CONTROLLER AND AUDITOR-GENERAL
Tumuaki o te Mana Arotake

Ministry of Health: Management of personal protective equipment in response to Covid-19 follow-up

1 November 2024

Mr Sam Uffindell
Chair
Health Committee
Parliament Buildings
WELLINGTON

Tēnā koe Mr Uffindell

Follow-up to our 2020 report – Ministry of Health: Management of personal protective equipment in response to Covid-19

In 2020, our office independently reviewed the Ministry's management of national reserve supplies (NRS) during the early stages of New Zealand's response to the Covid-19 pandemic, with a particular focus on personal protective equipment (PPE).[1]

We made 10 recommendations to address the issues we identified.[2] The Ministry accepted the recommendations and said it anticipated implementing changes by the end of 2020/21.

In recent work on the public sector's response to Covid-19, we observed shortcomings in the national security, emergency, and health systems that could have affected the effectiveness of the Covid-19 response.[3] Some of these arose because previous review recommendations had not been implemented. We stressed that New Zealand must avoid what the World Health Organisation calls a cycle of "panic then forget" when responding to emergencies.

We are mindful that the health system has been restructured since we reviewed the Ministry's management of NRS in 2020. We have asked the Ministry to update us on its progress on implementing our recommendations and provide comment on its general readiness to respond to another pandemic.

The purpose of this letter is to summarise what we have been told and provide our comments. We have not carried out a separate assessment of, nor have we audited, the information provided.

We also note that your scrutiny plan for 2025/26 includes pandemic preparedness and hope that our observations can assist with the Health Committee's review.

Context

The health system maintains a strategic NRS of critical clinical items, including PPE, to ensure that health services have continued access to them during large or prolonged emergencies. The NRS includes PPE such as masks (surgical and N95), goggles, face shields, gowns, aprons, gloves, antivirals (Tamiflu and Relenza), and pre-pandemic vaccines (such as a vaccine for H5N1 "bird flu", which the Government has held in the NRS since 2006).[4]

Our 2020 review of how the Ministry of Health was managing PPE in response to Covid-19 found:

- There were gaps in national and regional emergency plans and the pandemic plan about how PPE would be procured and distributed to mitigate the risk of shortages.
- The Ministry did not regularly review district health boards' (DHB) plans to ensure that they were kept up to date.
- The Ministry was not well positioned to ensure that enough PPE was available to meet demand. The Ministry was responsible for monitoring and forecasting PPE usage and prioritising and allocating supplies. However, in early February 2020, the Ministry did not know what PPE stock the DHBs held in their reserve supplies or the condition of that stock, or have a system to forecast demand.
- The devolved system of managing and distributing PPE stock was inadequate.
- Before Covid-19, DHBs procured stock, including PPE, individually or regionally. This did not lend itself to effective procurement in a competitive and constrained market.
- Communication was unclear about who could access and use PPE supplies in the NRS.

Since we did our review, the health system has undergone significant restructuring. District health boards have been disestablished and their functions have been split across the Ministry of Health and Health New Zealand – Te Whatu Ora (Health NZ).

There has recently been media coverage about the pandemic potential of avian influenza and the risk that the virus could mutate to become more contagious in humans. In light of this, we also asked about anti-viral stocks and pre-pandemic influenza H5N1 vaccine, including when the Ministry last reviewed policies about what is held in the NRS.

We set out in Attachment 2 what the Ministry and Health NZ have told us about progress in implementing our 2020 report recommendations. For ease of reporting, we have grouped our recommendations into six main areas: updating plans; clinical guidelines; NRS planning, procurement, stock management, and maintenance; who can access NRS supplies; what is held in the NRS; and public reporting on NRS contents.

Our comments

Our overall assessment is that some progress has been made, but further work is required to address the recommendations from our 2020 report and to give the public assurance that New Zealand holds sufficient reserves for future emergencies.

The health system is better positioned than it was in 2020 to source, manage, and distribute PPE because these functions have been centralised in Health NZ. This offers efficiencies and may simplify forecasting demand and ensuring that procurement and supply matches that demand. Stock management processes have been strengthened to improve oversight of what is in the NRS and to reduce stock obsolescence.

Despite this, in 2023/24, $55.167 million of NRS supplies was written off. About $2 million of this included vaccine stock that had reached its expiry date and could not be rotated through hospitals because it would be used only in the event of a pandemic.

Health facilities can assess their emergency management and business continuity capability against a new Emergency Management Assurance Framework. The framework encourages a consistent approach to planning for, managing, and responding to risks, but will take time to embed before the benefits are fully realised. Similarly, a centralised Infection Prevention and Control (IPC) team to develop and disseminate clinical guidelines in an emergency will ensure that consistent advice is provided to the health sector and the public.

However, progress has not been consistent across all of our recommendations, including the need to update national plans and modelling to determine how much stock should be held in the NRS and who should have access to it. The Ministry attributes slow progress to the health sector reforms and, more recently, to reduced staff numbers.

The Ministry intends to review the National Health Emergency Plan (NHEP) by the end of 2025 if resources are available to support this work. The New Zealand Pandemic Plan underwent a limited update. We were told further changes are unlikely until the second phase of the Royal Commission of Inquiry into Covid-19 Lessons Learned - Te Tira Ārai Urutā reports in February 2026.

During Covid-19, a number of community based healthcare providers and government organisations sought access to PPE from the NRS. The NRS is intended primarily for the public health sector and the Ministry expects primary care, the public, community providers, and private businesses to source their own PPE supplies. The Ministry said that it *may* consider providing PPE supplies to primary care, other health and disability providers, and designated first responders in a large or prolonged emergency.

Given this situation, we consider it timely for the Ministry to reinforce the message that non-hospital based health and disability providers, government organisations, and private businesses are responsible for sourcing their own emergency PPE, to manage expectations well before the next emergency and to clarify any exceptions to this.

We also wanted to understand what changes had been made to what is held in the NRS. We found that NRS stock might not be aligned with potential demand. The Ministry told us it increased the amount of PPE stock in the NRS based on what it learned from Covid-19. Health NZ has recently purchased antiviral medication and pre-pandemic vaccines to replace expired and soon-to-expire stock.

However, vaccine stocks are still based on pandemic modelling and health workforce numbers from 2005. There has been slow progress in updating pandemic and workforce modelling to inform the quantities of antivirals and vaccines that need to be held in the NRS. New Zealand's population and workforce demographics have changed considerably since 2005.

For these reasons, there is a risk that there are insufficient antiviral or vaccine supplies to cover the current health workforce or the other people eligible to receive it under the current NRS policy. In our view, the Ministry needs to complete the modelling work with some urgency so that we can all be assured that there are sufficient vaccine and antiviral supplies.

Public information about the NRS is limited, and we encourage the Ministry to consider what information it can share so that the public can understand how well prepared we are for the next health emergency. This could include making more general information about what is in the NRS accessible and giving greater visibility of who would get priority access to NRS supplies, including vaccine and antivirals during an outbreak of avian influenza or other prolonged health emergency.

As a result of the health system reforms, Health NZ now has responsibility for managing and maintaining the budget for the NRS. The Ministry has a monitoring role and maintains an NRS technical advisory group to inform the operation of the NRS, but no budgetary control. With increasing pressure on staffing numbers and budgets, which the Ministry told us has delayed progressing recommendations from our report, there is a risk that emergency preparedness, including replenishing the NRS holdings in line with workforce changes and population increases, might be deprioritised.

We encourage the Ministry and Health NZ to progress refreshing the National Health Emergency Plan, to complete pandemic and workforce modelling, and to refresh the NRS guidance, to reflect current and future needs.

We would be happy to discuss with the Committee our comments on the progress in implementing our recommendations and to answer any questions the Committee might have. We also recommend that the Committee invite the Ministry of Health and Health NZ to present their progress on our recommendations in person.

We extend our thanks to Ministry's Emergency Management team for co-ordinating a combined response with Health NZ and responding to our questions. Because of the public interest in emergency preparedness, we intend to publish this letter on our website.

Nāku noa, nā

John Ryan
Controller and Auditor-General

Cc: Diana Sarfati, Director General of Health
Cc: Fepulea'i Margie Apa, Chief Executive Health New Zealand

Attachment 1: Recommendations from our 2020 report

We recommended that:

1. the Ministry of Health regularly review district health boards' healthemergency plans to ensure that they are complete, up to date, and consistent with each other and with the Ministry's overarching Emergency Plan. The plans need to be kept current and tested regularly;
2. the health emergency planning framework contain specific guidance about responsibilities for procuring and distributing personal protective equipment;
3. the Ministry of Health and district health boards, with appropriate health and disability sector representatives, review how clinical guidelines for personal protective equipment will be prepared or amended and consistently communicated during emergencies. The Ministry needs to ensure that demand forecasting, supply, and procurement are updated to take account of changes to guidance that have an effect on demand;

4. the Ministry of Health consider whether the roles, responsibilities, coverage, requirements, and planning assumptions for maintaining the national reserve of personal protective equipment are clear and remain appropriate;
5. the Ministry of Health work with other government agencies to determine how workers and providers not currently covered by the national reserve of personal protective equipment access it in the future and clarify roles and responsibilities for this change;
6. the Ministry of Health regularly reassess assumptions for the categories and amount of personal protective equipment to be held in the national reserve;
7. the Ministry of Health implement a centralised system for regular public reporting on the national reserve and implement periodic stocktakes to confirm the accuracy of the data and the condition of the stock;
8. the Ministry of Health reintroduce a requirement for district health boards to manage national reserve stock in such a way as to reduce the risk of stock becoming obsolete;
9. the Ministry of Health, in collaboration with district health boards, prepare more detailed operational plans and processes that describe how the national reserve system should operate (including distribution mechanisms) and test these as part of future national health emergency exercises; and
10. the Ministry of Health and the district health boards strengthen the procurement strategy by including an analysis of risks to the supply chain and have a plan to address those risks.

Attachment 2: What we were told in 2024

Updating plans (Recommendations 1 and 9)

In 2020, we recommended that the Ministry of Health have a process to regularly review DHB emergency health plans to ensure that they were kept up to date and consistent with one another and the Ministry's National Health Emergency Plan (NHEP), and to ensure that they were regularly tested.

The Ministry told us that restructuring in 2023 and 2024 has delayed work to review the NHEP but that it is recruiting staff to do the work and plans to start the review in early 2025. It plans to review its H5N1 pre-pandemic vaccine usage policy in 2025, if it can secure sufficient staffing to do this.

The Ministry of Health has carried out a limited update of the New Zealand Pandemic Plan to incorporate the changes to how the health system is structured, and told us that it has incorporated some of the early lessons from the Covid-19 response. Further changes are not planned until the completion of the Royal Commission of Inquiry into Covid-19 Lessons Learned - Te Tira Ārai Urutā in February 2026.

Health NZ is now responsible for co-ordinating regional and district health emergency plans. The Ministry told us that there are regular reviews and testing to make sure that operational capability and compliance with the National Civil Defence Emergency Management Plan Order 2015 and Pae Ora (Health Futures) Act 2022 is maintained. The Ministry has recently developed an Emergency Management Assurance Framework for health facilities to use to assess their emergency management operational readiness and their compliance with relevant legislation. The Emergency Management Assurance Framework contains eight core standards:

- leadership;
- planning;
- continuous improvement;

- capability, tools and resources;
- logistics and supply;
- whanaungatanga and co-ordination;
- communications; and
- business capability.

Publicly funded health and disability organisations are expected to self-assess their emergency management risk maturity by June 2025. Over the next five years, organisations are meant to work through a range of activities and achieve core standards under the Emergency Management Assurance Framework. As a consequence, it will take several years for the framework to be fully operational and for the benefits to be realised. The Ministry does not plan to publicly report on the health sector's emergency management readiness.

Clinical guidelines (Recommendation 3)

In 2020, we recommended that the Ministry of Health and DHBs, in conjunction with the health and disability sector, review how clinical guidelines for PPE would be prepared, amended, and communicated during an emergency. The Ministry told us that in an emergency, national clinical guidelines would be developed centrally by a new Infection Prevention and Control (IPC) team in Health NZ. Hospital IPC teams could develop local clinical guidelines but they must be consistent with any national guidance.

NRS planning, management, procurement, and maintenance (Recommendations 2, 4, 7, 8, and 10)

In 2020, we had concerns about the quality of information the Ministry had about what supplies were held in the NRS. Regular stocktakes were not happening. The Ministry did not know how much PPE stock was held in the NRS, know what condition it was in, or have a means of forecasting usage and demand. NRS PPE stock was not being managed in a way that aimed to reduce obsolescence (leading to waste and less stock available to use when it was needed). We were also concerned that there needed to be better guidance about how PPE is procured and distributed during an emergency and considered that more clarity was needed about the roles and responsibilities involved in maintaining the NRS.

After the 2022 health reforms, Health NZ is now responsible for funding, procuring stock for, managing, and maintaining the NRS.

The NRS PPE stock is now incorporated into hospitals' operational PPE, which enables NRS stock to be rotated and used as required and replaced, reducing the risk of stock obsolescence. Health NZ carries out regular stocktakes of the NRS PPE inventory and there is a complete check of all stock at the end of each financial year. Despite this, in 2023/24, $55.167 million of PPE and vaccine stock was written off.

The Ministry told us that it works with Health NZ to ensure that NRS processes and accountabilities are clear and aligned with emergency plans. The new Emergency Management Assurance Framework aims to monitor and provide oversight of how this is working.

The Ministry told us that it has started to review the NRS Management and Usage policy (2013)[5] to reflect the changes that have been made to how the NRS now operates and changes to relevant roles and responsibilities. The Ministry anticipates finishing this update in late 2024, and NRS access and distribution will then be included as part of health sector emergency exercises.

Who can access NRS supplies (Recommendation 5 and 9)

When the Covid-19 pandemic broke out, a number of community-based healthcare providers and other government organisations turned to the NRS seeking access to PPE. We recommended that the Ministry work with other government organisations to clarify roles and responsibilities relating to access to PPE in the future and review the requirements, coverage, and planning assumptions for maintaining the NRS.

The Ministry has said that the NRS was developed to ensure that the health and disability sector would have access to essential supplies in a pandemic, and that more recently this has extended to include large or prolonged health emergencies that place heavy demand on existing supply chains, or which impact the health system. The Ministry is responsible for directing Health NZ about how PPE should be prioritised and distributed amongst the health and disability sector. The current NRS policy allows the Director-General of Health to authorise response agencies and other organisations to receive supplies from the NRS if the National Incident Controller deems it appropriate.

The Ministry expects all organisations (private or public) to be responsible for managing their supplies and supply chain capacity to support "all reasonably predictable events" without recourse to the NRS. The Ministry's review of the NRS Management Usage Policy will include reviewing who is eligible to access the NRS and how access would be prioritised.

The Ministry is reviewing what is in the NRS (recommendation 6)

We were interested in understanding whether the Covid-19 pandemic had prompted the Ministry to reconsider both what is held in the NRS and the quantity of PPE stored. Pandemic modelling to inform what is in the NRS was last carried out in 2005 and New Zealand's population, demographics, and health workforce has changed considerably since then.

The Ministry has decided, based on its experience of the Covid-19 pandemic, that it needs to hold enough PPE stock in the NRS to last for 12 weeks of high pandemic usage, until such time as supply chains would recover and normal supply patterns recommence. The Ministry's 2022/23 annual report states that there were short-term breaches of this performance measure in July 2022 while Health NZ was waiting for orders to arrive, but that this measure has been met since then.

The Ministry has established the National Reserve Supply Technical Advisory Group (NRS-TAG) which is responsible for providing clinical oversight of the management and composition of the NRS. The NRS-TAG is responsible for updating the NRS Management and Usage policy and has commissioned pandemic modelling from the Public Health Agency (within the Ministry) to inform this and the composition of the NRS. The Ministry told us that pandemic modelling is under way and that it will have "a form of a model to work on by the end of the year".

The current quantities of H5N1 vaccine held (150,000 courses) is based on 2005 modelling, modified by a subsequent 2011 decision that reduced the amount of vaccine deemed necessary to vaccinate key response agency workers.[6] Priority groups to receive the vaccine include:[7]

- Health;
- Defence;
- Police;
- Border management agencies;

- Social support agencies;
- Corrections;
- Fire Services; and
- New Zealand-based international air crew.

The NRS-TAG has recently been reviewing what type of pre-pandemic vaccine and antiviral medication should be held in the NRS. As a result, the Ministry has chosen a new pre-pandemic vaccine that it considers better matches circulating bird flu strains.

Health NZ has placed orders to replace some of the expired NRS antiviral stock. Current antiviral holdings are based on estimates from 2010. Quantities held were further reduced in 2014, in part due to questions about the clinical utility of the antivirals. The Ministry told us that in 2021 Pharmac's Pharmacology and Therapeutic Advisory Committee Anti-infectives Subcommittee recommended decreasing the antiviral stockpile and adopting a more targeted approach to using antivirals in a pandemic. The groups it recommended prioritising for access to antivirals include hospitalised patients and patients in ICU, targeted prophylactic use for front line health care workers exposed to infectious people, and aged care patients.

The quantities of vaccine and antivirals held and who has priority access in a pandemic will likely need to change based on the outcome of new pandemic modelling, the NRS-TAG review, and recommendations from Pharmac's Anti-Infectives Specialist Advisory Committee.

Health NZ has renewed the deed of agreement with CSL-Seqiris for purchasing pandemic influenza vaccines, which maintains New Zealand's current priority position for the supply of vaccines in the event of a pandemic.

Public reporting on NRS contents (Recommendation 7)

Previously, information about the composition of the NRS was publicly available. The Ministry said the recommendations from the current review of the NRS and information about the composition of the NRS will not be publicised because it has formed a view that this could pose national security concerns.

1: Controller and Auditor-General (2020), *Ministry of Health: Management of personal protective equipment in response to Covid-19*, at oag.parliament.nz.

2: See Attachment 1.

3: Controller and Auditor-General (2022), *Co-ordination of the all-of-government response to the Covid-19 pandemic in 2020*, at oag.parliament.nz.

4: Pre-pandemic vaccine is vaccine against novel influenza A viruses that have pandemic potential.

5: Ministry of Health (2013), *National Health Emergency Plan: National Reserve Supplies Management and Usage Policies*, 3rd edition, at health.govt.nz.

6: Ministry of Health (2013), *National Health Emergency Plan: H5N1 Pre-Pandemic Vaccine Usage Policy,* page 10, at health.govt.nz. Appendix 3 specifies that 150,000 people would qualify for access to the vaccine (assuming a 70% uptake rate).

7: Ministry of Health (2013), *National Health Emergency Plan: H5N1 Pre-Pandemic Vaccine Usage Policy*, pages 12-15, at health.govt.nz.

Related content

Ministry of Health: Management of personal protective equipment in response to Covid-19

June 2020: In April 2020, we agreed with the Ministry of Health to independently review its management of personal protective equipment (PPE) during the early stages of the country's response to Covid-19.