona Behavioural Unit arrived at varying conclusions. They did not exclude negative behavioural effects, but neither did they support the idea that there would definitely be negative effects. Taking all input into account, in the summer of 2020 the OMT did not advise in favour of the general adoption of facemasks in enclosed public spaces. The Cabinet took heed of the OMT advice and decided against implementing this measure. By late September, the situation changed as a facemask requirement appeared to have gained majority support in parliament. Even though there was no positive advice from the OMT at this point, the Cabinet gradually shifted towards 'urgently advising' the use of facemasks in enclosed public spaces. When the COVID-19 (Temporary Measures) Act came into force on 1 December 2020, the use of facemasks was no longer a matter of advice or discretion. It was required by law.

The autumn of 2020 brought various other measures intended to control the spread of the virus. Bars, restaurants, shops, museums, theatres, sports clubs, swimming pools and libraries were all closed. On 14 December 2020, Prime Minister Rutte addressed the nation from his office in The Hague, announcing that primary and secondary schools would once again close due to rising infection rates. This was part of a general lockdown.

It was a decision that the Cabinet had managed to put off for some months. By December, however, infection rates and the prognoses presented by the Chair of the OMT at the *Catshuisoverleg* meeting were so alarming that the Cabinet felt it had no choice but to close schools. The decision caused consternation and frustration among both schools and parents when subsequent communication gave the impression that the move was primarily intended to decrease travel movements and contacts on the part of parents, rather than to protect children from the virus. Moreover, the likely effect of the school closure in terms of pandemic control was far from clear.

The third measure examined in this part of the Dutch Safety Board's investigation is the nationwide curfew. This was a measure with a significant impact on the constitutional rights of the individual in that it restricted freedom of movement. With very few exceptions, no one was permitted to be in public areas after 9pm. Although the possibility of a curfew had been raised ever more often in late 2020, there had been no concrete proposal. In the minds of many politicians and a significant section of society, the resultant restriction of freedom was redolent of the Second World War. The situation changed with the emergence of the 'alpha' variant of the coronavirus in late December. The Cabinet then faced the realistic prospect of the healthcare system becoming overwhelmed. Additional measures were considered necessary. With regard to the curfew, the OMT reported that the effect would be highly uncertain. The element of uncertainty was, however, largely omitted from the Cabinet's communication about the measure and the argumentation supporting the decision. The curfew came into force on Saturday 23 January 2021. It was due to remain in place for a period of three weeks. However, due to the relatively smooth implementation of the measure and the effectiveness ascribed to it by the Cabinet, the curfew was extended no fewer than five times. The Netherlands therefore remained under curfew for a total of over three months. The initial promise that the measure would be of limited duration was not kept. The Cabinet had also announced that it would be the first measure to be withdrawn. In the event, primary schools reopened some time before the curfew was lifted.

Lessons from an ongoing crisis

In its initial approach to the crisis, the Cabinet relied heavily on people's sense of personal responsibility and the willingness of individuals and organizations to comply with behavioural guidelines. In practice, this approach gradually proved less effective and compliance began to wane. Measures, which had been readily observed in the spring of 2020, had diminishing effect as the crisis progressed. The Dutch Safety Board notes that the Cabinet faced a dilemma. Following a difficult spring, it did not wish to impose overly stringent measures too soon. Early intervention can attract considerable societal opposition. On the other hand, waiting too long can allow the virus to spread whereupon even harder measures will be needed at a later date.

As in the first period of the crisis, the scientific and other advisors on whom the Cabinet relied could not always offer a clear way forward due to the many uncertainties that existed. Nevertheless, the Cabinet's communication often took an optimistic tone, making quite firm predictions about likely developments and about the effect of the measures, despite the uncertainty inherent in a changeable pandemic situation. It is important to avoid raising expectations that cannot be met.

Decision-making in this phase of the crisis devoted more attention to the socio-economic side-effects of the measures than had been the case during the first wave of COVID-19 infections in the spring of 2020. Furthermore, there was more frequent and closer consultation with experts regarding the implementation of measures. The National Police, for example, provided input about the preconditions for implementing and enforcing a curfew. Social partners in the education sector were involved in devising the guidelines for remote learning. As with making the necessary provisions for vulnerable children, it was possible to draw upon experience gained during the first school closure. However, advice about socio-economic effects and implementational aspects became secondary to epidemiological advice as pressure on acute healthcare services increased. Short-term and immediate problems took a more prominent place in the decision-making process than any latent issues.

The demarcation of roles in this period forms another point for attention. As in the period covered by the first sub-report, the Dutch Safety Board notes several occasions on which the OMT considered interests and perspectives, which lie beyond the strict medical-scientific expertise of its members. This is primarily because there was no clear definition of the aspects on which the OMT was – and was not – expected to advise during this protracted crisis. Similarly, the Cabinet did not always act entirely in accordance with its formal role. For several months, its deliberations regarding the use of facemasks relied entirely on the medical-scientific advice of the OMT, to the exclusion of any broader, political consideration of advantages and disadvantages in other domains.

As in the period covered by the first sub-report, the protection of vulnerable individuals remained one of the Cabinet's key strategic objectives. In practice, 'vulnerable members of society' proved something of a vague umbrella term. This ambiguity affected both the vaccination programme and the evaluation of measures. A sizeable group who may be considered 'vulnerable' were excluded from the official definition of 'medically vulnerable high-risk groups' used to determine priority for vaccination. In its analysis, the Dutch Safety Board concludes that it is important to define clearly and precisely what decision-makers and advisors actually understand by 'vulnerable members of society' in a given situation, to evaluate the likely effect of the proposed crisis response on this group, and to take that effect into consideration in the relevant deliberations.

The Dutch Safety Board finds that lessons were indeed learned from the response to the Mexican flu pandemic in 2009, although chiefly with regard to European cooperation in joint vaccine procurement. Over time, experience gained during the first period of the COVID-19 crisis also led to improvements further on in the crisis. Actors such as GGD GHOR Nederland and the GGDs were able to apply their operational experience in setting up and running large-scale test centres to the new task of running vaccination centres. Similarly, experience gained during the first school closure allowed some useful modifications to be made when implementing the second school closure.

Lastly, the Board notes that the Cabinet took only limited steps to support a thorough evaluation of the effects of each measure individually. As a result, no insight was gained into the effectiveness of a particular measure in mitigating the pandemic, whereupon it remains uncertain whether measures such as the facemask requirement, school closure

or curfew are likely to have adequate effect in any future pandemic and are therefore worthy of consideration. It is also desirable to gain a better understanding of the negative side-effects of measures, such as social isolation and domestic violence. Then these aspects can also be weighed against the expected public health benefits, in the event of a future long-term (health) crisis with nationwide impact.

The crisis as an endurance exercise

The situation at the beginning of the period with which this sub-report is concerned – 1 September 2020 to 1 July 2021 – was entirely different from that at the very start of the COVID-19 crisis. Not only had the crisis organization gained experience in the relevant matters, the entire population had now become 'lived experience experts'. Far more was known about the virus and its characteristics, and experience had also been gained in imposing and relaxing the various measures. The general public had, of necessity, learned to live with the virus. Something that had not changed is that the crisis continued to place heavy demands on everyone in society; once again, it was a question of 'all shoulders to the wheel' and of finding ways of coping amid the given circumstances. New problems and uncertainties emerged. It became clear that certain groups who had not previously been classified as vulnerable were indeed vulnerable. Alongside the elderly, various other medically vulnerable high-risk groups were viewed. Some had decided to remain in almost total isolation until the vaccine became available. It also became evident that schoolchildren, students, young people, business owners and many others had all suffered a negative impact. While some people were at higher risk from the virus itself, everyone was affected by the far-reaching measures and the protracted nature of the crisis. Moreover, it was now apparent that some patients who had contracted COVID-19 continued to suffer health problems long after infection. They included frontline healthcare workers and others who fulfil vital functions in society. The realization dawned that this crisis had become an endurance exercise for society in general, and for the actors involved in the crisis response. It was against this background that the Cabinet was frequently required to make far-reaching decisions.

Flattening the peaks, taking advantage of the troughs

Looking back on the six months to 1 July 2021, we see a particularly tumultuous period. The Netherlands experienced recurrent waves of infection, each placing renewed pressure on the healthcare system, with periods of relative calm in between. In short, there were peaks and troughs. There was a similarly fluctuating pattern of imposing, extending and relaxing measures. The Cabinet did not succeed in extricating itself from this pattern. Each of the relatively quiet periods was followed by another peak in the infection rate, once again placing acute hospital care under serious strain. All concerned did their utmost to keep the situation under control. They did not allow themselves time or opportunity to look ahead more than a few days, or a few weeks at most. The resilience they showed is commendable but inevitably led to exhaustion. The more frequent the peaks, the more run down professionals and public alike get.

Since it is known that a pandemic is likely to involve this recurring pattern of peaks and troughs, and that the peaks can be of increasing severity, it becomes useful to reflect on this situation. One question is how the troughs (the quiet periods from an epidemiological perspective) can be put to better use. How can the various parties use these periods to prepare more effectively for the next peak and the new challenges it may bring? Those

involved within the crisis organization undertook various interim evaluations and reflections. However, the demands of the next peak quickly took the upper hand and learning was pushed into the background.

Quiet periods can also be used to think about ways in which to reduce the severity of the peaks. Would it be appropriate to introduce certain measures on a precautionary basis even when the infection rate remains relatively low? Or is it better to wait until intervention is clearly necessary? This is a difficult dilemma, and one that the Cabinet had faced during the recurring pattern of peaks and troughs. Measures have an impact on people's everyday lives; some have a very marked impact and can cause societal harm. Although early intervention may prevent the infection rate rising quite so much, the impact of the measures could prompt significant social opposition. Waiting too long, on the other hand, might necessitate even more stringent measures at a later date. The Cabinet must weigh all considerations on an ongoing basis: an integrated values assessment is required. In the case of the three measures examined in this sub-report, it is evident that the Cabinet did not apply a consistent approach. While the deliberations preceding the second school closure were indeed broad and considered the various non-epidemiological aspects, the same cannot be said for the decision-making process with regard to the facemask requirement. When considering the introduction of the curfew, even though diverse values were taken into account, they were given less weight than the anticipated positive effect of this measure, which itself was uncertain.

To arrive at a balanced consideration of values, it is important that the effects of the measures – in terms of both virus control and socio-economic impact – have been established as clearly as possible. Here, the Cabinet can call upon its advisors, and advice concerning social and economic effects should get full attention as well as the epidemiological advice. The ability to draw on expert advice does not detract from the fact that, in a crisis situation, the necessary knowledge is not always available or complete. It may be subject to considerable uncertainty, as illustrated by the advisory process concerned with the curfew. This reinforces the importance of an ongoing evaluation of the effectiveness and impact, both positive and negative, of the measures implemented earlier in the crisis. Knowledge can then be developed on a rolling basis and will be available to support any new consideration of proportionality. Because the Cabinet did not evaluate the effects of the curfew at any point during the three months that this particularly intrusive measure was in place, it relinquished the opportunity to make a more informed consideration should a new wave of infection occur. Broad-based advice and knowledge about the effects of earlier measures support the complex consideration of values that the Cabinet is required to make in a crisis, even more so in the case of measures introduced on a precautionary basis. Communication explaining the considerations which underlie the final decision is essential.

Maintaining public support

The behaviour of the general public is an essential component of a successful crisis response. It is therefore important to maintain public support for the government's strategy and the far-reaching measures it entails. In the early days of the crisis, most people appreciated the urgency of the situation and the government could rely on widespread support. As time went on and the impact of the measures became ever more acutely felt, the public's resolve was put to the test. To maintain support for the measures

when new waves of infection emerge, it is important to continue engagement efforts even during the periods of relative calm when the crisis tends to disappear into the background. The public must be informed about the upscaling or downscaling of measures, with a clear account of the considerations underlying each specific situation. It will then become easier to understand why a particular measure is thought necessary in one period but not in another. To go back on firm undertakings about the duration of a measure, or a promise that a particular measure will not be re-introduced, will diminish support. Communication about the uncertainties, and about why insights have changed, will help to ensure that support does not fall any further.

Anticipating various scenarios

With a view to a strategy designed to control the virus and its effects, thus eventually putting an end to the crisis altogether, it is important that those responsible are able to look beyond the next decision-making moment. Decision-making in a crisis demands the ability to anticipate various scenarios and the choices they will bring should the situation take an unexpected turn. During the period under review, the government acted less on a day-to-day basis than it had during the first period of the COVID-19 crisis. Nevertheless, our analysis concludes that the actors involved in planning and implementing the vaccination programme adhered to a single, pre-determined scenario, whereupon they were inadequately prepared for alternative scenarios in which a different vaccine, possibly with different distribution or administration requirements, became available sooner. This was indeed the case, whereupon it was not possible to conduct the vaccination programme through the usual finely-meshed network of small-scale vaccination locations. The 25 GGD departments then had less than a month in which to operationalize a series of large-scale vaccination centres.

The role of scientific advice in a protracted national crisis

To anticipate various scenarios in a timely manner, and to make sound decisions which allow the crisis to be controlled in the most effective way, the Cabinet is very much reliant on the scientific knowledge of advisory bodies such as the OMT and the Health Council *(Gezondheidsraad)*. The Cabinet is also supported by various organizations which provide supplementary advice, either on request or at their own initiative, but which do not form part of the official crisis structure. They include the advisory agencies for social and economic policy analyses and advisory teams formed during the COVID-19 crisis itself. Seldom has the scientific community been so closely involved in the formulation of policy with such a marked impact on society. Its involvement was not confined to giving advice: science also played a key role in the development of the vaccines, which would provide a way out of the crisis. The Cabinet often declared that it would ‘follow the science’. Its reliance on the scientific field justifies a critical reflection on the relationship between politics and science during a national crisis.

A first reflection concerns the interaction between scientific advisor and the Cabinet, particularly where the measures advised will have a major impact on society while the intended positive effects are subject to uncertainty. In a protracted crisis with national impact, such as the COVID-19 pandemic, the situation is complex and continually changing. Information is often open to several interpretations and is sometimes contradictory. There is rarely, if ever, one clear solution to the problems at hand, and each proposed course of action brings new challenges and problems. Given this dynamic,

it is essential that advice is accompanied by interaction and discussion between advisor and decision-maker. What if the intended effect does not materialize? What if compliance falls short of expectations? How does one recommendation relate to another? Ongoing interaction between advisors and decision-makers in order to identify possibilities, impossibilities and the expected effects as clearly as possible strengthens the role of both advisor and decision-maker, but it also intertwines these roles. Provided all concerned, including those who must give public accountability, acknowledge that the final consideration of values rests with the politicians, this need not be a problem. A point for attention is that, in their interaction with decision-makers, advisors must not be tempted to make statements about matters which are beyond their specific area of expertise, or which involve some (implicit) consideration of values. This is a shared responsibility between advisor and decision-maker, who must ensure that the advisor is not placed in this position.

A second reflection concerns the participation of individual scientists in the public debate. An opinion expressed through the mainstream media will often have greater impact and reach than a scientific publication which has been subject to peer review. If the intention of the scientist is to add further dimensions to the matter under consideration based on his or her own discipline, this can indeed enrich the societal debate about the crisis response. The scientist can add nuance and new perspectives to the discussion on whether the response is good or bad, based on his own area of expertise. Scientists who form part of the advisory and decision-making structure have an additional responsibility in this regard. Introducing new perspectives can help to raise public understanding of the complexity of the crisis and of the values which the political decision-maker must take into consideration when arriving at a decision.

Finally, the delineation and definition of the various advisory bodies' remit and tasks in a crisis situation demands some reflection. The Health Council and the OMT are different in nature and each faced its own specific challenges during the COVID-19 crisis. The Health Council is a permanent scientific advisory body and provides advice on a wide range of health-related issues, based on a remit that is established by law. The synthesis of scientific knowledge this requires takes time. During the COVID-19 crisis, this institute was expected to return prompt and concise advice. The nature and regular procedures of the Health Council are not entirely in keeping with the speed and anticipative ability demanded by a crisis situation. The customary caution with which it delays advising on developments until those developments are actually apparent would not always give decision-makers the basis they needed. However, the formation of a temporary crisis committee allowed the Health Council to achieve greater speed and flexibility. In the case of the OMT, a development of a different type is apparent. An OMT is only formed when there is a major outbreak of an infectious disease, in which case it generally has a temporary, clearly defined remit and instructions. Due to the extent and duration of the COVID-19 crisis, its role gradually became broader and more prominent. In the many advisories produced by the OMT, decision-makers could find handholds for further deliberations and action. However, because these advisories also considered aspects outside the domain of medical and epidemiological advice, the role of the OMT became broader than its original instructions had foreseen. A reflection on the role, task and position of both the Health Council and the OMT in times of crisis would seem appropriate. A clear delineation of the tasks of advisory bodies involved in the COVID-19

crisis will provide clarity for all concerned. In addition, it is important that the party who issues a 'request for advice' is mindful of the role, task and expertise of the relevant body when formulating its questions and terms of reference.

Learning and reflecting

Alongside action, reflection is an important competence for decision-makers in a crisis. The COVID-19 crisis was so complex and extensive that the response was, of necessity, one of trial and error. We generally think of 'reflection and learning' as an explicit process which involves collecting knowledge and evaluating. However, learning can also be implicit. It is virtually inevitable that the various actors became better at tackling the crisis as time went on. It is possible that decision-making during such a crisis will benefit if it is acknowledged that, given the complexity and changeability of the situation, decisions will not be permanent but will demand adaptation according to circumstances. In any complex crisis, there is rarely adequate robust knowledge to allow the effect of a decision to be estimated beforehand. Each decision, with its expected and unexpected consequences, will generate new knowledge that can be put to use in subsequent stages. Learning is integrated and assimilated within this type of incremental approach, which will therefore be more effective than when the learning process is separated from practice.

The ability to learn depends not only on knowledge itself, but also on the opportunity, systems and processes that surround that knowledge. It is important, particularly in a crisis situation, that organizational management creates an environment in which learning and reflection are the norm, despite the immense pressure of the situation. The Dutch Safety Board notes that society acknowledges and shows great understanding for the complex, difficult task which faced decision-makers during the crisis. This allows space to create the necessary learning environment.

In conclusion

As this second sub-report is published, the COVID-19 pandemic is still ongoing. This document is the second in a series of three. The third sub-report is scheduled for publication in 2023 and will examine aspects such as the objectives and strategy of the Cabinet, the manner in which the virus and its consequences were monitored, and the considerations which underpinned decisions to implement or relax the measures. Several of the topics raised in this discussion will be covered in greater detail.

RECOMMENDATIONS

In this second sub-report, the Dutch Safety Board examines the Netherlands' response to the COVID-19 crisis, focusing on the period from 1 September 2020 to 1 July 2021. As before, the Board's aim is to determine how and why the situation developed as it did, and what lessons can be drawn.

The recommendations made on the basis of this sub-report relate to a period which, at time of publication, is over one year in the past. Now that the COVID-19 crisis has been ongoing for some two-and-a-half years, several modifications to the crisis approach have already been made. For example contingency plans to increase preparedness for a future pandemic, a Societal Impact Team (*Maatschappelijk Impact Team;* MIT) and a National Functionality for Infectious Disease Control (*Landelijke Functionaliteit Infectieziekte-bestrijding*; LFI) which, under the direct authority of the Minister of Health, Welfare and Sport (VWS) will be responsible for preparing for future pandemics and for the operational coordination of the GGDs. Alongside these developments, the Board wishes to make a number of supplementary recommendations.

To the Cabinet:

1. Ensure that each of the measures implemented during the crisis is individually evaluated as soon as possible. All effects, both intended and unintended, should be examined. The knowledge gained will support decision-making about similar measures in future waves of infection or a subsequent pandemic. Where measures are implemented in the future, ensure effective monitoring and evaluation of the effects and implementational aspects.

2. In preparation for future public health crises, build on the knowledge and experience gained in European cooperation with regard to joint procurement, supply security and the timely availability of (scarce) pharmaceutical products and medical devices. Take the initiative in placing relevant aspects on the European agenda.

In its first sub-report, the Dutch Safety Board recommended that the Cabinet should ensure a clear delineation of roles, safeguarding the independent position of elected representatives as decision-makers and experts as advisors. Based on this second sub-report, the Board wishes to add two further recommendations to the Cabinet:

3. Clearly define the role, task and position of advisory bodies in future protracted crises with a national impact. In doing so, devote attention to the interaction between the advisory parties, and their interaction with decision-makers. Ensure that the role and responsibilities of the Health Council, the Outbreak Management Team (OMT) and new parties such as the Societal Impact Team (MIT) in any future pandemic situation are clearly established. To this end, evaluate the crisis response organization in place during the COVID-19 crisis.

4. Ensure that the consideration of values and interests in a crisis is undertaken by the politicians who are accountable within the democratic process. Use the (scientific) advice as input for decision-making. Communicate clearly with society about the weight given to the various values and interests, and about the manner in which the decision-making has taken account of uncertainties. Avoid creating unrealistic expectations.

To the Minister of VWS:
In its first sub-report, the Dutch Safety Board recommended the modification of the crisis structure for the healthcare sector in order to give the Minister of VWS authority to address problems which transcend sectoral, regional or institutional boundaries in any case including directly binding instructions. The Minister of VWS intends to adopt this recommendation through the establishment of the National Functionality for Infectious Disease Control (LFI). Based on this second sub-report, the Board wishes to add a further recommendation:

5. Clearly define the tasks and responsibilities of the LFI, and how those tasks and responsibilities relate to those of the Minister of VWS and other executive or advisory parties involved in the crisis response. Ensure that the lessons learned from the implementation of the COVID-19 vaccination programme are fully embedded within the LFI, whereby specific attention should be devoted to:
    a. central coordination of the GGDs, and coordination between GGDs;
    b. timely and recurrent preparation of various scenarios, including their operational implications;
    c. a national vaccination registration system, including the necessary linkages between the IT systems of the various operational parties.

To the Health Council of the Netherlands:

6. Adopt and embed methods and procedures which allow appropriate speed and flexibility of the advisory process. In doing so, draw on lessons learned from the COVID-19 crisis.

To RIVM:

7. Protect the position, authority and integrity of an OMT and its individual members by means of published 'Rules of Procedure'. This document should state the composition of the OMT, its working procedures, its position in relation to the Ministry of VWS, and external communications.

Brunott
PULL&BEAR

10 INSIGHTS FROM AN ONGOING CRISIS

This is the second sub-report of the Dutch Safety Board's investigation of the Netherlands' response to the COVID-19 crisis. It is primarily concerned with the period from 1 September 2020 to 1 July 2021. This was the period during which the national vaccination programme started, and one in which the COVID-19 pandemic once again qualified as a true 'crisis' with significant societal impact. This sub-report devotes particular attention to the start of the vaccination programme (to 1 July 2021) and to three measures which, each in its own way, served to define this phase of the crisis: the facemask requirement in enclosed public areas, the closure of primary and secondary schools, and the nationwide curfew.[1] By reconstructing and analysing the preparation, advisory process, decision-making, operationalization, monitoring and communication of these interventions, we gain a better understanding of the various considerations which decision-makers were required to take into account as they sought an effective response to the pandemic. This sub-report complements and augments the insights presented in the first sub-report.

10.1 Context: advising and decision-making during recurrent waves

Partly due to recurrent waves of infection and the emergence of the 'alpha' variant of the coronavirus, the crisis was marked by a long series of upturns in the number of reported cases and hospital admissions. A pandemic will generally have several waves, a fact of which the crisis management organizations were well aware long before the summer of 2020.[2] Even so, these organizations seemed to have been taken by surprise, and on occasion overwhelmed by the severity of the infection wave that began in August that year.

In this context, the Dutch Safety Board finds it noteworthy that the Cabinet adopted something of a 'wait and see' stance in the late summer of 2020. Unlike several neighbouring countries, the Netherlands refrained from recommending the use of facemasks for some considerable time. The Outbreak Management Team (OMT) did not return positive advice in this regard, there being insufficient scientific evidence to support the measure in the existing literature. The Cabinet had stated that it would 'follow science', and was therefore unable to state whether the effectiveness of such a measure was plausible or probable, or whether the (uncertain) advantages would outweigh the (equally uncertain) disadvantages. By following the OMT's line, the Cabinet denied itself an opportunity to make its own balanced consideration. It was not until late September

1 The measures defined this phase in that they were preceded by a complex decision-making process and surrounded by considerable societal discussion. These interventions not only had a significant effect in terms of infectious disease control but also major societal effects, and thus influenced the level of public support for the government's approach. In addition, the measures brought about a significant number of policy amendments in a relatively short period.

2 The first sub-report describes how various organizations were able to anticipate a second wave. Source: Dutch Safety Board, *Approach to COVID-19 Crisis, Part 1: to September 2020* (February 2022).

2020 that pressure from parliament and society eventually persuaded the Cabinet to advise the use of facemasks in enclosed public areas.

A similarly hesitant approach could be seen in the autumn of 2020, when the Cabinet expressed the 'hope' that people would continue to follow advice, as they had in the spring of that year. Collective compliance with recommendations was considered preferable to mandatory measures. Once again, the Cabinet advised people to work from home wherever possible and to limit the number of visitors they received at home. By this time, mobility data and research by the National Institute for Public Health and the Environment (RIVM) had clearly demonstrated that the measures and recommendations were having less effect during this second wave than they had earlier in the year. The public were finding it ever more difficult to maintain compliance. The mood was one which the Minister of Health, Welfare and Sport (VWS) summed up on various occasions with the words, "We are done with the virus, but the virus is not yet done with us." When recommendations and voluntary action did not have the desired effect and the infection rate continued to increase in September 2020, mandatory measures were once again considered. During the autumn period, the Cabinet did indeed consider measures that had previously seemed 'off limits', including the re-closure of schools and a curfew. Eventually, the Cabinet found itself compelled to impose a 'partial' lockdown in October 2020, which was then upgraded to a full, 'hard' lockdown in December.

These developments illustrate the dilemma faced by the Cabinet: early intervention can attract considerable societal opposition, while waiting too long might necessitate even more stringent measures at a later date.

10.2 The advisory process: demarcation of roles, thoroughness, promptness and certainty

Bringing a pandemic under control involves ongoing cooperation between the public, professionals, politicians and the scientific community. The Dutch Safety Board's investigation concludes that it is in the close interaction between political decision-makers and scientific experts that the most important lessons are to be learned with regard to the avoidance of role-blurring, thoroughness, promptness and uncertainty within the advisory process.[3]

Clearly defined roles: who advises whom about what?

As in Part 1 of this investigation, the Dutch Safety Board notes that the OMT chose to consider aspects and perspectives which lie at the outer limits of its members' expertise, or in some cases clearly beyond. In its advice on school closures, for example, the OMT opted to consider the impact on the welfare, wellbeing and personal development of children, and on the longer-term implications for society at large. In its advice on

3 In Part 1 of this investigation, the Dutch Safety Board recommended that there should be a clear demarcation of roles: the independent position of politicians as decision-makers should should be safeguarded, as should that of experts as advisors. (Recommendation 9). Source: *Approach to COVID-19 Crisis, Part 1: to September 2020* (February 2022).

facemasks, the OMT devoted attention to behavioural aspects, despite having no specific expertise in this regard. Studies by the Corona Behavioural Unit (*Corona Gedragsunit*) of the RIVM, which is independent of the OMT, later showed that the hypotheses on which OMT members based their advice lacked an evidential basis (according to the existing scientific literature).

That the OMT chose to consider such non-epidemiological aspects might be explained by the lack of any other advisory body with the necessary expertise. Alternatively, it may be because there is no clear remit or 'task description', established by legislation, which would define and delineate the matters on which the OMT is – and is not – to offer advice. The Cabinet itself omitted to state in its 'request for advice' exactly what it expected from the OMT. Conversely, the OMT does not appear to have asked the Cabinet to define its tasks and responsibilities. The absence of a clear remit for the OMT stands in contrast to the situation of the Health Council of the Netherlands *(Gezondheidsraad*), whose tasks and responsibilities are set out in the Health Act *(Gezondheidswet).* Its remit is formulated in broad terms. Their advice is to be based on current scientific knowledge. The Health Council emphasizes that the considerations that have to be made which underlie policy decisions are up to government and parliament.[4] The relationship between the Health Council and the Cabinet is therefore crystal clear. Moreover, the procedures adopted by the Health Council stipulate that any 'request for advice' must first be assessed by its Chair to ensure compatibility with the Council's current remit.

Thoroughness through broader advice

Through the efforts of the the Directorate General (DG) of Society and COVID-19 and the National Coordinator for Counterterrorism and Security (NCTV), the societal and economic side-effects of potential policy choices were brought into sharper focus in the autumn of 2020 than was possible during the first six months of the COVID-19 crisis. These organizations collated input from various sources, including the Corona Behavioural Unit of the RIVM, the Netherlands Institute for Social Research, and the 'Troika'[5]. Starting in January 2021, the NCTV produced a regular summary of this input, known as the Societal Status and Implementation Assessment *(Maatschappelijk beeld en uitvoeringstoets)* which was forwarded to the main decision-making bodies, such as the *Catshuisoverleg,* whose meetings were also attended by representatives of the relevant advisory agencies for social and economic policy analyses.

This broader-based approach to the advisory process devoted attention to the practical implementation of the measures under consideration. Were they practicable and feasible? The NCTV actively consulted the public sector organizations which would be responsible for implementation, such as the Association of Netherlands Municipalities (VNG), the National Police and the safety regions. In addition, members of the Cabinet maintained direct contact with the National Police and the Safety Council (*Veiligheidsberaad*) to discuss possibilities and pre-empt any difficulties in the

4 Health Council of the Netherlands, Annual Report 2021 https://www.gezondheidsraad.nl/over-ons/organisatie/verantwoording/jaarverslag-2021/de-gezondheidsraad [Retrieved 15 August 2022].

5 The 'Troika' consists of the Ministry of Finance, the Ministry of Economic Affairs and Climate Policy, and the Ministry of Social Affairs and Employment.

enforcement of measures such as the curfew. Similarly, policy departments were in contact with representatives of the relevant sectors to discuss the form and implementation of the measures.

Alongside the advice returned by the OMT, non-epidemiological advice (societal, economic and implementational aspects) formed important input for the Cabinet's deliberations about the school closure and the curfew. In this context it is notable that, in November 2020, the Cabinet took account of knowledge regarding the adverse effects of re-closing schools when arriving at its decision to keep the upper grades of secondary education open, despite the OMT's advice to consider their closure.

Promptness in availability of advice on vaccines
In early 2020, the Minister of Health asked the Health Council to produce an advisory on the vaccination strategy. The Council published its initial report in November 2020. It was in early September 2020 that the Vaccinations Committee first convened to consider the questions presented in the 'request for advice' and to examine the scientific information gathered thus far. The Dutch Safety Board notes that the majority of the peer-reviewed scientific articles on which the Health Council based its deliberations had been published some time before this meeting. A preliminary advisory, based on the studies that were available in September 2020 and issued shortly thereafter, could have helped those responsible for preparing and implementing the vaccination programme, such as the RIVM, the Municipal Health Departments (GGDs), general practitioners and campaign communications staff, gain a better understanding of the ethical and legal implications at play.

Uncertainty and the use of scenarios when advising on vaccination strategy
In its initial report, the Health Council listed a number of uncertainties which prompted caution in its recommendations. They include the properties of the vaccine, the number of doses available, the epidemiological situation in the Netherlands, the measures then in place, societal choices with regard to vaccine take-up, and the practicability of the proposed vaccination campaign. Because there were no vaccines for which adequate information was available at this time, the Health Council was unable to answer all the questions included in the 'request for advice'. It was dependent on the completion of the clinical trials and the final assessment by the European Medicines Agency (EMA). Only then would the Health Council be able to issue its follow-up advice about the use of specific vaccines.

By remaining close to the scientific information available at that time, the Health Council showed a thorough and conscientious approach. However, this approach gave decision-makers and implementing parties little opportunity to anticipate changing circumstances. The dynamics of a crisis situation as well as the urgency and adaptability such a situation demands are not entirely compatible with the procedures and character of the Health Council.

Uncertainty about the effectiveness of measures
As in the spring of 2020, the OMT was once again hindered in returning advice on the proposed measures by the uncertainty surrounding their likely effectiveness. In the spring that uncertainty was largely due to the fact that the measures on which the OMT

had been asked to advise had never previously been implemented in the Netherlands, at least not on the proposed scale. As a result, very little knowledge about their effectiveness was available. The same lack of knowledge was present during the period considered in this sub-report, partly because different measures, such as a curfew, were now being proposed, and partly because the Cabinet had taken no steps to monitor the effectiveness of the earlier measures. The effects of individual measures which form part of a larger package would be too difficult to quantify. However, this argument seems arguable given that this type of study was indeed undertaken in other countries. The OMT and the Cabinet based their consideration of a curfew on the results of foreign studies which were able to measure the impact on the reproduction number (R), albeit with some degree of uncertainty, even though the curfew was part of a larger package of measures in the countries concerned.

Monitoring and evaluating the effects of measures can help to ascertain whether they work and, if so, to what degree. This will support future decision-making which involves selecting certain measures above others,[6] and any assessment of the proportionality of a given measure. An understanding of the effects of interventions such as the curfew and closing schools will enable future governments to determine whether positive effects in terms of virus control outweigh negative effects such as social isolation or learning deficit. In the case of stringent measures which impinge upon the constitutional rights of the individual, such as a curfew, these are important political considerations.

Advisors to the Cabinet provide guidance in interpreting uncertainty. The Dutch Safety Board notes that there are gradations in the scientific substantiation of advice in which uncertainty plays a role. As stated in our first sub-report, advice given by a scientist is not necessarily scientific advice. Sometimes, peer-reviewed studies can help to support an advisory, as in the case of the articles on which the Health Council based its vaccination strategy. However, scientific knowledge is often unavailable and the situation remains uncertain even for scientists. If they are unable to rely on studies conducted by themselves or colleagues, their role is primarily that of an expert who can contribute to the discussion about proportionality, side-effects and plausibility. The role of 'expert who gives expert opinions' is regularly seen during crisis situations in general, and the COVID-19 crisis in particular. The OMT fulfilled this role when advising on the introduction of a curfew, for example. The effect of the curfew in the Dutch situation was, as the OMT stated, uncertain. Nevertheless, based on experience and sound judgement, the OMT was able to conclude that the measure would have some effect, whereupon it advised in favour of its adoption.

Uncertainty about vaccine development

The development of vaccines was also shrouded in scientific uncertainty; the new vaccines had yet to prove their effectiveness in practice. At the European level, member states worked together to expedite development and testing. The process was accelerated by the adoption of a 'rolling review'. The EMA weighed the risks of fast-tracking the process against the interests of protecting the population. For the public,

6 E.g. the likely effect of closing bars and restaurants but not commercial health clubs, or of closing schools but not sports facilities.

however, it was impossible to ascertain whether concessions had been made or short-cuts taken. Some people began to express doubts concerning the safety of the vaccines.

10.3 Decision-making in the face of ever-changing circumstances

Despite the experience gained and the adoption of a broader advisory structure, the Cabinet once again faced difficult choices in the period from September 2020 to July 2021. As in the first six months of the crisis, three key objectives underpinned its decisions: 1) monitoring the spread of the virus; 2) preventing the healthcare system from becoming overburdened, and 3) protecting the most vulnerable members of society.

Dealing with uncertainty
An effective response to the crisis required not only advisors but also decision-makers to address many uncertainties. The effects of the measures formed one such uncertainty. The government opted to 'follow the science'. In the case of the facemasks, this means that the question of whether it is a good intervention is narrowed down to the question of whether the effect of facemasks can be scientifically proven. Because the OMT was unable to answer this question due to a lack of evidence, this measure was not introduced for a long time. The Cabinet did not make any broad political consideration of other advantages or disadvantages, which were also subject to uncertainty. Similarly, the Cabinet relied heavily on OMT advice and data when deliberating the introduction of a curfew. The OMT drew attention to the uncertainties, which played little part in the decision-making process. As a result, the introduction of the curfew appeared to be inevitable, even though the consideration of its proportionality had been based on uncertain information. However, it falls to politicians to make decisions despite whatever uncertainty exists. Within the democratic process, it is only the politicians who are accountable for those decisions.

'Code Black' as a red line
The Cabinet regarded 'Code Black' – the overburdening of acute healthcare services – as a red line which must not be crossed under any circumstances. The ongoing objective was to maintain adequate capacity at all times. Avoiding a Code Black situation therefore weighed more heavily in the decision-making process than the possible societal side-effects of the proposed measures. If overburdening of acute healthcare seemed likely, the OMT would become the dominant advisory body to the Cabinet, not least because there is no other team within the crisis organization which can provide input about non-medical aspects. In line with the findings in the first sub-report, the period under review also often saw acute problems taking priority over longer-term threats. Once the limits of the healthcare system come into view, they form the key, if not sole, focus of crisis policy. Under these circumstances the decision is made to close primary and secondary education, for example, when the OMT raised the alarm about epidemiological developments in mid-December 2020. The new 'alpha' variant emerged shortly thereafter, of which it was unknown how infectious it was or whether it was more likely to cause serious illness. The Cabinet decided to implement new measures such as the curfew which came into effect in mid-January 2021.

'Vulnerable' as an umbrella term

Another important objective was to protect vulnerable members of society. A significant number of people living (at home) with a chronic condition or disability considered themselves to be 'medically vulnerable' but did not believe that their interests were taken fully into account by the government. In its first sub-report, the Dutch Safety Board concluded that the Cabinet focused primarily on vulnerable patients in hospital, while insufficient attention was given to those in residential care such as nursing homes. During the later phase of the crisis, it again became clear that the Cabinet did not apply clear definitions which would support policy in respect of vulnerable persons. The term 'vulnerable' was applied differently by virtually every sector. In its initial advisory of 20 November 2020, concerning the roll-out of the vaccination strategy, the Health Council defined vulnerable persons as "medically vulnerable groups at increased risk of more serious illness or death". In practice, this included anyone over the age of 60, those with specific serious conditions, persons with an intellectual disability living in residential care, and nursing home patients. This definition excluded people with chronic conditions not listed, who would therefore not be among the priority groups for vaccination. This not only led to confusion and incomprehension, but is also to the (feeling of) being unfairly disadvantaged.

Elsewhere, other definitions of 'vulnerable' were applied. In parliamentary papers, for example, the group of 'vulnerable persons' includes senior citizens in residential care, persons with a mental or physical disability living in a care institution, and the homeless. In the education sector, the term 'vulnerable' is reserved for children living in a precarious domestic situation, those with a clear requirement for additional support, and children with psychiatric or psychological problems.

In a period in which the focus is on vaccinations and measures to protect the 'vulnerable', it is desirable for there to be a clear definition of what decision-makers and advisors actually mean by this frequently used word. If each forum or body applies different definitions, and crisis meetings resort to vague generalities such as "the vulnerable must be protected", there will inevitably be a lack of clarity. The number of people who consider themselves to be vulnerable, due to some chronic condition or disability, is greater than the number who fall into the high-risk groups defined by the Health Council (on the basis of an elevated risk of serious illness or death). If the various forums expressly agree which people they are referring to, this will facilitate the process of operationalizing policy for those groups, whether they will be affected by the measures or merely wish their situation to be acknowledged.

10.4 Implementation under changing circumstances

The organizations which help in the implementation of the measures possess much practical knowledge with regard to what will work and what will not. There is a clear role for 'front-line' organizations, such as teachers' unions, mayors, and the National Police, in the decision-making about school closures and the curfew, for example. Their involvement is crucial.

Representing interests in times of crisis

Throughout the COVID-19 crisis, government representatives maintained contact with numerous special interest groups, from patient associations to sector federations. This contact helped ensure the smooth implementation of the measures because the various parties were closely involved in planning and preparation. The education sector provides a good example. The Minister for Primary and Secondary Education was in close contact with the sector at all times, including the period during which school closures had been proposed by the OMT. This contact ensured that the measure could be implemented as smoothly as possible, with due attention given to aspects such as remote learning and day-care for the children of key workers. The Ministry of Education, Culture and Science (OCW) worked alongside the sector to produce so called service documents and protocols which offer schools practical guidance to maintain the highest possible standard of education during the crisis period.

The involvement of a large number of parties has both advantages and disadvantages. Broad consultation about potential measures brings a higher risk of information leaks. On more than one occasion, such leaks prompted people to anticipate decisions and behave in a way that was the very opposite of what the measures were intended to achieve. For example, people would rush to the hairdresser or the shops just before a new round of closures was officially announced.

Unless all interests have equal access to the Cabinet, there will inevitably be some sectors whose voice is heard above the others. This detracts from the sense of fairness in society. In its first sub-report, the Dutch Safety Board notes that nursing homes were unable to obtain adequate supplies of personal protective equipment (PPE) because the 'cure sector' was more effectively represented at government level than the 'care sector'. We now note that various well-organized professional associations within the healthcare sector were able to exert enough influence to persuade the Minister of VWS to change the 'running order' of the vaccination programme to prioritize frontline health workers. Organizations such as *Ieder(in)*, the network for people with a chronic condition or disability, were not in a position to do likewise on behalf of patient associations.

Uncertainty regarding administration and logistic requirements for vaccines

The development of vaccines was a neck-and-neck race between several pharmaceutical companies, with considerable uncertainty regarding the (interim) results of clinical trials, marketing authorization and delivery. At the start of the vaccination campaign, it was far from certain that vaccines would be available. The manufacturers could not guarantee production capacity or whether the number of doses ordered would actually be delivered on the agreed dates. A vaccine that becomes available in the Netherlands somewhat later but in far larger quantities would for example prompt the modification of the priority groups within the vaccination strategy. Moreover, each vaccine had advantages and disadvantages for certain target groups. For this reason, the Health Council advised that the vaccines should be allocated to clearly defined target groups.

The Dutch vaccination campaign had to be adjusted when it became clear that the BioNTech/Pfizer vaccine would become available somewhat sooner than the AstraZeneca vaccine. In this context, it is notable that both the Ministry of VWS and RIVM had assumed that the AstraZeneca version would be the first to be approved, making no allowance for

the possibility that some other vaccine, possibly with different storage or administration requirements, would win the race. The steadfast assurance with which the Ministry of VWS and RIVM prepared for the roll-out of the AstraZeneca vaccine via general practitioners was based on the -'that's how we've always done it'- thinking. Familiar structures and procedures offered a handhold in this extensive, complex operation. As a result, insufficient attention was given to contra-indications and alternative options. In November 2020, the Ministry of VWS and RIVM seemed to be taken by surprise when the combination of an extremely low storage temperature and large packaging units (which could not be split into smaller units) proved incompatible with the current plans, even though the manufacturer had announced the storage requirements several months previously. Those requirements mean that the BioNTech/Pfizer vaccine was less suited to distribution via the finely-meshed network of general practitioners. A sudden change of plan was necessary; the success of the subsequent vaccination was due to the involvement of the GGD sector association GHOR Nederland (Medical Response Organization in the Regions). Through the COVID-19 Programme Organization (CPO), GGD GHOR Nederland retained the services of external experts in logistics and planning. Working alongside local GGD offices, the CPO quickly managed to put the necessary large-scale facilities in place and vaccinations with the BioNTech/Pfizer vaccine could begin in early January 2021.

Once the vaccination campaign was underway, the Ministry of VWS, RIVM and the CPO faced numerous challenges. It was difficult to anticipate changes to the order in which vaccines were delivered, which would have a knock-on effect where the vaccine available on a given date was not suitable for certain target groups. This led to many complications in day-to-day practice. The organizations adopted a reactive approach, taking prompt action when a change actually occurred.

10.5 Communication and public support during a protracted crisis

In order to manage the COVID-19 crisis, it was essential that members of the public adopted the government's recommendations and complied with the various measures. Behaviour had to be modified in order to check the spread of the virus. As in the early period of the crisis, government communication played a crucial part in the crisis management approach, the intention being to encourage behavioural change. During the period under review, government communication was concerned not only with the measures that the Cabinet had advised or mandated, but also attempted to encourage people to come forward for vaccination. Because vaccination is an individual choice, achieving a satisfactory vaccine coverage rate ('take-up') requires willingness on the part of the individual and general confidence in the government's approach.

Communication from the Cabinet: announcement of vaccination campaign
In the Netherlands, the first COVID-19 'jab' was not administered until 6 January 2021. Public opinion was that the country was trailing behind the rest of the European Union. The necessary preparations that the GGDs had unexpectedly been called upon to make, meant that the programme could not begin any sooner. The first, well-publicized, vaccinations in a number of neighbouring countries were, according to the Minister of VWS, largely 'for show'. Vaccination programmes in those countries slowed considerably

thereafter because further preparations were required or because supplies of vaccines were disrupted. The impression that the Netherlands got off to a slow start (which is true if we consider only the starting date) became entrenched in the collective consciousness and undermined confidence in the vaccination programme. This dissatisfaction persisted, even though the programme quickly built pace. Within a few weeks, the vaccination rate was no longer lagging behind that of many other European countries. The Dutch Safety Board concludes that the public judged the Netherlands' approach in terms of performance in a race: frontrunners are good, stragglers are bad. As the vaccination programme in the United Kingdom passed various milestones, the Dutch public came to regard it as the standard against which their country's programme should be judged – until some other country moved into pole position. These momentary 'snapshots' of the situation say very little about the effectiveness of the overall vaccination campaign.

Communication from the Cabinet: 'Dancing with Janssen'
The campaign encouraging people to get vaccinated stressed that they should do so not only for themselves but also, and primarily, for others. This raises the question of whether such an appeal to the community spirit was greeted with equal enthusiasm by all groups within society. The results of the 'dancing with Janssen' approach suggest that many people were motivated to come forward not only to protect their own health and safety, but also to regain the individual freedoms that vaccinated status conferred.

The Minister of VWS stated that the Janssen vaccine was ideal for young people. It required only one injection, whereupon they would be ready for the summer and the various music festivals held in the Netherlands each year. He coined the slogan '*Dansen met Janssen*' – literally, 'Dancing with Janssen'. The minister's remarks ignore the fact that the Janssen vaccine, like the others, takes some time to provide an adequate level of protection.[7] The roll-out of the Janssen vaccine coincided with the release of the CoronaCheck app, which allowed people to prove their vaccination status and thus gain admission to bars, clubs and other entertainment venues. Those who received the Janssen vaccination were immediately given a QR (Quick Response) code to be displayed in the CoronaCheck app. In the case of the other vaccines, the code was issued only after the second injection.[8] The 'Dancing with Janssen' campaign also coincided with the relaxation of restrictions on hospitality sector opening hours, leading to unintended adverse consequences. The number of reported infections showed a marked surge within a very short period. Looking back on this course of events at a press conference held on 21 July 2021, the Minister of VWS and the Minister President admitted that they had made 'an error of judgement'.[9]

Vaccination take-up
Public communication in general, and the campaign *Ik stroop mijn mouw op* ('I'll roll up my sleeve') in particular, devoted much attention to people who were reticent to come forward for vaccination, the aim being to win their confidence. For the Ministry of VWS, transparency is an essential element of efforts to engender confidence in the vaccination

7 From 1 July 2021, the interval between vaccination and obtaining a green tick in the CoronaCheck app became two weeks. In August 2021 this was further extended to four weeks.
8 See also response to Parliamentary Questions, in *Proceedings II* 2021/22, no. 565.
9 This press conference took place after the period covered by the Dutch Safety Board's investigation. National press conference, 12 July 2021.

campaign and to increase vaccination take-up. This campaign specifically addressed the questions and doubts that people might have. The government explained that it had been possible to fast-track the vaccine development process by conducting various phases in parallel, with results evaluated at several interim moments. When the use of the AstraZeneca vaccine was suspended due to concerns about side-effects, the Ministry of VWS stated that it was understandable for there to be questions and opened a website and telephone helpline to provide further information.

As the vaccination programme progressed, a better understanding of regional differences in the take-up rate could be gained. Regions in which take-up was lower than the national average could be identified and targeted. Despite a reworking of the campaign material in easier-to-understand Dutch and several other languages, it was clear that the message was still not reaching certain groups to the desired extent. Other channels were needed to inform people for whom the standard approach did not work. In June 2021, communication with these people began through a finely-meshed network of neighbourhood meetings, GPs' practices and mobile vaccination facilities. It is possible that this approach would have improved outreach even more if implemented somewhat earlier, but that would have meant that fewer vaccinations could have been administered elsewhere, especially while the vaccines themselves were in short supply. From that perspective, it is understandable that efforts were first directed to the more efficient, large-scale vaccination centres, with appropriate communication. It would thereafter become possible to extend outreach once the vaccines were more readily available.

Public support: a fragile process

Gaining and maintaining public support is a fragile process but one over which the government has considerable influence. In a period marked by fluctuating infection rates, the Cabinet's statements also fluctuated from optimistic when the situation appeared to be improving, to pessimistic when it did not. The Dutch Safety Board concludes that, in the interests of maintaining support and anticipating the recurrent waves inherent in a pandemic, it is desirable to avoid showing too much optimism when the figures are moving in the right direction, or when the introduction of a vaccine seems imminent. It is preferable to remain realistic, conceding that a pandemic situation is always changeable. This will help to prevent any false expectations which could make later developments difficult to explain. If unduly optimistic, the Cabinet could well exacerbate the dilemma mentioned in a previous chapter, whereby early intervention creates societal opposition (because people feel overly reassured) while waiting too long might necessitate more stringent measures at a later date. Society demands clarity, but in a pandemic there is always the possibility of new circumstances which will alter attitudes and insights. The Cabinet must remain adaptable, stay alert, and continue to stress that the situation could change, perhaps due to the emergence of new variants of the virus, whereupon it is impossible to exclude the necessity of further measures.

In December 2020 and January 2021, the Minister President and the Minister of VWS described the vaccine as "the light at the end of the tunnel". In April 2021, they said that "jab by jab, a return to normality is coming ever closer." Such statements lacked nuance; it was still uncertain whether the vaccination prevented someone with COVID-19 passing it on to others. When it was later announced that a high vaccination coverage rate would

not automatically mean that no further measures were required, some members of the public felt a sense of disillusionment which did not increase support for the government's approach.

Public support: get people on board
To prevent dwindling support, it is desirable for the government to communicate clearly and consistently about how a measure will help bring the crisis under control. This was the case with interventions such as the facemask requirement and the curfew, which were eventually introduced after some weeks of insisting that the Netherlands would not go down this route. Similarly the communication about the closure of schools also showed the importance of sound argumentation and explanation. When the Minister of VWS said that the Cabinet hopes that parents would spend more time working at home because their children were unable to attend school, a large section of the public gained the impression that, although the measure purported to protect children, it was actually intended to influence the behaviour of their parents. The statement caused considerable unrest among both parents and schools. People began to ask whether there might be other ways in which to encourage working from home, reduce travel and avoid unnecessary contacts.

There were points at which the Cabinet had to announce that certain measures would be extended. Here too, it is desirable to state clearly the basis on which the decision was made, whether that be the infection rate, compliance, public support, the vaccination take-up rate, or any combination of factors. The Cabinet should also communicate the degree to which the measures have been effective (with evidence) and, where necessary, why the government is now going back on its previous undertaking that restrictions would be lifted on a certain date.

Public support: media appearances
Public support for the measures and confidence in the government will also be adversely affected if members of the formal crisis management structure criticize government policy during media appearances. During a talk show broadcast in April 2021, for example, the chair of the National Coordination Centre for Patient Distribution (*Landelijk Coördinatiecentrum Patiënten Spreiding*; LCPS) stated that the recently introduced curfew had shown no effect on the number of hospital admissions. For many, this remark was incomprehensible in the light of the severity and duration of the measure, quite apart from the fact that the effects of measures had never actually been measured. Another example concerns the OMT member who, despite his involvement as an advisor, claimed to be 'astonished' by the Cabinet's decision to close schools, contending that it would cause 'too much damage to young children'.

10.6 Learning ability

Learning from past experiences
In the public debate, the Mexican flu pandemic of 2009 was often used as a reference point for the COVID-19 crisis. However, a direct comparison is not possible for several reasons. First, Mexican flu was far less widespread in the Netherlands than COVID-19. Moreover, at the time of the 2009 outbreak, vaccines to protect against Mexican flu were

in plentiful supply. Vaccines had yet to be developed when COVID-19 emerged. Even when they became available, they were in short supply and deliveries remained unpredictable for several months.

Despite these differences, the Dutch Safety Board notes that the member states of the European Union had drawn lessons from their joint response to the Mexican flu pandemic. During the Mexican flu pandemic they proposed a system of centralized purchasing for vaccines. At that time this did not come to fruition, whereupon there was competition between the member states. In 2014, the European Commission therefore devised a procedure for joint purchasing of (existing) pharmaceuticals and medical aids. Although this procedure could not be used for vaccines that had yet to be developed, experiences with Mexican flu and in the development of the procedure itself have had a clear added value. The process fostered willingness on the part of EU member states to take joint action in matters of public health. During the COVID-19 crisis, this resulted in joint purchasing of vaccines, thus preventing competition between member states and ensuring maximum access to vaccines throughout the European Union.

The implementation of the COVID-19 vaccination campaign made very little use of lessons learned from the 2009 situation. In the wake of the Mexican flu pandemic, the Ministry of VWS requested GGDs to produce regional contingency plans for mass vaccination. However, there has never been any overarching national plan. During the COVID-19 crisis, GGD GHOR Nederland was therefore required to collate and adapt the various regional plans to form a unified national approach.

With regard to measures, the parties were less able to rely on experience gained during the Mexican flu pandemic than might have been the case. Had all 'points for attention' identified by the evaluation of that situation been followed up, insights which would assist in the deliberation of comparable issues, notably the use of restrictive measures, may have been gained. Following the Mexican flu pandemic, for example, it was decided to undertake a study of the societal costs and benefits of closing schools. This study was never conducted, whereupon an integrated overview of the likely costs and benefits of applying this measure during the COVID-19 crisis was not available. Another finding of the evaluation of the response to the Mexican flu pandemic was that the contingency plans included no detailed operational instructions for the closure of schools. This omission was never rectified, whereupon the Ministry of OCW was required to produce various sets of guidelines during the early days of the first school closure.

Learning during the crisis

In a protracted crisis such as the COVID-19 pandemic, the crisis organization can also learn during the crisis. The Dutch Safety Board notes that the parties concerned did indeed make efforts to draw lessons during the period under review. A few months into the crisis, for example, the government realized that it was necessary to adapt its communications in order to reach low literate or non-native speaking members of society Lessons drawn from the first school closure, in the spring of 2020, could be applied during the second closure. All parties demonstrated considerable flexibility and adaptive ability, not least in the optimization of the vaccination process at the large-scale vaccination centres and the manner in which the overall vaccination programme was managed.

The Ministry of VWS took a proactive approach to learning. In mid-2020, at the request of the Cabinet and parliament, the ministry introduced a series of broad-based evaluation sessions involving experts from various disciplines. Although these 'lessons learned' sessions represented a rapid mobilization of knowledge and experiences, they did not lead to fundamental organizational adaptation of the ongoing crisis approach. One of the recommendations made by experts at the sessions was that decision-making should take greater account of societal and economic factors. As noted earlier in this chapter, during the second phase of the crisis, decision-makers had increasing insights into societal and economic effects than had been the case during the first six months. Another recommendation from the experts concerned the incorporation of behavioural science expertise when considering potential measures. The Dutch Safety Board notes that research in this field did indeed play a more important role during the period under review than in the earlier phase of the crisis. This is demonstrated by greater prominence accorded to the Corona Behavioural Unit of the RIVM as an advisor to the Ministry of VWS' *Ik stroop mijn mouw op* ('I'll roll up my sleeve') campaign. One final, particularly noteworthy, recommendation made by the experts at the Lessons Learned sessions was to apply a region-by-region approach and avoid rushing into a generic nationwide lockdown. Wherever possible, a finely-meshed local approach was considered preferable. In the summer of 2020, the Cabinet's standpoint was that, in line with the advice of these experts, any surge in infections should be 'stamped out' on a regional basis. When national infection figures then showed a sharp increase in late September 2020, it was clear that this regional approach did not work in practice due to the mobility of the public and the contagious nature of the virus. It was at this point that the crisis response once again became a central government responsibility.

The crisis structure

The crisis structure put in place in the summer of 2020 remained unaltered throughout the period covered by this sub-report. Ministers convened as the *Ministeriële Commissie COVID-19* (MCC-19) and were advised by the *Ambtelijke Commissie COVID-19* (ACC-19). Consultation platforms such as the *Catshuisoverleg* and *Torentjesoverleg* also remained in place. Within the various ministries, however, certain changes were made. The Ministry of VWS instituted the Programme Directorate COVID-19, the intention being to prevent the existing organization becoming dominated by the crisis which, if protracted, could demand all capacity. All relevant activities would now be brought together within the Programme Directorate. The Health Council also made some organizational changes to support its advisory role. It adapted its processes and procedures so that it would be able to respond to requests for advice more promptly.

Embedding the lessons learned

The Dutch Safety Board has identified a significant weak point in terms of the ability to learn from crises, and that is the tendency for the lessons learned to be quickly forgotten. One notable exception is European cooperation in vaccine purchasing, which is a direct result of experiences gained during the Mexican flu pandemic. Nevertheless, if the lessons learned are not adequately embedded within organizations, there is a risk that any future long-term crisis with national impact will require 'the reinvention of the wheel'. Practice has shown that organizations quickly forget the lessons learned because, once the hectic period of the crisis itself has passed, staff return to their everyday routine, or may leave the organization altogether. This can lead to the loss of relevant knowledge

and experience. Not only must the lessons be properly recorded, there must also be ongoing strategic attention to knowledge management by all concerned, from ministry teams to the executive agencies, planning agencies, regional authorities and municipalities.

11 CONCLUSIONS

This chapter presents the conclusions of the Dutch Safety Board's investigation of the government's response to the COVID-19 crisis during the period 1 September 2020 to 1 July 2021. These conclusions are mainly concerned with the implemented measures (the facemask requirement, curfew and school closure), and the vaccination programme. It is important to examine the points from which lessons can be drawn in order to optimize the response to any future protracted crisis situation. The most important learning points and conclusions are distilled to form a number of recommendations.

Preparation of the vaccination campaign was too focused on a single scenario
During the preparatory phase of the vaccination programme, it was assumed that all vaccinations would be given in the customary manner at small-scale locations (such as GP practices or care home doctors). This option was appropriate to the scenario in which the AstraZeneca vaccine would be the first to become available in the Netherlands. The parties responsible were inadequately prepared for any alternative scenario involving another vaccine, perhaps with different storage or administration requirements. The BioNTech/Pfizer vaccine was eventually the first vaccine to be delivered. Due to its storage requirements and packaging form, this vaccine was not suitable for distribution via the GP network. Had they devised alternative scenarios, the Ministry of Health, Welfare and Sport (VWS), Municipal Health Services (GGDs), the National Institute for Public Health and the Environment (RIVM) and the COVID-19 Programme Organization (CPO) would have been able to pre-empt the significant degree of flexibility demanded by the large-scale vaccination programme. After a relatively late start to the programme, the Netherlands' vaccination rate lagged behind that of some neighbouring countries. The difference was quickly made up during the first quarter of 2021, largely through the sterling efforts of GGD GHOR Nederland and the GGDs.

Cabinet delayed action in the face of dwindling public support
Support for the measures was high among the majority of the population during the first six months of the COVID-19 crisis. However, public support could no longer be taken for granted during the second phase. Compliance began to decline. "We are done with the virus, but the virus is not yet done with us," the Minister of VWS said on a number of occasions. The infection rate began to show a marked upturn in 2020 but the Cabinet opted to 'wait and see'. It was not until late September that the Cabinet advised the use of facemasks in enclosed public areas. At this point, the Cabinet faced a dilemma: acting too soon could attract societal opposition, but waiting too long might mean that more stringent measures would be required at a later date. During the period, the Cabinet relied heavily on the individual's sense of personal responsibility and the willingness of people and companies to comply with behavioural advice. Due to the decline in support, however, this approach was ineffective and it did become necessary to introduce more stringent measures. Communication which remains realistic and makes clear that the situation in a crisis can change very quickly is desirable in order to avoid raising false expectations which can make it difficult to explain later changes of course.

Safety and thoroughness prioritized in vaccination programme

The process of developing, assessing and authorizing the use of vaccines was completed more quickly than usual. This was due to the use of extra resources, both human and financial, and by undertaking certain stages of the process in parallel. If and when any concessions were made in the interests of swiftness, thorough risk assessments were conducted by several parties. In the implementation of the vaccination programme, safety and thoroughness were the priorities which underpinned the decision not to administer the first vaccinations in December 2020 (even though there was public pressure to do so in order to keep up with neighbouring countries) but in January 2021, once the national registration system was fully functional. The Minister of VWS took careful note of the Health Council's advice concerning the side-effects of the AstraZeneca vaccine, whereupon his subsequent decisions were accompanied by sound argumentation. This demonstrates a thorough and conscientious approach in the interests of vaccine safety.

Uncertainties rarely explicated or communicated

The period covered by this sub-report was marked by uncertainty in several areas, such as the possibility of new variants of the virus, the effects of the measures, when a vaccine would become available, and how effective it would prove. As noted in the conclusions of the first sub-report of the Dutch Safety Board's investigation, it is important to explicate and communicate such uncertainties to the public. Although the Outbreak Management Team (OMT) did precisely that in its advice on the desirability of a curfew, the uncertainties seemed to disappear in the Cabinet's decision-making or subsequent communication. As a result, the introduction of the curfew was presented as inevitable, the only option, yet it was a consideration of advantages and disadvantages based on uncertain information. The unequivocal tone of the Cabinet's announcements about the introduction, extension or withdrawal of measures was not in keeping with the uncertain, highly changeable situation. On several occasions, promises made earlier could not be kept. If public support is to be maintained, it is prudent to be realistic about uncertainty.

Demarcation of roles

As stated in the first sub-report of this study, balanced decision-making during a crisis demands a clear demarcation of roles. When formulating policy, the Cabinet sought guidance in the scientific evidence offered by the advisory bodies. This would appear to be a clear line, but in practice a purely political deliberation of uncertain advantages and equally uncertain disadvantages was not always made. Moreover, science is unable to remove all uncertainty, which means that the advice of scientists is often in the form of an 'expert opinion'. The OMT's advice frequently incorporated interests and perspectives which transcend the medical and scientific knowledge possessed by its members. There was no clear demarcation between the matters on which the OMT was and was not expected to advise.

More consideration of broader societal effects but not at the same level

During the period under review, societal and economic effects were given greater consideration during decision-making meetings than in the first six months of the pandemic. Similarly, greater attention was devoted to implementation and practicability. Nevertheless, as pressure on acute healthcare services increased, epidemiological advice was given greater importance than non-epidemiological advice. For a long time the

school closure and the curfew had been ruled out as political options. They remained 'off limits' until the 'Code Black' situation came into view. Only then did the Cabinet introduce these measures. At this time, the epidemiological advice of the OMT was dominant in the crisis approach. Extensions of the measures in place became the rule rather than the exception, sometimes contrary to the promises made earlier.

Varying definitions of 'vulnerable'

As in the first six months of the COVID-19 crisis, the protection of vulnerable persons was one of the Cabinet's key strategic objectives. Within all the various measures and the vaccination strategy, the word 'vulnerable' became something of a vague umbrella term. Policy with regard to 'vulnerable persons' varied from one sector to the next. The decision-making and advisory bodies applied various definitions, and those definitions might alter over time. There was a sizeable group of people who, although medically vulnerable, did not meet the definition applied in the running order of the vaccination programme. Many had gone beyond the government's early advice to restrict social contacts and had entered almost total self-isolation. When they were not given the priority they had expected, there were inevitably feelings of dissatisfaction and disbelief. In some cases, people felt that the government had unfairly discriminated against them in favour of those in the 'officially defined' high-risk groups.

Better use of grassroots expertise and experience

Compared to the first phase of the crisis, closer interaction between policy and implementation could now be seen. The Cabinet took implementation and evaluation into account when making decisions, and showed much confidence in the knowledge available in the field. This was demonstrated by the close involvement of representatives of the education sector in the planning and implementation of the school closure, and that of GGD GHOR Nederland, which took responsibility for the practical roll-out of the vaccination programme under a series of Service Level Agreements.

Targeted communication essential to ensure adequate outreach of vaccination campaign

The government's information campaign reached a large proportion of the general public. It focused on both those who needed little persuasion to get vaccinated and those who remained hesitant. It was due to this campaign that the vaccination take-up rate eventually reached 85 per cent (June 2022, based on the standard series of injections, excluding boosters). In some areas and among certain target groups, however, the campaign had less effect. Several villages and neighbourhoods had a relatively low take-up rate. In the summer of 2021, the GGDs therefore took to the road in mobile vaccination buses, while GPs and community organizations made concerted efforts to approach those people whom the national campaign had failed to reach.

Lessons learned from experiences but measures not evaluated

Many of the parties involved in the COVID-19 crisis showed significant adaptive ability and improvisational skills. This is true of both the organizations responsible for the vaccination programme and of the bodies and individuals which formed part of the crisis organization. Lessons drawn from the response to the Mexican flu pandemic were largely applied at the European level. Some lessons were not applied, some because they were less applicable to the COVID-19 situation. The main opportunities for learning therefore

presented themselves during the COVID-19 crisis itself. A number of initiatives were introduced to take advantage of such opportunities, such as the 'lessons learned' sessions organized by the Ministry of VWS. Stakeholders such as GGD GHOR Nederland and the GGDs were able to apply the operational experience they gained running the test centres to the vaccinations centres that followed. However, in preparation for a possible new wave the Cabinet did not undertake a thorough evaluation of the measures applied in the spring of 2020. Doing so may have aided preparations for any subsequent waves of infection. The insights provided by such an evaluation would better prepare the government for a situation in which similar measures have to be announced. The main points of concern identified by the Dutch Safety Board are: inadequate knowledge-sharing between organizations in different sectors, and the failure to record and embed the knowledge gained, both in the past and during the most recent crisis, to ensure its long-term usefulness.

Visiting address
Lange Voorhout 9
2514 EA The Hague
The Netherlands
T +31 (0) 70 333 70 00

Postal address
PO Box 95404
2509 CK The Hague
The Netherlands

www.safetyboard.nl