

Briefing: Review of New Zealand's COVID-19 Protection Framework and self-isolation settings – 22 June 2022

Date:	22 June 2022	Report No:	DPMC-2021/22-2311
		Security Level:	GENSITIVE
		Priority level	High

Action sought **Deadline** 27/06/2022 Rt Hon Jacinda Ardern agree/disagree to recs **Prime Minister** Hon Grant Robertson **Deputy Prime Minister** Hon Kelvin Davis Minister for Māori Crown Relations: Te Arawhiti Hon Dr Ayesha Verrall Minister for COVID-19 Response Hon Carmel Sepuloni Minister for Social Development and Employment Hon Andrew Little **Minister of Health** Hon Kiri Allan Minister of Justice Hon Poto Williams Minister for Disability Issues Hon Chris Hipkins **Minister of Education**

Name	Position	Telephone	
Alice Hume	Head of Strategy and Policy	s9(2)(a)	
Kate Hamilton	Senior Policy Advisor	s9(2)(a)	N/A

Minister's Office

Status:

(SENSITIVE)

☐ Signed	□ Withdrawn
Comment for a	gency
Attachments:	Yes
(O)	

Briefing

Review of New Zealand's COVID-19 Protection Framework and self-isolation settings: 22 June 2022

To: C	OVID-19 Ministers		
Date	1/01/2021 Briefing template not updated,	Security Level	-[IIN-CONFIDENCE]
	correct date is 22/6/22		

Purpose

1. This briefing recommends, based on public health advice and consideration of non-health factors, that all New Zealand remains at the Orange setting of the COVID-19 Protection Framework (the Framework), and that self-isolation periods for cases and household contacts remain at 7 days. A further review of the colour setting and isolation periods is due in mid-July. It is proposed that this review also considers face masks requirements across the Framework.

Executive Summary

- 2. Since the peak of the current outbreak in March 2022, there has been a steady decline of cases to the week of 17 April 2022. More recently, the rate of decline has slowed.
- 3. Hospital bed occupation rates remained relatively static for the past month, sitting at around 7 per 100,000 resident population. COVID-19 fatality rates are also steady, having been at approximately 10 fatalities (by date of death) per day since the last week of May (a full situation update is included in Attachment A).
- 4. On 15 June 2022, the Ministry of Health's COVID-19 Assessment Committee (the Committee) conducted a review of the Framework colour settings across New Zealand, to ensure proportionality of public health measures and the restrictions on freedoms, relative to COVID-19 risk. It also reviewed self-isolation periods for cases and contacts, and face mask use in schools, airports and aircraft.
- 5. Based on the ongoing case transmission in the community and significant pressure in the health system, the Director General of Health recommends that all of New Zealand remain at Orange. The Ministry of Health (MoH) recognises that influenza and other winter illnesses are contributing to pressures on the health system, however it considers that the impact of COVID-19 continues to require targeted measures independent of other seasonal illness.
- 6. Remaining at Orange is supported by an analysis of the non-health factors that must be considered by Ministers when making decisions on the colour setting: impacts on at-risk populations and iwi Māori, economic impacts, public attitudes and compliance, and operational considerations. Remaining at Orange will allow for economic activity to occur largely as normal, while including some protection against the spread of COVID-19 through the use of face masks.

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022 DPMC-2021/22-2311

DPMC: 4563460 Page 3 of 27

ISENSITIVE

- 7. While there is ongoing concern about the rates of transmission among students and teachers, officials do not recommend making masks mandatory in schools. Instead, officials consider the local input of schools and initiatives beyond the Framework led by the Ministry of Education will mitigate the risk of transmission more effectively than mandatory mask use.
- 8. MoH does not recommend removing mask requirements in airports and on aircrafts at this time. Instead, the Department of the Prime Minister and Cabinet (DPMC) and MoH officials propose to conduct a comprehensive mask review in the next colour review. This review will consider the public health benefits of face mask use in different settings, consistency of settings, and whether those benefits justify further mandated masking.
- 9. Self-isolation modelling suggests that a reduction in isolation measures might be possible without significantly increasing transmission risk. However, MoH and DPMC are concerned that assumptions underpinning the modelling are unlikely to hold in reality because they rely on additional health measures being in place and adhered too. The Director General of Health has requested more information about self-isolation for contacts to inform decision-making.
- 10. DPMC recommends that 7-day isolation periods are retained because a reduction could put extra pressure on the health system. Further reviews of isolation periods should consider what additional precautions would be required to adequately mitigate transmission risk, and how adherence to these would be encouraged. We understand this would tie into wider public health measures being considered by MoH.
- 11. s9(2)(f)(iv)
- 12. Officials recommend that the next colour review takes place in the week of 18 July, with Ministerial advice due the week of 25 July, and that this review includes self-isolation periods and a review of face mask use across the Framework.

Recommendations

We recommend you:

- note that while COVID-19 case rates are plateauing nationally, COVID-19
 continues to place significant pressure on the health system, on top of pressures
 due to other respiratory illnesses such as influenza
- 2. note that the Director-General of Health's advice is that:
 - 2.1 All parts of New Zealand remain at Orange
 - 2.2 The isolation period for cases and household contacts remains at seven days, but is kept under review
 - 2.3 Face mask use in schools and in airports and on aircrafts is unchanged, but that a review of face mask use across Orange and Red is undertaken

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

DPMC-2021/22-2311

loted

DPMC: 4563460 Page 4 of 27

ISENSITIVE

 agree, after consideration of both the Director General's advice and non-health factors, to keep all of New Zealand at the Orange level of the COVID-19 Protection Framework



 agree, after consideration of the Director General's advice and non-health factors, to retain self-isolation periods for cases and household contacts at 7 days



 note that the Director General has recommended that self-isolation periods, particularly for household contacts, is kept under review

Noted

6. agree that the COVID-19 Assessment Committee conduct the next colour setting review during the week of 18 July, with advice due to Ministers in the week of 25 July or sooner should it be required (for example, due to concerning increases in cases or hospitalisations), and that a review a of isolation periods be included



7. agree that in the next colour review, a review of mask requirements across Orange and Red is included and considers strengthening mask requirements in Orange



 note that the Ministry of Health has recommended a review of the Red setting to ensure that it is able to reduce COVID-19 transmission to the degree required to justify stricter restrictions



 agree that the Minister for COVID-19 Response will announce the outcome of Ministers' decisions



10. agree to proactively release this report, subject to any appropriate withholding of information that would be justified under the Official Information Act 1982.



Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

DPMC-2021/22-2311

DPMC: 4563460 Page 5 of 27

ISENSITIVE

Alice Hume Head of Strategy and Policy, COVID- 19 Group	Rt Hon Jacinda Ardern Prime Minister
/2022	/2022
Hon Grant Robertson Deputy Prime Minister	Hon Kelvin Davis Minister for Māori Crown Relations: Te Arawhiti
Hon Dr Ayesha Verrall Minister for COVID-19 Response	Hon Carmel Sepuloni Minister for Social Development and Employment
24 6 12022	/ /2022

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

DPMC-2021/22-2311

DPMC: 4563460

-[OENOITIVE]

Hon Andrew Little	Hon Kiri Allan
Minister of Health	Minister of Justice
/2022	/2022
Hon Poto Williams	Hon Chris Hipkins
Minister for Disability Issues	Minister of Education
/2022	/2022

Briefing: Review of New Zealand's COVID-19 protection Framework and self-isolation settings: 22 June 2022

Public health risk assessment in the current context

- On 13 April 2022, the whole of Aotearoa New Zealand moved to Orange, which included the removal of gathering size limits and mask mandates in schools. This setting, along with 7-day isolation periods, was maintained in the May colour setting review based on New Zealand's context at that time. Attachment A provides a situation update of the New Zealand context.
- 2. On 15 June 2022, the Ministry of Health's (MoH's) COVID-19 Assessment Committee (the Committee) conducted a review of the Framework colour settings across New Zealand, to ensure proportionality of public health measures and the restrictions on freedoms, relative to COVID-19 risk (see Attachment B). The Committee considered its advice on the colour setting in conjunction with isolation periods for cases and household contacts, and face mask use in schools and other contexts.
- 3. Based on the available information, MoH and DPMC recommend that:
 - i. All parts of New Zealand remain at the Orange setting of the Framework;
 - ii. Self-isolation periods for cases and household contacts should remain at 7-days; and
 - iii. No changes to current face mask settings in schools (not mandatory) or airports and aircraft (mandatory).

Public health risk assessment of colour setting

- 4. The MoH applied health factors recently agreed to by Cabinet [CAB-22-MIN-0114], to determine its advice related to the colour settings, namely the:
 - a. degree of protection from severe health outcomes due to COVID-19, gauged by vaccination coverage and immunity levels among the general population and vulnerable populations, and availability of treatments (e.g. antivirals) to reduce the severity of illness from COVID-19; and
 - b. capacity of the health system to meet demand due to COVID-19, given competing demands from other illnesses (including seasonal and imported conditions), backlog of prevention activities and the care of people with long term conditions.

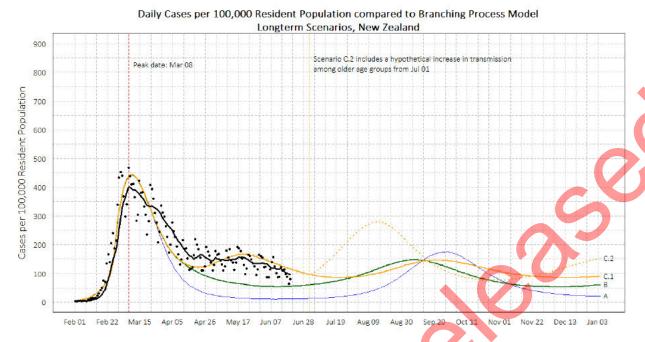
Degree of protection

- 5. MoH noted that COVID-19 case rates are decreasing overall compared to the past four weeks of plateau but remain higher than expected. In the Central Region, cases increased between 29 May and 5 June 2022 which could indicate that the downward trend is starting to reverse.
- 6. Modelling by COVID Modelling Aotearoa based on the current Omicron BA.2 variant indicates that New Zealand is tracking closely to scenario 'C.1', the scenario with the largest increase in modelled transmission after the March peak (see figure 1). Based on this modelling, it is expected there will be another, much lower, peak this year. This is likely to be driven by waning immunity from previous vaccination and infection, and more indoor activities during winter.
- 7. Booster uptake for Māori and Pacific People aged 65 and over is around 89 percent and 85 percent respectively. However, booster rates continue to be lower for the total eligible Māori and Pacific Peoples populations versus the rates for the wider population. Booster uptake rates are not keeping pace with eligibility, which will be in part due to those who have recently had COVID-19 being recommended to wait three months before they receive their next dose. There is a risk of increased hospitalisation amongst vulnerable groups, particularly Māori and Pacific People, due to increasing transmission in these groups, together with slower booster uptake and waning immunity.

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

- FOENOITIVE

Figure 1. COVID Modelling Aotearoa scenarios compared with reported cases nationally



- 8. The dispensing rates of Paxlovid and molnupiravir (oral COVID-19 antivirals) have been steadily increasing since their introduction on 5 April 2022 and 4 May 2022, respectively. As of 20 June 2022, 6,779 courses of COVID-19 antivirals have been dispensed in the community. Dispensing rates reflect appropriate targeting towards more vulnerable groups such as the elderly, Māori and Pacific Peoples. Due to the eligible population being small, we are yet to see a statistically significant impact on hospitalisation rates.
- While case rates for the over 65 age group have not recently increased, the proportion of total cases reported for this cohort has, alongside elevated influenza.

Capacity of the health system to meet demand for COVID-19

- 10. There is continued pressure on the health system, with district health boards (DHBs) across the country reporting high levels of hospital occupancy, workforce absenteeism and consequential disruption of services such as planned care.
- 11. COVID-19 and influenza are both contributing significantly to pressure on the health system, with DHBs experiencing inpatient occupancy of almost 90 percent across all DHBs, in the week ending 19 June.
- 12. For the first time since 2019, influenza has become the most identified severe acute respiratory infection in Auckland hospital patients, significantly exceeding hospitalisations for COVID-19. Despite the impact of other respiratory illnesses on the health system, COVID-19 continues to require targeted measures due to its substantially higher mortality rate compared to seasonal illnesses such as influenza, and the greater potential severity of its symptoms. These measures apply independently of measures to address other respiratory illnesses.
- 3. Clinical staffing constraints due to illness are contributing to the difficulties in meeting demand. All DHBs across the country cite staff absenteeism (largely driven by seasonal influenza) as the biggest driver for the pressure experienced in the health system. Clinical absenteeism is consistently between 10-15 percent, with some hospitals reporting more than 15 percent. Workforce limitations across the sector are also attributed to longstanding staff vacancies.

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

SENSITIVE

14. While some hospitals have begun addressing their backlog of planned services, the backlog coupled with the seasonal demand for services has increased the number of patients waiting for services. Nearly 29,000 people are now waiting for elective surgery for 121 days or more.

The measures available at Red currently need to be reviewed for effectiveness

15. MoH noted that while the current Red setting measures would have an effect of slowing transmission, the measures, in particular capacity limits, were not likely to have the same impact as was the case prior to widespread community transmission. DPMC and MoH, in consultation with Treasury and other agencies, will continue to regularly review colour settings, and recommend to Ministers where changes in the settings may be needed.

Assessment of face mask requirements

16. At the Orange setting, mask use is mandatory in many indoor settings. In making its colour setting assessment, MoH considered the role of face mask use in particular settings, including schools, and in airports and on aircrafts.

Mandatory face masks in airports and on aircrafts

- 17. MoH was asked to consider the continued benefits and proportionality of requiring face masks in airports and on aircrafts, including when people are seated on aircrafts (noting that travellers can remove masks to consume food or drinks).
- 18. The Director General recommends that in the context of continued COVID-19 infections combined with seasonal illnesses, it is not appropriate to remove the current mandates for face masks in airports and on aircrafts at this time.
- 19. Strong evidence remains that mask use decreases the risk of COVID-19 transmission by 50-75 percent, particularly in indoor settings. However, MoH articulated a concern that mask requirements may not be sufficiently complied with currently to be as effective as needed to minimise transmission.
- 20. Mandatory masking on public transport, including aircraft, has been a key factor in both the Alert Level and COVID-19 Protection Frameworks due to the risk posed by the intermingling of people who are unknown to one another. Removing some mandatory mask use on transport would be a major shift and should be considered in light of other mask changes.
- 21. Furthermore, considering the recent removal of pre-departure testing to enter New Zealand from 21 June, DPMC considers it appropriate to retain other measures at the border to mitigate the risk of transmission between travellers entering New Zealand.

Non-mandatory face masks in schools

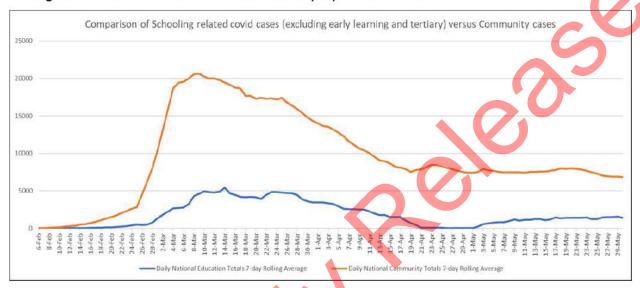
- 22. MoH also considered whether mandatory face masking should be introduced at Orange in schools, as it is in the Red setting. The impact of Omicron on schools has been widely discussed in recent months with reports that school attendance has dropped, and that transmission of COVID-19 in students and teachers is impacting the education of students.
- 23. Evidence about the impact that masks have on transmission rates in schools is complex. Many students and teachers have already contracted the virus, and many wear masks even when they are not required which makes it difficult to interpret the impact that mandatory mask use would have. The Ministry of Education reports that many schools continue to have a strong mask-wearing culture, alongside other measures, including good ventilation of indoor spaces, good hygiene and cleaning practices, appropriate physical distancing wherever possible, plenty of fresh air breaks and staying home when unwell.
- 24. MoH considered longitudinal data on case rates in students that had not previously been infected. Initially, in Term 1 (when masks were required) there was a steady decline in rates

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

DPMC-2021/22-2311

- among school aged children and adults. The decline continued during the holidays for school aged children (when face masks were removed), after which there was a slight increase with the return to school in Term 2. For adults during school holidays, overall, the rate changed little, and then continued to decrease after school holidays.
- 25. Ministry of Education (MoE) data indicates that schools do not contribute disproportionately to the overall incidence of COVID-19 in the community. In Term 1 (when masks were required), the 7-day average of school cases reported to the Ministry of Education was over 20 percent of the community cases. In Term 2 (when masks were not required), case numbers only just reached the 20 percent proportion of community cases (refer to figure 2).

Figure 2 - School cases of COVID-19 as a proportion of total cases



- 26. While a comparison between the case rate in teachers and the total population indicates their rate of infection is higher than that of the general population, it is possible that their case ascertainment is higher than the general population. MoE data indicates that notifications of cases amongst teachers have stabilised to a similar percentage occurring before the Term 1 break and the 7-day cumulative count of teachers impacted (as a percentage of the education workforce) has not passed 2 percent so far in Term 2.
- 27. MoH does not consider mandatory mask use in schools would have a significant impact on transmission. It supports the view of MoE that local communities and schools can mitigate the risk of COVID-19 transmission with measures outside the Framework. Based on this assessment, the Director General recommends that mandatory mask use is not introduced in schools at Orange. Mask use and other health measures should continue to be encouraged.
- 28. While masking is not mandatory, schools are asked to undertake regular risk assessments and health and safety reviews to ensure the mitigations they have in place reflect their risk profile, including risks to individuals. For students or staff at higher risk of poor health outcomes, schools are asked to have individualised plans in place to mitigate their risks. For example, plans may require masks to be worn around individuals at higher risk, or may require those individuals are positioned in a well-ventilated space while indoors. Education providers are encouraged engage with whānau to consider the options available to balance the education, health and wellbeing needs of the ākonga. More information about the general education settings for mask wearing are outlined in Attachment C.
- 29. Face masks are also being made accessible to staff in schools with 20,000 to 30,000 masks supplied to schools each week. Guidance has also been provided to schools to support mask wearing and includes advice on how to support those that are exempt from mask wearing.

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

CENCITIVE

30. Given complexities in the data, MoH and the MoE will further investigate the evidence which will be reflected in MoH's future Insights briefings and other reports about the prevalence of COVID-19 in the community and schools.

Timely to review face mask settings across the Framework

31. s9(2)(g)(i)

MoH recommends that a review of all mask-wearing rules across the Orange and Red settings to ensure a clear and consistent rationale for these measures before making changes in particular contexts.

32, s9(2)(q)(i)

33. DPMC and MoH therefore propose to conduct a comprehensive mask review in the next colour review. In doing so, it will be important to tease out the public health benefits that are gained by face mask use in different settings, the impact that compliance has on those benefits, and whether those benefits are sufficiently retained in scenarios that masks are removed for practical reasons (like eating and drinking).

Strengthening public health guidance

- 34. MoH recommends that a renewed communications campaign should be introduced, emphasising the importance of complying with mask-wearing rules to reduce the spread of COVID-19 and protect vulnerable populations.
- 35. The current Winter Wellness campaign includes key messages around mask wearing. DPMC is also developing new informational messaging to reinforce the utility of wearing face masks to go live shortly, as well as longer-term behaviour changes messaging to launch later in winter. In light of the recommended mask review, DPMC officials do not recommend doing a campaign to reaffirm mask requirements at Orange until the review is completed.
- 36. Stronger public health guidance and measures to reduce the risk of illness is discussed at paragraphs 73-74.

Assessment of proposal to remain in Orange against non-health factors

Colour setting proposal

- 37. Officials propose Ministers agree to keep all of New Zealand at Orange. Staying at Orange is supported by an assessment of the health factors above and the non-health factors set out below for moving between colours in the Framework.
- 38. The following section assesses the proposal against the non-health factors agreed by Cabinet:
 - Impacts on at-risk populations and iwi Māori
 - Economic impacts
 - Public attitudes and compliance
 - Operational considerations

Impacts on at-risk populations and iwi Māori

39. Vulnerable groups have been disproportionately affected by COVID-19. Māori, Pacific people, disabled people, older people, and those living in deprivation or with co-morbidities are in some instances experiencing disproportionate rates of the virus and suffering more

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

FOENOITIVE

- significantly from its effects. Any downward change to the colour setting is likely to have a disproportionate effect on these groups.
- 40. Agency feedback has been supportive of retaining the current Orange setting for the whole of New Zealand with communities having identified that it allows for economic activity to occur largely as normal, while including some protection against the spread of COVID-19 through the use of facemasks. Some communities will likely support stronger public health measures, including moving to Red, to reduce the disproportionate risks to vulnerable communities.
- 41. National Māori groups such as the Iwi Chairs Forum, Te Rōpū Whakakaupapa Urutā (the National Māori Pandemic Group) and other Māori providers have consistently advocated for a cautious approach to be taken to manage the impact of COVID-19 on Māori communities who are more likely to experience negative outcomes in infections, hospitalisations, and deaths. On 16 June, members of the National Iwi Chairs Forum were consulted on and supported remaining at Orange. The level of support available to whānau who become unwell in rural and isolated communities remains a concern, particularly over winter and with high influenza rates.
- 42. Te Puni Kōkiri (TPK) supports the proposal to stay at Orange, noting that increasing supports to communities and Māori that are the most vulnerable to the impact of Omicron is recommended, and would be preferable to a shift to Red. A shift to Red would need to be considered alongside the impacts to Māori businesses and the economic supports available. Te Arawhiti generally supports strong public health measures as they reduce the disproportionate burden of COVID-19 on Māori, whether this is achieved through Orange or Red. Both agencies remain concerned about the vulnerability of some Māori due to:
 - continued high levels of infections in the community with Māori still experiencing disproportionate impacts
 - continued lower levels of vaccination for some cohorts in the Māori population and for some communities (as of 16 June, 56 percent of eligible Māori have received a booster dose, versus 73 percent of the wider population)
 - the uncertain impacts of the opening of borders and the possibilities of new variants of COVID in the community
 - the compounding impact of COVID-19 and the onset of winter and associated risks from cold homes, winter illnesses such as colds and flu, and additional medical conditions that are likely to impact on Māori, particularly tamariki, such as rheumatic fever and RSV
 - the increasing impact of COVID-19 on older Māori and those in rural and remote areas
 - perceived complacency in health behaviours and mask wearing at Orange meaning that the setting may be less protective than envisioned, and
 - need for high quality masks to ensure kaumātua can be protected from younger whānau, in particular school age children who are often vectors of Omicron.
- 43. While Whānau Ora Commissioning Agencies continue to meet the needs of whānau within their baseline funding, the onset of winter and the transmission of winter illnesses is likely to put added pressure on these resources as is the increased food and living costs brought about by inflation.
- 44. Whānau Ora Commissioning Agencies and TPK remain concerned about tamariki and rangatahi being disengaged from schooling. TPK is working jointly with Manatū Wāhine to develop a prototype exploring the issues experienced by kōhine Māori in South Auckland, who have not returned to school because of the impacts of COVID-19.

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

FOENOITIVE

- 45. The Office of Disability Issues (ODI) anticipates that the disability community would support remaining at Orange, however, some community members will prefer Red for the additional protective measures it provides. The community has told ODI that the lessening of restrictions has generated some concerns about safety. This unsafe feeling impacts behaviours and overall wellbeing. However, the continued use of face masks, particularly when accessing essential services, creates reassurance to help mitigate against these concerns.
- 46. The disability community have advised they are worried about the spread of the virus and the potential this may have to affect their caregivers/support workers and access to services and support. MoH is continuing to work with the sector to address these concerns.
- 47. For some disabled people and people with health conditions, wearing a face mask is unsuitable. People who have genuine reasons for not being able to wear a face mask can now access a personalised Mask Exemption Pass. This pass is recognised under law and provides conclusive evidence that the holder is exempt under law from wearing a mask.
- 48. The Ministry for Pacific Peoples' engagements with Pacific communities confirm the Omicron outbreak continues to impact the social and economic wellbeing of some Pacific families.
- 49. Whilst most older people are adapting to life under Orange, further emphasis on how all New Zealanders can continue to keep themselves safe would be of benefit to older people. Older people have already disproportionately been affected by COVID-19 and face an increasing threat through winter, particularly impacting those in the 65+ age group.

Economic impacts from the Framework

50. Remaining at Orange is estimated to result in a \$105 million loss in GDP per week, while a move back to Red would increase the economic impact by \$35 million a week. Table 1 shows the anticipated economic impact of the Framework relative to forecasted activity with no public health restrictions. These are estimates, and the Treasury will continue to refine them as new data becomes available.

Table 1. Estimated loss in GDP activity (relative to no restrictions), assuming open border

	s million per week	% of GDP
All New Zealand Red	\$140	2%-3%
All New Zealand Orange	\$105	1%-2%

51. Under the Framework, most businesses are expected to operate relatively normally. The reduction in GDP is primarily driven by distancing requirements, capacity constraints at Red, and the behavioural response of consumers at Orange.

Public attitudes and compliance

- 52. Agencies and Regional Leadership Groups (RLGs) have noted that while current Orange settings have been adopted to varying degrees within communities, there is a general support for mask wearing and strong public health messaging.
- 53. A behavioural insights survey covering May indicates that willingness to comply with health behaviours remains high but is declining. There have also been significant declines in compliance of almost all key health behaviours including wearing face masks as required¹. In particular, those that have had COVID-19 are less likely to adopt health behaviours.

Operational considerations

¹ Of participants in this research, 67% complied with face mask requirements (an 11% decline since May).

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

DPMC-2021/22-2311

DPMC: 4563460 Page 14 of 27

TOENOTTIVE

- 54. The Orange setting has not given rise to any significant adverse impacts on the Care in the Community welfare response or access to the COVID-19 Leave Schemes. However, if there were to be an increase in transmission, this may place additional pressure on community providers supporting people to isolate safely at home.
- 55. Feedback from RLGs suggests a general perception that little has changed operationally since the last review. Orange is widely considered to be the appropriate setting at this time, as the public health protections that exist at Orange is seen to balance the need for economic recovery with protecting communities against persistent COVID-19 especially while other winter viruses are circulating.

Review of self-isolation periods

- 56. On 14 June 2022, the National Investigation and Tracing Centre (NITC) provided advice to the Committee, including modelling by COVID-19 Modelling Actearoa, on potential changes to self-isolation settings with scenarios based on:
 - a) Retaining the current 7-day self-isolation requirements for both cases and household contacts
 - b) Reducing self-isolation requirements to 5 days for both cases and household contacts with 'Test to Release' on day 5 and a maximum isolation period of 7 days (with an additional day 3 test for household contacts)²
 - c) Options to remove isolation for household contacts, including testing on days 3 and 5, daily testing, and testing only if symptomatic.
- 57. These scenarios are outlined in full in Attachment D along with the modelling analysis.
- 58. The modelling indicates that a reduction in self-isolation measures might be possible without significantly increasing likely transmission risk. However, the reductions in transmission are only realised where cases and household contacts were required to take strong additional public health precautions (e.g. additional masking, avoiding high-risk settings like rest homes and working from home if possible). The results of the two most promising scenarios are summarised in Table 2 below including both circumstances where additional public health precautions are and are not taken.
- 59. MoH concluded that the assumption that the public would comply with a range of additional new requirements were unlikely to hold in reality. It added that greater clarity about the additional precautions required, how adherence to these would be encouraged, and what confidence would there be that they would be followed, as well as clearer evidence of the benefit of reducing isolation periods, could lead to a different recommendation for household contacts. On this advice, the Director General of Health has requested more information about self-isolation periods for household contacts before deciding to whether to recommend a change in isolation periods.
- 60. DPMC and MoH officials support the maintenance of the current 7-day self-isolation periods at this time, as a reduction to five days could increase the number of infections and put extra pressure on the health system. Officials recommend that the review of self-isolation periods continue to be tied into the monthly colour review over winter.

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

² The Centre for Disease Control and Prevention in the United States has reduced the isolation period for cases to 5 days and the United Kingdom also recommends 5 days self-isolation after a positive test.

SENSITIVE

Table 2. Short-term (around one month) modelling of potential changes to self-isolation settings compared to retaining the current 7-day isolation requirements

Policy setting		Strong public health precautions for cases and household contacts		No additional public health precautions for cases and household contacts	
		Infections	Hospitalisations	Infections	Hospitalisations
•	5 days isolation for cases, 1 test to release 5 days isolation for household contacts	+0%	+0%	+14%	+10%
•	5 days isolation for cases, 1 test to release No isolation for asymptomatic household contacts but daily testing	+3%	+3%	+34%	+30%

61. Critical workers in healthcare and other sectors have established pathways and schemes in place to allow them to continue to work throughout their self-isolation period as a household contact where service provision is at risk, and the individual is willing and well. Critical healthcare workers who are cases are also able to return to work if they are well and if service provision is at risk. Other sectors can apply for a temporary exemption to self-isolation if they have critical workers who are cases.

Public attitudes and compliance

- 62. A behavioural survey covering May 2022 indicates that compliance with self-isolation requirements is decreasing. Some of the top reasons identified for people not complying is the inability to take time off work and commitments outside the house (such as grocery shopping). Feedback also indicates a sentiment of not understanding why self-isolation is required. Removing self-isolation for household contacts in favour of strong precautions may increase compliance if people see these settings as more proportionate to the risk.
- 63. TPK has also noted that compliance may be affected by financial pressures or other pressures on workers to reduce their isolation periods.

Operational considerations

- 64. Feedback from the RLGs suggests a mix of views about isolation periods. The majority of RLGs appear to support retaining 7-day isolation periods; however, many regions consider five days may be more appropriate to support a greater return to work. In particular, there have been concerns raised in some regions about the impact household contact isolation requirements are having on businesses and workforce capacity in the face of employers facing staff shortages and cost pressures.
- 65. A 'test to return' regime for all household contacts would alleviate some pressure on both businesses and household contacts who are impacted by current self-isolation settings.

Economic impact

66. The number of people required to isolate at any one time has a significant economic impact due to people being unable to work from home, reducing the number of hours worked across

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

- the population. The current settings will be adding pressure on an already persistently tight labour market. Although there are several factors are at play, the Omicron outbreak has contributed to negative economic growth in the March quarter.
- 67. The Treasury's estimate of the economic impact of the 7-day self-isolation for both cases and their household contacts is around \$174.3 million per month using the short-term modelling as a basis. Moving to a 5-day self-isolation period for cases with a 'Test to Release' requirement, and a 5-day self-isolation period for household contacts reduces the economic impact to \$143-160 million per month. The economic impact of only requiring cases to isolate (5-day self-isolation period for cases with a 'Test to Release' requirement) is estimated at \$92-117 million per month.
- 68. These estimates do not include economic impacts in addition to the reduction in the number of hours worked across the population, such as the impact of reduced demand for goods and services due to people isolating, or the impacts on business continuity and supply chain disruption. Conversely, some of the modelled economic impact of self-isolation is partially attributable to illness or people needing to look after unwell whānau, which would persist even if self-isolation requirements were removed.

Table 3. Short-term modelling of the number of isolation days per month

Policy setting	Case isolation days per month (change from current settings)	Contact isolation days per month (change from current settings)	Total isolation days per month (change from current settings)
Baseline: 7 days isolation for cases. 7 days isolation for household contacts, test on day 3, 7 and if symptomatic	1,155,000	1,100,880	2,250,880
 5 days isolation for cases, 1 test to release. 5 days isolation for household contacts, test on day 3, 5 and if symptomatic Additional health precautions for 10 days that reduce transmission by 50 percent 	996,800 (reduced by 158,200 or - 13.7%)	847,440	1,844,240 (reduced by 406,560 or -18%)
5 days isolation for cases, 1 test to release. No quarantine for asymptomatic household contacts but daily testing Additional health precautions for 10 days that reduce transmission by 50 percent	1,086,400 (- 68,600 or - 5.9%)	0 (reduced by 1,100,880 or - 100%)	1,086,400 (reduced by 1,164,400 or -51%)

69. While the option for 5-day isolation for cases and their household contacts could result in 8 percent more cases (although no increase in infections or hospitalisations – the discrepancy

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

VITIONIE

is due to a greater proportion of cases being identified as a result of more testing), cases will likely spend an average of 5.6 days in isolation compared to 7 days due to becoming symptomatic before testing positive, resulting in an overall reduction in days isolating.

70 c0/2\/a\/i\		
/ U. S9(2)(q)(I)		
1 -1 -13/17		

- 71. The Omicron outbreak and the number of people across the population in isolation have contributed to the New Zealand economy contracting 0.2 percent in the March quarter. It is likely these impacts will also be apparent in the June quarter, as the total number of COVID-19 cases has exceeded those in the March quarter. Modelling suggests that removing the requirement for household contacts to self-isolate would approximately half the number of people in isolation. We estimate this could reduce the impact on GDP by up to 0.3 percent³.
- 72. Treasury also note that policy responses which also address influenza and other seasonal illnesses will be more effective in preserving hospital system capacity than those which target COVID-19 exclusively. It supports measures that better balance the economic, fiscal, and social impact with acute risks to hospital capacity.

Stronger public health guidance

- 73. The Director General has indicated that consideration is needed of the public health measures and guidance in place and how they can be strengthened. DPMC understands that MoH will be putting greater emphasis on staying well against all seasonal illnesses (rather than focussing on COVID-19 in isolation) including the general actions that can reduce a person incidence of illness.
- 74. Greater public health measures and guidance would reinforce DPMC's stay well this winter campaign and would give better assurances that we could reduce self-isolation periods, particularly for contacts, without a significant impact of the health system.

Financial implications

75. Various schemes available to support individuals and businesses have had high uptake throughout the Omicron outbreak. In particular, the Leave Support Scheme and the Care in the Community programmes incur a significant fiscal cost with over \$2 billion appropriated to these schemes to date. While these programmes will need to continue to support cases to isolate, there will likely be significant savings if the requirement for household contacts to isolate is removed.

Table 4. Uptake of business and individual support

Scheme	Amount appropriated	Paid out
COVID Support Payment	\$1.530 billion (for 2021/22)	\$1.308 billion (as of 9 June)
Leave Support Scheme and Short-term Absence Payment	\$660.8 (for 2021/22)	\$420.6 million (as of 31 May)

³ As with the estimates of the policy changes on transmission and hospitalisations, these economic impacts omit the impact of the Close Contact Exemption Scheme due to insufficient data.

Briefing: Review of New Zealand's COVID-19 protection Framework and self-	DPMC-2021/22-2311
isolation settings: 22 June 2022	DFWC-2021/22-2311

DPMC: 4563460 Page 18 of 27

[SENSITIVE]

Small Business Cashflow Scheme	\$1.414 billion (for 2021/22) \$652 million (for 2022/23)	\$525.89 million loans approved for 2021/22 (as of 10 June)	
Care in the Community and related programmes	Approximately \$1.201 billion across Votes Social Development, Māori Development, Pacific Peoples and Education (some allocated prior to the COVID-19 Protection Framework) (for 2021/22)		Ó

Human Rights (legally privileged) s9(2)(h) 76. s9(2)(h) 77. s9(2)(h) 78. s9(2)(h) s9(2)(h) 79. s9(2)(h) 80. s9(2)(h)

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

-{OENCITIVE}-

s9(2)(h)		
		l.
04 - 2/2///		
81. s9(2)(h)		
82. s9(2)(h)		

Te Tiriti o Waitangi Analysis

- 83. The Crown's obligations to Māori under the Treaty of Waitangi require active protection of tāonga, and a commitment to partnership that includes good faith engagement with, and appropriate knowledge of the views of iwi and Māori communities. In the context of the Framework, this involves considering what will support a national response that is coordinated, orderly, and proportionate, considering the Crown's obligation to actively protect Māori health, interests and rangatiratanga.
- 84. The strain on the health system described above is disproportionately affecting Māori. For example, the portion of Māori patients waiting over 121 days for planned care is increasing at a faster rate than for other ethnic groups. Māori are more likely to have co-morbidities that require ongoing care than that of the wider population. Delay to planned care due to health system pressures will exacerbate existing inequities in which Māori are diagnosed later, and with more progressed conditions, than Pākehā.
- 85. COVID-19 has created wider inequities, including educational loss for Māori tamariki due to digital access inequity, financial hardship, employment reduction, decreased access to preventative healthcare, and an over representation of Māori in emergency and crowded housing. The holistic nature of Care in the Community can help support and empower Māori to mitigate these inequities. Factors in addition to the impact of the pandemic likely contribute to increased stress on whānau Māori. These include issues such as high inflation, strained supply chains, distressed whānau facing illness, high costs, and employers facing a tight labour market with high costs.
- 86. Ensuring Māori whānau have comprehensive and immediate supports through the Omicron outbreak will contribute to their resilience so they can leverage recovery opportunities.
- 87. The impact of front-line services providing manaaki, health care, vaccination, advocacy and organisation to distribute resource should not be underestimated. Māori-led response at all levels has protected many Māori from COVID-19 and has likely reduced COVID-19 hospitalisations and deaths and continue to be relied upon. The Māori Communities COVID-19 Fund (MCCF) supports Māori, iwi and community providers accelerate current responses and to build resilience in light of the Framework, in the period to the end of June 2022.
- 88. Maintaining the current settings will provide certainty to Māori enterprise regarding the tools they are able to utilise for safer working environments. Many Māori enterprises are vulnerable,

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

[SENSITIVE]

particularly in industries like tourism, hospitality, services, food production and construction and will continue to be challenged by the pandemic and its after-effects, including rising inflation, talent gaps, challenges in securing forward business and issues with navigating a fragmented, disconnected business support ecosystem.

Consultation

- 89. This paper was prepared by the COVID-19 Group within DPMC. The Ministry of Health reviewed the paper and provided specific input and text, including advice on the course of the outbreak, the public health response, and the views and recommendations of the Director-General of Health. The Crown Law Office advised on New Zealand Bill of Rights Act implications.
- 90. The Treasury, Ministry for Ethnic Communities, Ministry for Pacific Peoples, Te Puni Kōkiri, Ministry of Social Development, Te Arawhiti, Ministry of Education, the Office for Disability Issues, Ministry of Business, Innovation and Employment, Ministry of Transport, Customs, and Police were consulted on the paper. Regional Leadership Groups provided feedback regarding the considerations for remaining within the Orange setting and the impacts of self-isolation. Members of the National Iwi Chairs Forum provided feedback on staying at the Orange setting.

Next steps

- 91. If Ministers agree to the proposal, the announcement to keep all New Zealand at Orange can be ready this week, however, we understand that Ministers may want to consider bundling up this announcement with other COVID-19 announcements in the week of 27 June. Given that no changes are being recommended, there is no pressing reason to make the announcement this week.
- 92. The COVID-19 Assessment Committee will consider Framework colour settings and self-isolation settings in the week of 18 July to inform advice to Ministers in the week of 25 July, when advice will go to Ministers. This will ensure both are calibrated to be proportionate and minimise the potential negative impacts on people and the economy due to public health measures. Additionally, a comprehensive review of face mask requirements across colours settings Orange and Red will be included.

Attachments:	
Attachment A:	Situation update
Attachment B:	COVID-19 Assessment Committee: Review of colour settings and isolation periods 16 May 2022
Attachment C:	General education settings for mask wearing
Attachment D:	Modelling for self-isolation

Briefing: Review of New Zealand's COVID-19 protection Framework and selfisolation settings: 22 June 2022

Attachment A: Situation update

- 1. Since the peak of the current outbreak in March 2022, there has been a steady decline of cases to the week of 17 April 2022. More recently, the rate of decline has slowed. The 7 day rolling average for daily cases per 100,00 residents was 97 on 19 June the first time that the seven day rolling average was below 100 cases per 100,000 since 23 February. The Northern Region and Te Manawa Tahi regions also have seven day rolling averages below 100, while the Central and Southern regions are declining rapidly.
- 2. We are currently seeing a slightly lower incidence of COVID-19 among the Māori population than at the time of the last review. The proportion of Māori being identified as new cases has remained steady at 9.6 percent of cases identified in the week to 17 June, as opposed to 9.7 percent in the week to 16 May. Fatalities have also reduced with Māori making up 6.8 percent of fatalities in the week ending 19 June, down from 10.7 percent in the week of 16 May.

Figure 1. Daily Cases per 100,000 Resident Population, Seven Day Rolling Average



- Hospital bed occupation rates have remained relatively static for the past month, at around 7
 per 100,000 resident population this is reflected through most regions except for the Central
 region, which is increasing (due to spikes in hospital bed occupation in MidCentral and Hutt
 Valley DHBs over the last two weeks).
- 4. Fatality rates are also steady, having been at approximately 10 fatalities (by date of death) per day since the last week of May.

Wastewater testing show that infection levels remain steady and are higher than self-reported cases would indicate

- Precise case numbers remain somewhat uncertain nationally with different data sources suggesting a slightly different picture:
 - a. For example, in the week ending 5 June 2022, border workers, whose risk is comparable with the general population, had a case rate of 14 per 1000 people compared to 9.3 per 1000 people in the general population.

Briefing: REVIEW OF NEW ZEALAND'S COVID-19 PROTECTION FRAMEWORK
AND SELF-ISOLATION SETTINGS: 23 JUNE 2022

DPMC-2021/22-2311

DPMC: 4563460 Page 22 of 27

b. In addition, wastewater testing shows that infection levels are likely higher than self-reported cases, as wastewater RNA levels have remained constant since early April (see figure 2 below). However, consistent with a broad trend downward in cases overall, all regions (except Northern) have started to see a slight decrease in wastewater trends since the end of May, though this is not significant enough to indicate a consistent, downward trend in overall wastewater positivity. Contradictory to other evidence, wastewater trends indicate there was no substantial decrease in the underlying level of new infections for the past 2 months.

Figure 2: Trends in SARS-CoV-2 genome quantification from wastewater by region from 6 February to 5 June 2022



Ongoing COVID-19 infections are leading to increased risk in older populations

6. For example, initially, the virus moved through the younger population, who typically have more social interactions and are subsequently more exposed to the virus. However, COVID-19 is now moving into the older population, particularly impacting those in the 65+ age group, with an 11 percent increase in cases in the past seven days. This has been stable across all ethnic groups. The shift of the virus into older age groups will create a different degree of burden on the health system compared to younger people.

Variants of concern and community risk

7. Omicron (BA.2 variant) remains the dominant variant in Aotearoa, making up about 99 percent of sequenced community cases in the past two weeks, although BA.4, BA.5 and BA.2.12.1 have recently been detected. The Ministry of Health advises that BA.4 and BA.5 will account for an increasing number of cases, estimated at up to 50 percent of cases by mid-July. Vaccine effectiveness against infections, hospitalisations will be much lower for BA.4 and BA.5. It is also not yet known what impact this will have on hospitalisations in New Zealand.

Briefing: REVIEW OF NEW ZEALAND'S COVID-19 PROTECTION FRAMEWORK AND SELF-ISOLATION SETTINGS: 23 JUNE 2022

DPMC-2021/22-2311

DPMC: 4563460 Page 23 of 27

- IOENOITIVE!

Attachment B: COVID-19 Assessment Committee: Review of colour settings and isolation periods – 15 June 2022



Briefing: REVIEW OF NEW ZEALAND'S COVID-19 PROTECTION FRAMEWORK AND SELF-ISOLATION SETTINGS: 23 JUNE 2022

DPMC-2021/22-2311

DPMC: 4563460 Page 24 of 27



Memo

Review of COVID-19 Protection Framework settings and isolation periods – 15 June 2022

Date:	17 June 2022	
To:	Dr Ashley Bloomfield, Te Tumu Whakarae mō te Hauora, Director-General of Health	
Copy to:	Robyn Shearer, Deputy Chief Executive, DHB Performance and Support	
	Maree Roberts, Deputy Director-General, System Strategy and Policy	
	John Whaanga, Deputy Director-General, Māori Health	
	Lorraine Hetaraka, Chief Nursing Officer	
	Dr Ian Town, Chief Science Advisor	
	Dr Robyn Carey, Chief Medical Officer	
From:	Dr Jim Miller, Acting Director of Public Health	
For your:	Decision	

Purpose of report

- This memo provides you with advice following the Ministry of Health (the Ministry)
 COVID-19 Protection Framework Assessment Committee's (the Committee) monthly
 review on 15 June 2022, and seeks your decision on:
 - a. COVID-19 Protection Framework (CPF) colour settings,
 - b. self-isolation periods for COVID-19 cases and household contacts, and
 - c. mask use in schools and other contexts.
- 2. As is the usual process, with your agreement, the information in this briefing is intended to be provided to DPMC for its report to Cabinet on the CPF colour settings in the week beginning 20 June 2022.

Committee's recommendations

- The Committee <u>recommended</u> that:
 - a. all parts of the country should remain at the Orange setting of the CPF
 - b. self-isolation periods for cases and household contacts should remain at 7-days
 - c. mask use settings for schools, airports and aircraft should remain unchanged
- 4. In addition, the Committee recommended:



- a. further public communications, emphasising the importance of complying with existing mandatory mask requirements and other public health measures, particularly over winter and given the increasing pressures on the health system
- b. a review of the public health measures available at the Red setting to ensure they are based on the latest evidence about effectiveness in reducing spread of COVID-19. This review would ideally be conducted shortly but would follow this assessment rather than being contained within it. It should also emphasise that some people remain legitimately exempt from such requirements.
- 5. The Committee highlighted the need for innovative solutions in the health system to manage pressures from COVID-19 and other illnesses over winter. This might include, for example, models of care that reduce the impact on hospitals.
- 6. Finally, the Committee recommended that the definitions for each colour under the CPF be updated to better reflect the current stage of the outbreak as set out in **Table 1** below.

Table 1 - CPF colour setting revised definitions and public health measures

Colour	Revised Definition	Public health measures
Red	At Red, we need to take action to protect our vulnerable communities and our health system from COVID-19. [no change]	 200-person indoor and no outdoor gathering limits. Face masks in most indoor settings.
Orange	At Orange, there is community transmission of COVID-19, with increasing or significant risks to vulnerable communities, and pressure on the health system from COVID-19 . [changes in bold]	 No gathering limits. Face masks only required in some indoor settings – retail, hospitality, public transport, public facilities.
Green	At Green, there is limited manageable community transmission, and our health system has the capacity is ready to respond to COVID-19. There are no restrictions. [changes in bold]	No gathering limits.No face masks requirements.

The Committee also noted that the measures under the Red setting of the CPF, in particular capacity limits of 200, were unlikely to substantially impact the COVID-19 case numbers going forward. It was observed that such measures would likely place a significant burden on certain sections of society and the economy (e.g. the events sector) without offering the public health benefits needed to justify their use. On this basis, the Committee recommended that the measures under the Red setting be reviewed to better calibrate them for reducing COVID-19 transmission.

Analysis

7.

8. The Committee's assessment was informed by comprehensive analysis and discussion of the current outbreak and associated demand for services, set against the health system's



capacity. In doing so, the Committee applied health factors agreed to by Cabinet [CAB-22-MIN-01141, which are:

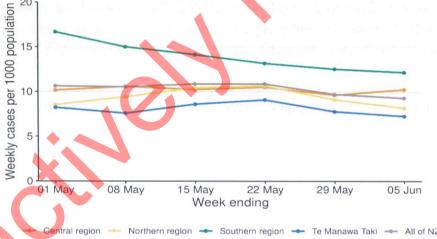
- a. <u>degree of protection from severe health outcomes due to COVID-19</u>, gauged by vaccination coverage and immunity levels among the general population and vulnerable populations, and availability of treatments (e.g. antivirals) to reduce the severity of illness from COVID-19
- b. capacity of the health system to meet demand due to COVID-19, given competing demands from other illnesses (including seasonal and imported conditions), backlog of prevention activities and the care of people with long term conditions.

The decline in cases has slowed and new variants are emerging that will likely increase demand

9. Since the peak of the current outbreak in March 2022, there has been a steady decline of cases to the week of 17 April 2022. More recently, the rate of decline has slowed. The weekly COVID-19 case rate was 9.3 per 1000 people for week ending 5 June 2022, which is a decrease on the week prior and consistent with an overall trend downwards. However, in the Central Region, cases increased 6 percent between 29 May and 5 June 2022 which could indicate that the downward trend is starting to reverse.



Figure 1. Regional weekly case rates for weeks ending 1 May – 5 June 2022



- 10. Testing rates remain high. However precise case numbers remain somewhat uncertain nationally with different data sources suggesting a slightly different picture:
 - For example, in the week ending 5 June 2022, border workers, whose risk is considered comparable with the general population, had a case rate of 14 per 1000 people compared to 9.3 per 1000 people in the general population. These case rates This suggests about 2/3 of cases are being reported. should be similar but are not.
 - b. In addition, wastewater testing shows that infection levels are likely higher than selfreported cases, as wastewater RNA levels have remained consistently higher than self-reported cases, since early April (see figure 2 below).
 - c. All regions (except Northern) have started to see a slight decrease in wastewater trends since the end of May, though this is not significant enough to indicate a consistent, downward trend in overall wastewater positivity.



Figure 2. Regional wastewater trends in SARS-CoV-2 genome quantification from 06 February – 05 June 2022

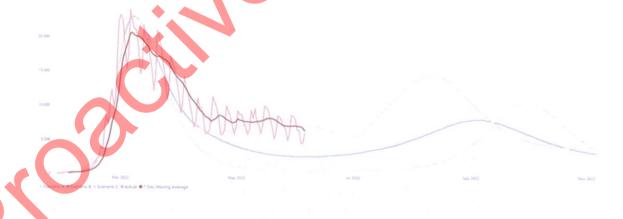


11. The BA4/5 variant is now emerging in New Zealand and, based on international evidence collated by the World Health Organisation, has a clear transmission advantage¹. We therefore expect that this will add significantly to case numbers over winter leading to a further spike in hospital admissions.

COVID-19 is tracking closest to the highest case rate model

12. Modelling by COVID Modelling Aotearoa shows three possible scenarios for how case prevalence may develop during the rest of 2022. These scenarios are based on the current Omicron BA.2 variant. Currently, New Zealand is tracking closely to scenario 'C', the scenario with the largest increase in modelled transmission after the March peak.

Figure 3. COVID Modelling Aotearoa scenarios compared with reported cases nationally



Based on the modelling, it is expected that there will likely be another peak later in the year. This is likely to be driven by waning immunity from previous vaccination and infection, and more indoor activities taking place over winter relative to outdoor ones.

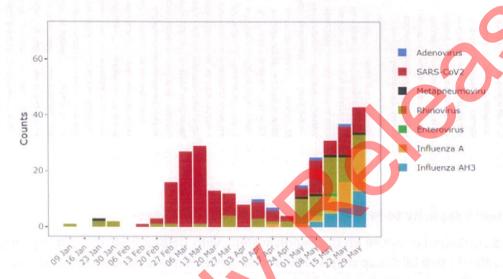
¹ Ministry of Health, Science and Technical Advisory, SARS-CoV-2 Variants of Concern Update, 10 June 2022



Seasonal illnesses are contributing to health system demand significantly

- 14. Demand is already beginning to place pressure on the health system. COVID-19 and influenza are already both contributing significantly to the overall burden. For example, 50 percent of district health boards (DHBs) experienced inpatient occupancy of over 90 percent last week.
- 15. However, for the first time since 2019, influenza has now become the most identified severe acute respiratory infection in Auckland hospital patients, surpassing hospitalisations for COVID-19.





- 16. The spike in seasonal illnesses like influenza is in line with Australian modelling, where flulike illnesses are increasing rapidly and earlier than their 5-year average predicts. This can be attributed to having the most relaxed COVID-19 measures since prior to the pandemic, including opened international borders, and two preceding years of low-burden flu seasons.
- 17. The Committee was clear that managing influenza lies beyond its remit. However, the members were sufficiently concerned about these trends that they considered that it might be advisable for the government to explore further measures designed to address the likely forthcoming impact of influenza and other seasonal illnesses. This might include messaging around staying at home if you are sick, hand hygiene, cough and sneeze into elbow, mask wearing, promoting flu vaccination and not visiting high-risk locations such as aged-residential care facilities if you have been to a high exposure event
- Despite the impact of other respiratory illnesses on the health system, COVID-19 continues to require the targeted measures in the CPF due to its substantially higher mortality rate compared to seasonal illnesses such as influenza, and the greater potential severity of its symptoms. These measures apply independently of measures to address other respiratory illnesses.

Seasonal illness and COVID-19 are also frustrating efforts to clear planned care backlogs

19. At the beginning of the pandemic, many hospitals paused planned care services. Recently, some hospitals began addressing this backlog to reduce the number of patients waiting for these services. However, the backlog coupled with the seasonal demand for services



has increased the number of patients waiting for services. Nearly 29,000 people are now waiting for elective surgery for 121 days or more (see **Figure 5**).



Figure 5. Planned care - Patients waiting for elective surgery

The health system's capacity to respond is challenged by staff illness

- 20. There is continued pressure on the health system, with DHBs across the country reporting high levels of hospital occupancy, workforce absenteeism and consequential disruption of services such as planned care (see **Appendix 1**).
- 21. Clinical staffing constraints due to illness are also contributing to the difficulties in meeting demand. All DHBs across the country cite staff absenteeism as the biggest driver for the pressure experienced in the health system. Workforce limitations across the sector are also attributed to longstanding staff vacancies.

Reduced compliance with masking requirements may be undermining the response

- 22. At the Orange setting of the CPF mask use is mandatory in indoor settings, including in airports and on aircraft. This is one of the key remaining measures to control the spread of COVID-19. However, the Committee articulated a concern that mask requirements are not being sufficiently observed by the public currently to be as effective as needed to minimise disease transmission.
- As the health system is facing pressure, ensuring compliance with existing requirements under Orange would be a useful intervention. This matters particularly for vulnerable cohorts, including the over 65 age group, who are already starting to see an uptick in COVID-19 case rates alongside elevated influenza rates.
- 24. However, it appears that reduced compliance may not be due to hardening of attitudes against measures to reduce COVID-19 transmission. For example, a behavioural insights survey has identified that around half (47 percent) of respondents feel that the 'traffic light system' "keeps Aotearoa New Zealand safe from COVID". The survey also found that if public health measures became stricter (i.e. the country moved to red), 72 percent of



- people would follow mask guidance, 60 percent of people would limit gatherings and 43 percent of people would work from home if possible.
- 25. Consequently, the Committee recommended that a renewed communications campaign should be introduced, emphasising the importance of complying with mask-wearing rules to reduce the spread of COVID-19 and protect vulnerable populations.
- 26. The Committee suggested such a campaign could leverage off the current 'Stay Well This Winter' campaign. This could involve reinforcing the "team of 5 million" narrative and stressing the beneficial impacts that appropriate mask-wearing can have on preventing vulnerable members of society being severely affected by COVID-19, especially over the winter period.

Removing face mask requirements in airports and on aircraft now is not advisable currently

- 27. Strong evidence remains that mask use decreases the risk of COVID-19 transmission by 50-75 percent, particularly in indoor settings. The magnitude of the decreased risk will depend on the background rate of disease, the efficacy of the mask and the compliance to effective mask wearing behaviour.
- 28. As described above, New Zealand continues to face both higher than anticipated COVID-19 infections and spiking seasonal illnesses, which are only likely to intensify over the coming winter months. In this context, it is not considered appropriate to remove the current mandates for face masks in airports and on aircraft at this time. However, the committee agreed that a further review of face masking mandates in the round would be appropriate shortly.

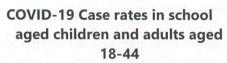


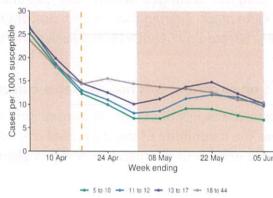
Reintroducing face mask mandates for schools is unlikely to reduce cases significantly

- 30. The Committee was presented with longitudinal data on case rates in susceptible (no prior infection) school aged children and adults both before and after mandatory masking in schools was lifted (indicated by the dotted orange lines in the graphs below, **Figure 6**).
- 31. Initially, in term 1 (first beige block) there was a steady decline in rates among susceptible school aged children and adults. The decline continued during the holidays (white block) for school aged children, after which there was an increase with the return to school in Term 2. However, for adults during school holidays, overall, the rate changed little, and then continued to decrease after school holidays.
- A comparison between the case rate in teachers and the total population would indicate their rate of infection is higher than that of the general population. However, it also possible that their case ascertainment is higher than the general population, although teachers are not required to undertake regular asymptomatic screening.

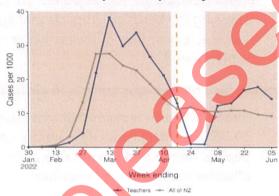


Figure 6. COVID-19 rates in schools for students and teachers





Rate of Infection in teachers compared to all of New Zealand (Cases per 100 per day, week)



33. The Committee also noted that there are many spaces in any given school where a face mask mandate may not be practical (e.g. staff rooms where teachers may remove their face masks to consume food or drinks), and of course they do not apply in the home of students and teachers. The Ministry of Education has also pointed out that the buy-in and support of local communities and schools is critical to the successful implementation of face mask rules locally.

A range of other measures are already in place to reduce transmission in schools, including to help protect vulnerable students

- 34. The Ministry of Education has advised that there are strong supplies of masks available for schools to support mask use with 20,000 to 30,000 masks supplied to schools each week and plentiful supply until the end of the year. So far, 27 million masks have been sent to schools around the country.
- A range of guidance and information has also been provided to schools to support mask wearing, as well as advice on how to support those who are exempted from wearing masks, including some children and young people with a disability or health condition that prevents them from being worn.
- Schools are asked to undertake regular risk assessments and health and safety reviews to ensure the mitigations they have in place reflect their risk profile, including the risk to individuals. Each school has a unique community, facing a diverse range of circumstances with different operational needs that will be considered in local decision making.
- 37. Education providers are encouraged to work with ākonga (students), whānau and their medical professionals (where appropriate) to understand the level of risk and consider the options available to balance the education, health and wellbeing needs of the ākonga. For example, the deaf and hard of hearing community find it challenging to communicate when everyone is wearing masks; and for some people who may have physical or mental



health issues or other conditions (such as some victims of violent crime), masks are unsuitable.

- 38. People, including ākonga, are exempt from the requirement to wear a mask under the Covid Protection Framework Order if wearing a mask is unsuitable for them because they fall into one of the above categories. Exempt people are not required to prove their exempt status, but may chose to apply for an exemption pass from the Ministry of Health if they wish to.
- 39. For ākonga and staff who are at higher risk of poor health outcomes due to COVID-19, schools should have an individual plan in place to help minimise their risk. Their health and safety plan may require masks to be worn when working in close contact with individuals at higher risk and may also require workers to be vaccinated. Other strategies may include:
 - a. reducing the number of adults working closely with akonga-
 - b. ensuring akonga are positioned in well-ventilated spaces while indoors
 - c. building a class culture of manaakitanga (looking out for each other through our actions) which reinforces good hygiene for the benefit of all
 - d. promoting staying home when sick
 - e. continuing to encourage mask use in particularly high-risk activities, such as school assemblies or other gatherings.
- 40. Most vulnerable learners are also asked to be prioritised for attendance onsite, where appropriate, to minimise potential harms to learning and wellbeing. If hybrid or distance learning is needed for some ākonga, guidance notes that identifying ways for ākonga to remain connected to their kaiako and peers will support an easier transition back when the time is right and reduce feelings of isolation while learning offsite.
- 41. The Committee noted the differing rationales for mask mandates, including for in schools and across the CPF and recommended a review of all mask-wearing rules across the Orange and Red settings to ensure a clear and consistent rationale for these measures before making changes in particular contexts.

Reducing self-isolation periods does not appear appropriate or justified currently

- 42. On 14 June 2022, the National Investigation and Tracing Centre (NITC) provided separate advice on potential changes to self-isolation settings (currently set at seven days for cases and household contacts). The advice included modelling by COVID-19 Modelling Aotearoa which suggested that a reduction to isolation measures might be possible without significantly increasing likely transmission risk.
- However, on closer inspection, the Committee concluded that the assumptions underpinning the modelling were unlikely to hold. For example, the modelling assumed compliance with a range of additional new requirements by the public. It also assumed a high level of compliance with additional testing arrangements, working from home and face mask wearing rules once people had completed a newly reduced mandatory 5-day isolation period. The Committee observed that these assumptions did not, for example, tally with recent experience of public compliance with face mask requirements.



- 44. While the available evidence does not yet support reducing self-isolation requirements from 7 to 5 days, the Committee agreed that self-isolation periods should remain under ongoing review.
- 45. The committee noted there would need to be greater clarity about the additional precautions, how would adherence to these be encouraged, and what confidence would there be that they would be followed. Clearer evidence of the likely benefit would also be important. If these points could be provided, a further review could lead to a different recommendation of the Committee, particularly for household contacts.

The measures available at Red currently need to be reviewed for effectiveness

- 46. The Committee noted that the Red setting measures, in particularly capacity limits were not likely to have the same impact as was the case prior to widespread community transmission unless the measures are reviewed and altered.
- 47. While the current Red CPF setting measures would have an effect of slowing transmission, the burden they would place on society balanced against the COVID-19 risk they would mitigate is likely not to be proportionate. On this basis, the Committee members advised that the Red setting measures be reviewed to determine whether they could be better calibrated to slow COVID-19 transmission.

Te Tiriti O Waitangi Analysis

- 48. The Crown has a duty to actively protect Māori health outcomes. Its obligations are heightened due to the disproportionate threat COVID-19 poses to the health and welfare of Māori. For example, the strain on the health system described above is disproportionately affecting Māori. The portion of Māori patients waiting over 121 days for planned care is increasing at a faster rate than for other ethnic groups.
- 49. COVID-19 has also created wider inequities, including educational loss for Māori tamariki due to digital access inequity, financial hardship, employment reduction, decreased access to preventative healthcare, and an over representation of Māori in emergency and crowded housing. The holistic nature of Care in the Community can help support and empower Māori to mitigate these inequities.
- 50. Identifying as Māori and having ties with whānau, iwi, hapū or a Māori provider is a positive factor in times of emergency and crisis. The impact of front-line services providing manaaki, health care, vaccination, advocacy, and organisation to distribute resource should not be underestimated. The Māori-led response at all levels has protected many Māori from COVID-19 and has likely reduced COVID-19 hospitalisations and deaths.
- 51. Sustaining ongoing support and protection requires strong treaty-based partnerships and commitment of resources at all levels of our health and disability system.

Equity

52. Any downward change to the CPF colour setting is likely to have a disproportionate effect on those more at-risk in the population, including Māori and Pacific People, the disabled community, and older people.



- 53. Older people have already disproportionately been affected by COVID-19 and face an increasing threat through winter.
 - a. For example, initially, the virus moved through the younger population, who typically have more social interactions and are subsequently more exposed to the virus. However, COVID-19 is now moving into the older population, particularly impacting those in the 65+ age group, with an 11 percent increase in cases in the past seven days. This has been stable across all ethnic groups.
 - b. The shift of the virus into older age groups will create a different degree of burden on the health system compared to younger people. Over 65s are more likely to end up in hospital and for a longer period. It is also expected that the virus will take longer to move through this population due to the demographic having fewer social interactions. This may lead to a higher hospitalisation burden over a longer period, which is particularly concerning as we approach winter.
- Pasifika have also been disproportionately affected by COVID-19, particularly as the population in New Zealand is generally highly urbanised, many face financial challenges, and are more likely to live within multi-generational housing. Moreover, these families often face long-standing health outcomes inequitable health outcome and service use, including a considerable gap in COVID-19 booster and paediatric vaccinations. These concerns are further heightened due to the expected severity of the 2022 flu season.
- Disabled people, and those with underlying medical conditions, are also more likely to be negatively impacted by COVID-19. People with compromised health are more likely to end up in hospital or require medical intervention and support if they test positive with COVID-19. Equally, those who need assistance with everyday living, are affected by their carers or support workers contracting COVID-19 and being unable to provide essential supports.
- The disability community have advised that they are worried about the spread of the virus and the potential this may have to affect their caregivers/support workers and access to services and support. The Ministry is continuing to work with the sector to address these concerns and have recently established the face mask exemption scheme as a result.

New Zealand Bill of Rights Act (Crown Law Advice)







Next steps

63. If you agree, we will provide this advice to DPMC to inform its All-of-Government advice to Ministers. A further CPF Assessment is scheduled for mid-July 2022, or earlier if circumstances require.

Recommendations

It is recommended that you:



Note the COVID-19 Protection Framework (CPF) Assessment Committee met Noted on 15 June 2022 as part of its regular review to assess colour settings, and to review self-isolation periods for case and household contacts and face mask policy. Noted 2. **Note** that the Committee found evidence suggesting: COVID-19 case rates are plateauing overall but remain higher than expected, nothing that Ouse numbers are now in the expected for his period (3-5,000 per day) ongoing COVID-19 infections means that certain populations are at ii. increasing risk, such as the 65+ age group, for whom there has been an increase in cases in the week ending 5 June 2022. iii. COVID-19 continues to place significant pressure on the health system on top of pressures due to other illnesses such as influenza. 3. Agree that, based on the data and analysis above, all parts of the country should remain at the Orange setting of the COVID-19 Protection Framework at this time. Agree that self-isolation periods for cases and household contacts should 4. Yes/No I intend to discuss this further and seek additional information before forming a final remain at 7-days. view on The Bolation 5. Agree that masking settings in relation to schools, airports and aircraft should remain the same, including: Yes/No No change to mask settings for schools and Yes/No No change to mask requirements in airports and on aircraft **Note** the Committee recommended a review of all mask-wearing rules across 6. Noted the Orange and Red settings of the COVID-19 Protection Framework, including in the above settings, to ensure a clear and consistent rationale for these measures. 7. Note the Committee recommended additional public communication of Noted existing mandatory and non-mandatory mask requirements, and advice to

Note the Committee recommended a review of the public health measures available at Red to ensure they are based on the latest evidence about effectiveness in reducing spread of COVID-19.

pressures on the health system.

promote compliance, particularly over winter and given the increasing

Noted

Note the next COVID-19 Protection Framework Assessment Committee is scheduled for mid-July 2022 or earlier if circumstances require.

Noted



10. **Agree** to forward this advice to the Department of the Prime Minister and Cabinet to inform their advice to Cabinet on 27 June 2022.

Yes/No

Signature:

Date: 20" June 2022

Dr Ashley Bloomfield

Te Tumu Whakarae mō te Hauora

Director-General of Health

Signature

Date: 17 June 2022

Dr Jim Miller

Interim Director of Public Health



Appendix 1: District health board (DHB) assessments

- 1. Feedback from the four regional DHB leads (Northern, Te Manawa Taki, Central and South Island) was also considered. This focused on DHB capacity to respond to COVID-19 and non-COVID-19 demand for health care services in their region.
- Acknowledging the strain the system is under, and some of the benefits which a move to a
 Red setting would bring, <u>all regional DHB leads considered a move to a higher setting was
 not currently merited</u>. They provided the following commentary:

Northern

- 3. Workforce absenteeism: There are continued persistent workforce gaps across all Northern region DHBs. Significant nursing, allied health and technical workforce vacancies and safe staffing obligations continue to limit available inpatient bed capacity and patient flow. The region has a surge workforce, systems to identify critical workforce shortages within providers and, as appropriate, processes to deploy people into those services in a timely manner to mitigate service failure below minimum service levels.
- 4. Planned care: All DHBs continue to experience significant delivery disruption, impacted by high occupancy rates and workforce shortages. Services are still not being delivered routinely at business-as-usual levels. The pressure points are on primary and aged care.
- 5. Hospital capacity: COVID-19 cases are tracking close to scenario 'C' and there is sustained pressure across ED capacity in all hospitals making it challenging to manage patient flow effectively due to high occupancy.
- 6. Other outbreaks: Influenza is a key area of concern now, with high volumes peaking around four weeks ahead of projections and potentially reaching higher levels in future.

Te Manawa Taki

- 7. Workforce absenteeism: Has steadied but is still elevated, posing an issue in pockets or where small teams are providing services (rurally, GP practices, specialist services). Compounded by vacancies in primary care and ARC.
- 8. Planned care: Volumes are reduced in most DHBs, restricted to urgent (cancer) and time critical care. Elective volumes are unlikely to return to normal until some months after winter.
- 9. Hospital capacity: The system is running 'close to the wire', with hospitals across the region at, or close to, being full most days, while adult wards are full or overflowing.
- 10. Other outbreaks: Influenza and RSV have been detected but there is no significant outbreak yet.

Central

- 11. Workforce absenteeism: Continues to be an issue across the region but the main driver is due to vacancies and not necessarily staff absence due to illness.
- 12. Planned care: There is minimal planned care underway in the region and the loss of staff is a key factor. Without certainty of Care in the Community funding over the longer term, many in the community-based workforce are seeking employment opportunities elsewhere.



- 13. Hospital capacity: Experiencing a surge in COVID-19 cases. With hospitals at capacity, community and primary care is under growing pressure and GP wait times increasing
- 14. Other outbreaks: There is an emergence of Influenza A with some parts of the region having higher admission rates for influenza than for COVID-19.

South Island

- 15. Workforce absenteeism: There is pressure on all hospital workforces from sickness and vacancies. In Canterbury there are 300 staff on return-to-work due to having COVID-19. School closures are also causing staff absenteeism as they necessitate staff staying at home to care for their children. The workforce is fatigued and stressed.
- 16. Planned care: Continues to be delivered, but at a 'bare minimum'.
- 17. Hospital capacity: This is at its peak and the system is struggling to cope. From a clinical perspective there is a risk to patients and the community. ARC is of particular concern and is the second largest pressure point. DHBs continue to supply additional workforce for ARC to maintain services. Primary care is under pressure with background levels of COVID-19 and increasing numbers of influenza cases, but they are managing.
- 18. Other outbreaks: There are no significant outbreaks, but the region is starting to see influenza cases, both in community and in hospital but currently at manageable levels.



TOENOITIVE

Attachment C - General education settings for mask wearing

- At Orange, mask wearing is required on school transport for those aged 12 and above, and strongly encouraged inside at school. They are not required in Early Learning Services.
- Schools can, and many do, require masks at Orange through their own policies (implemented following a risk assessment review).
- 3. A range of guidance and information has been provided to schools to support mask wearing as well as advice on how to support those who are exempted from wearing masks, including some children and young people with a disability or health condition that prevents them from being worn.
- Some schools have had trouble balancing the need to enforce mask wearing at Red, while supporting those who are the exempt, and responding to those who claim to be exempt but may not be.
- 5. Schools spoken to regarding the new exemption process were not confident that the new exemption process would make this easier to manage in practice.
- As part of any risk assessment and health and safety review, consultation with workers, their
 representatives, and any other relevant parties such as parents and those in the wider
 school is recommended.
- 7. Guidance regarding children, young people and staff at greater risk of severe outcomes from COVID-19 has been provided regularly to schools throughout the pandemic response, and fully aligns with the CPF and public health advice.

Schools managing their COVID-19 risk

- 8. Each school has a unique community, facing a diverse range of circumstances with different operational needs that will be considered in local decision making.
- Education providers are encouraged to work with ākonga, whānau and their medical
 professionals (where appropriate) to understand the level of risk and consider the options
 available to balance the education, health and wellbeing needs of the ākonga.
- 10. For example, the deaf and hard of hearing community find it challenging to communicate when everyone is wearing masks; and for some people who may have physical or mental health issues or other conditions, masks are unsuitable.
- 11. People, including akonga, are exempt from the requirement to wear a mask under the Covid Protection Framework Order if wearing a mask is unsuitable for them because they fall into one of the listed categories. Exempt people are not required to prove their exempt status, but may choose to apply for an exemption pass from the Ministry of Health if they wish to.
- 12. Parents and whānau should talk through the needs and risks for their children with their teachers in the first place and, if needed, school management are well placed to support those discussions to ensure the needs of each student are well understood.

Briefing: REVIEW OF NEW ZEALAND'S COVID-19 PROTECTION FRAMEWORK AND SELF-ISOLATION SETTINGS: 23 JUNE 2022

DPMC-2021/22-2311

DPMC: 4563460 Page 25 of 27

Attachment D: Modelling for self-isolation

- Data modelling was commissioned from Covid-19 Modelling Aotearoa to explore different combinations of case isolation and contact quarantine requirements and the impact that this may have on case numbers, onward disease transmission and hospitalisations.
- Two models are used to analyse the impacts of changes to self-isolation and testing requirements. The network contagion model (NCM) considers the short-term (around one month) impact and the branching process model (BPM), which allows for reinfection, considers the medium-term impact.
- 3. It should be noted that the NCM utilises the following key assumptions:
 - · no waning immunity or reinfection
 - a household secondary attack rate of around 40 percent (lower than previous estimates
 of up to 80 percent) which likely underestimates the increase in transmission
 - · the wider community is in the Orange CPF setting
 - that 75 percent of symptomatic infections are detected on average 1.5 days after symptom onset; likely overestimates both the impact of isolation on transmission and the number of people requiring to isolate
 - even in self-isolation, transmission continues (5 percent from cases and 10 percent from contacts) reflecting lower compliance and infectiousness after self-isolation. If non-compliance were higher than these levels, it would suggest that current isolation/quarantine settings are less effective and that reducing isolation/quarantine would have a smaller impact than modelled
 - compliance with increased public health precautions until day 10 is 100 percent and reduces onward transmission by 50 percent.
- 4. The scenarios considered are summarised below. These are considered against the baseline of 7 days isolation for cases and contacts.

Scenario 1	Cases: Reduce isolation (5-day minimum isolation, 1 test to release), maximum 7 days isolation, increase public health precautions until day 10 Household contacts: Reduce (maximum 5-day quarantine, test day 3 and 5 and if symptomatic), with increase public health precautions until day 10
Scenario 2	Cases: Reduce isolation (5-day minimum isolation, 1 test to release), maximum 7 days isolation, increased public health precautions until day 10 Household contacts: Remove quarantine (no quarantine, test day 3 and day 5 and if symptomatic), increase public health precautions until day 10
Scenario 3	Cases: Reduce isolation (5-day minimum isolation, 1 test to release), maximum 7 days isolation, increased public health precautions until day 10 Household contacts: Remove quarantine (no quarantine, test only if symptomatic), increase public health precautions until day 10
Scenario 4	Cases: Reduce isolation (5-day minimum isolation, 1 test to release), maximum 7 days isolation, increased public health precautions until day 10 Household contacts: Remove quarantine (no quarantine, test daily for 5 days and if symptomatic), increase public health precautions until day 10
Scenario 5	Cases: Increase isolation (10-day isolation) Household contacts: Increase quarantine (maximum 10-day quarantine test day 3 and day 9 and if symptomatic)

Briefing: REVIEW OF NEW ZEALAND'S COVID-19 PROTECTION FRAMEWORK AND SELF-ISOLATION SETTINGS: 23 JUNE 2022

DPMC-2021/22-2311

DPMC: 4563460 Page 26 of 27

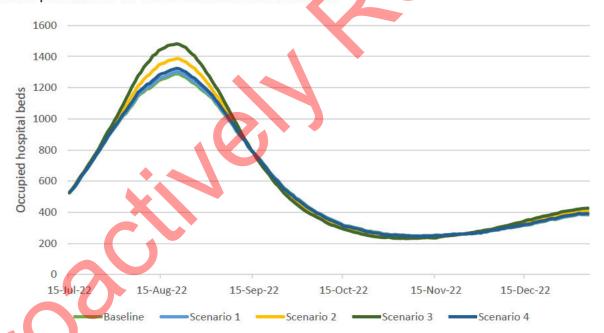
Short term results

- 5. Two of the scenarios modelled suggest a minimal impact on infections and hospitalisations (assuming increased public health precautions for cases and household contacts leading to a 50% reduction in transmission until day 10). These were Scenario 1 and Scenario 4 which indicate only a 0% and 3% increase in infections respectively, compared to baseline.
- 6. However, with no increased public health precautions, all scenarios that reduce self-isolation periods result in a material increase in infections and hospitalisations. In particular Scenarios 1 and 4 have the following changes:
 - Scenario 1: hospitalisation increase 10 percent over baseline and infections 14 percent over baseline
 - Scenario 4: hospitalisation increase 30 percent over baseline and infections 34 percent over baseline.

Medium term results

7. Across all the scenarios modelled, an increase in transmission on 15 July results in a higher winter peak. This is due to transmission increasing in the lead up to a winter wave. The increase in peak occupied hospital beds is 8% (Scenario 2), 20% (Scenario 3) and 3% (Scenario 4), with increased public health precautions for cases and household contacts. Scenario 1 is shown but closely follows the baseline curve.

Figure 1: Impact on occupied hospital beds of isolation scenarios with increased public health precautions for cases and household contacts



8. When there are no additional public health precautions for cases or contacts, for all scenarios with reduced isolation/quarantine periods there is a noticeable increase in infections, hospitalisations and deaths. The increases in peak hospital beds occupied are proportionately larger, in part reflecting that the policy change is implemented leading up to a winter wave. For example, peak hospital beds occupied increases by 12 percent in Scenario 1 and by 25 percent in Scenario 4.

Briefing: REVIEW OF NEW ZEALAND'S COVID-19 PROTECTION FRAMEWORK AND SELF-ISOLATION SETTINGS: 23 JUNE 2022

DPMC-2021/22-2311

DPMC: 4563460 Page 27 of 27