COVID-19 Weekly Monitoring Report

Tuesday 12 May 2020

[IN-CONFIDENCE]

Current strategy: Elimination by keeping it out, finding it and stamping it out.

Current Alert Level: 3

This weekly report responds to COVID-19 Ministerial Group's 9 April directive for All-of-Government officials to develop a set of measures and regular reporting that will inform future decisions on changing Alert Levels or the overall strategy, and to report them regularly.

The report places information about COVID-19 in New Zealand and health system capacity alongside evidence of the effects of the restrictions on the economy and society more broadly, and public attitudes towards, and compliance with, the restrictions.

This report covers:

Key changes and developments from last week	3
COVID-19 in New Zealand	4
Testing and tracing system	7
International comparisons of cases and testing	9
Health system capacity	10
Public and business compliance and movement	12
Effects of the measures on society	14
Effects of the measures on businesses	16
Macroeconomic and fiscal effects of the measures	18
Public attitude towards the measures	20

The contents of this report reflect the principal matters that need to be taken into consideration when determining whether to change alert levels.

There are some gaps in measures and data, and these are noted where applicable. All-of-Government officials will continue to improve the measures.

Key changes and developments from last week

Developments to note:

- New cases have flattened at low levels, and active cases continue to drop.
- No locally acquired cases with an unknown source (potential community transmission) in the past week.
- Health-care (including aged care) staff and members of their households made up most of the locally-acquired cases over the last fortnight.
- Public complaints have declined as Alert Level 3 has progressed.
- Financial hardship signals are mixed with demand for special needs grants for food continuing to reduce, but an uptick in the rate of payment holidays.

Additions to the report:

- The report now includes a table providing more detailed information about the source of transmission for cases over the past 14 days (Figure 4 on page 5).
- The compliance section now includes a breakdown of type of breach (individual, business and mass gathering), and information from WorkSafe about complaints, assessments and actions taken.
- New electronic transactions data has been included from Statistics New Zealand, along with missed loan payments by businesses.

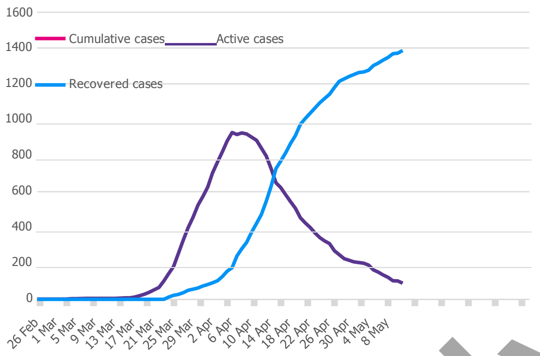
Improvements we are working on:

- Testing timeliness data should be made available beginning with the next report.
- Number of active cases by location of isolation (self-isolation, quarantine, hospital, rest homes, etc).
-

COVID-19 in New Zealand

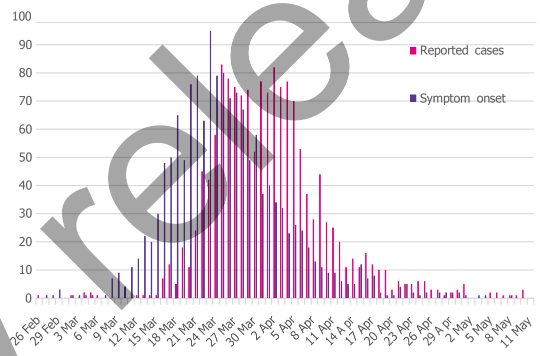
New case numbers have flattened over the past week at low levels. There are now consistently three or fewer each day (Figure 2).[1] There are now 78 active cases (Figure 1). After 14 days in Level 3, we have not yet seen any cases attributable to relaxed restrictions or non-compliance. Only three non-imported cases have symptom onset dates in May, and these are health care staff or household contacts connected with rest home clusters. There have been no further cases with an unknown source (potential community transmission) in the past week.

Figure 1: Cumulative, active and recovered cases



Source: EpiServ via Ministry of Health, Statistics New Zealand

Figure 2: Daily cases and symptom onset date[2]



Source: EpiServ via Ministry of Health

Figure 3: Daily cases by source of transmission (past 14 days)

Source: EpiServ via Ministry of Health

Definitions:

- Import-related case: Cases that have a link to an imported case.

[1] Please note that the daily case numbers used in this report differ slightly from the figures reported each day by the Ministry of Health. The Ministry's figures are based on the change in the 24 hours to the 9am reporting time. The numbers in this report are based on the actual calendar dates of case reporting.
[2] Current estimates are that symptoms appear 2-12 days after infection (on average 5 days after infection).

- Locally acquired cases, epidemiologically linked: Cases that have a link to a locally acquired case with an unknown source.
- Locally acquired cases, unknown source: Cases that have no link to another case or overseas travel (potential community transmission).

The table below provides more detailed information of the source of transmission for cases in the last fortnight. The most common infections have involved staff in health care settings, with many of the recent cases linked to the St Margaret's Hospital and Rest Home cluster, and some linked to the Rosewood Rest Home cluster. A resident of a rest home was also a confirmed case.

With few exceptions, other locally acquired cases have been household contacts of known cases. The case infected in other settings and linked to existing cases was a Marist College student (a case with a dated symptom onset of 5 April).

Figure 4: Detailed transmission source for cases reported in the past 14 days

Case transmission category	Number in last 14 days	Symptom onset date for most recent case[3]
Imported		
Travelers to New Zealand	4	8 May
Import-related		
Household contact of a traveller or air or ship staff	0	
People infected in other settings, where the case is linked to an imported case	1	27 April
Locally acquired (cannot be traced back to an imported case)		
People infected in health care setting (staff)	8	3 May
People infected in health care setting (resident)	1	30 April
People who were infected as a household contact of a known case	5	6 May
People who were infected from a known case in the community (non-household non-health care)	1	1 May
Unknown source		
People whose source of infection is unknown and no longer under investigation	2[4]	5 April
People whose source of infection is unknown but investigations are still proceeding	0	
Total	22	

Source: ESR analyst input and Ministry of Health reports

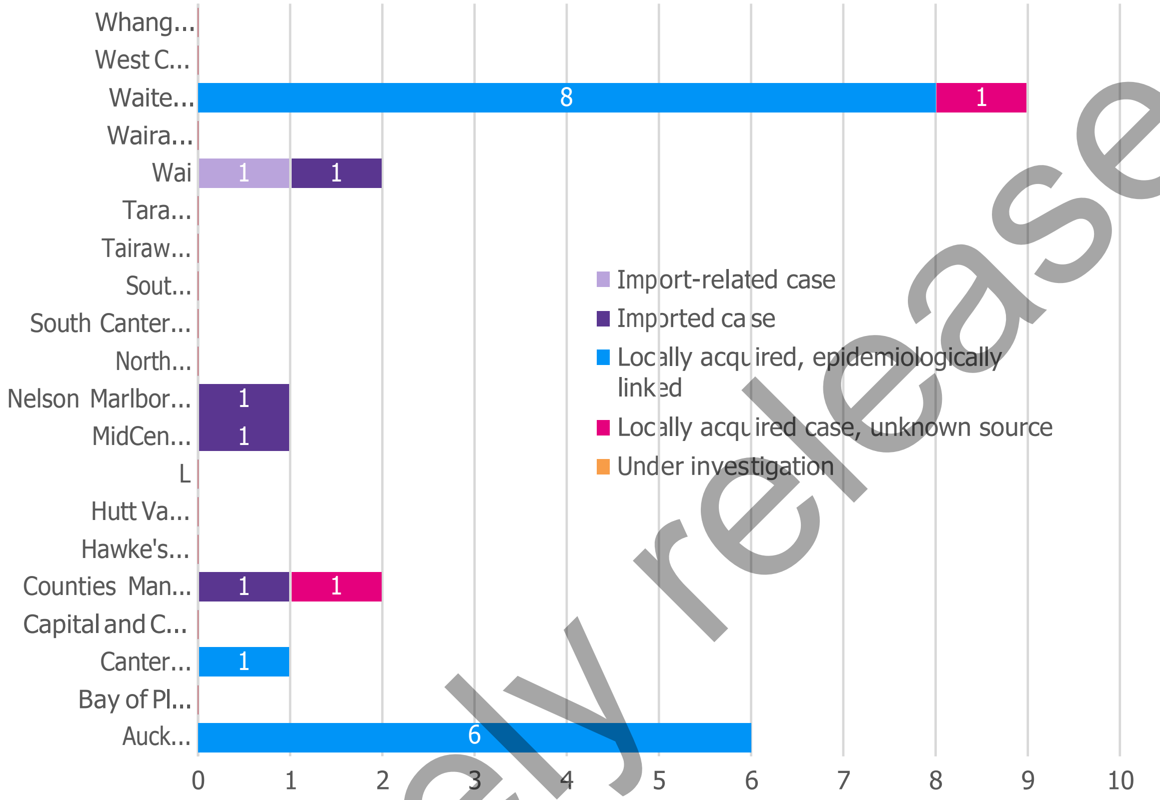
Regionally, cases over the past 14 days have been concentrated in Waitematā and Auckland. Many DHBs have had no new cases over the past 14 days, or only imported cases in the past 14 days (Figure 4).

[3] Cases identified through asymptomatic testing do not have an onset date and are not reflected in this column.

[4] The most recent cases locally acquired cases with unknown source (potential community transmission) are were reported on 29 April and 30 April. The 29 April case was an asymptomatic case detected by workplace surveillance testing. The case reported on 30 April had a symptom onset date of 5 April, suggesting an infection date between 23 March and 3 April and is already recovered. Because this case has an onset date of so long ago it has generally been excluded from advice referring to the number of recent cases with unknown sources.

Please note that the chart below shows the individuals DHB based on their residence. It does not show where the individual is actually located at the moment. This is particularly relevant for imported cases, which will generally be at a quarantine facility that will often be outside their DHB area.

Figure 5: DHB cases over the past 14 days, by source of transmission

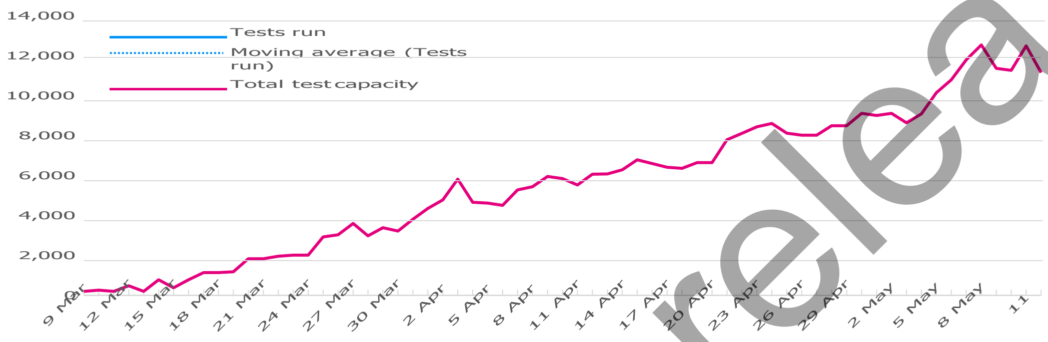


Source: EpiServ via Ministry of Health

Testing and tracing system

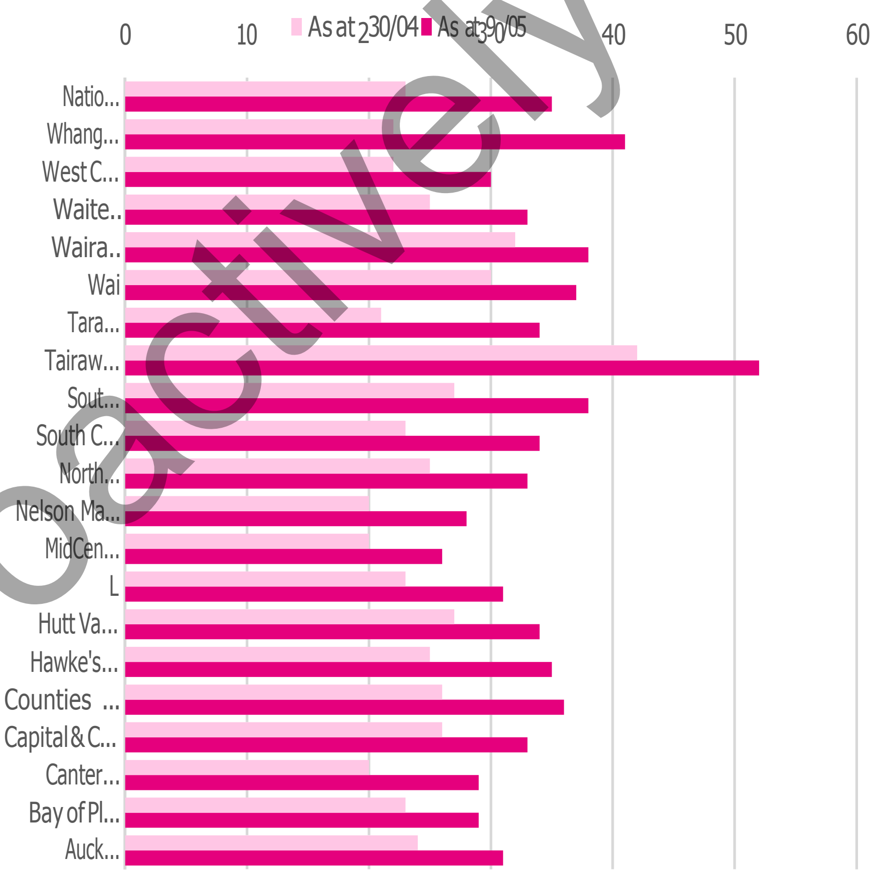
Our testing capacity is now consistently over 11,000 tests per day (Figure 6). As at 21 April, complete test stock on hand in labs is 79,000, which is 13 days' supply at current (7-day average) levels. Demand for testing has been responsive to changes in policy to test with a wide range of symptoms. Targeted testing of higher-risk groups (e.g. airport workers) has also contributed to the increase. At this stage all DHBs in New Zealand have undertaken a level of testing that compares favourably internationally.

Figure 6: Testing capacity



Source: Ministry of Health

Figure 7: Cumulative testing rate per 1,000 population, by DHB



Source: Ministry of Health

The Public Health Units (PHUs) currently have combined capacity to contact and investigate up to 185 cases per day. In addition, the National Close Contact Service (NCCS) has capacity to scale up to 10,000 calls a day to trace and quarantine.

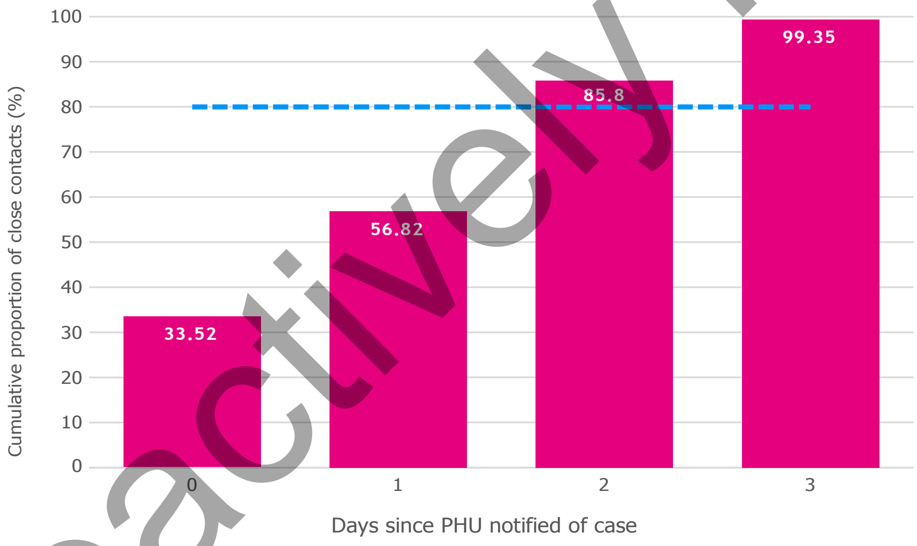
While we remain in Alert Level 3, the number of close contacts per case has remained low.

In addition to capacity, timeliness measures are critical to understanding the performance of the testing and contact tracing systems. Following Dr Verrall's audit of contact tracing, the Ministry of Health established a number of performance metrics for this.

At this stage data is only available by date, rather than time, so we are reporting in terms of number of days in the chart below (Figure 8). Achieving the target would require more than 80% being achieved within two days.

Beginning with the next report, data on timeliness of testing will also be available.

Figure 8: Time between notification of case and tracing of close contact, 13 April-4 May



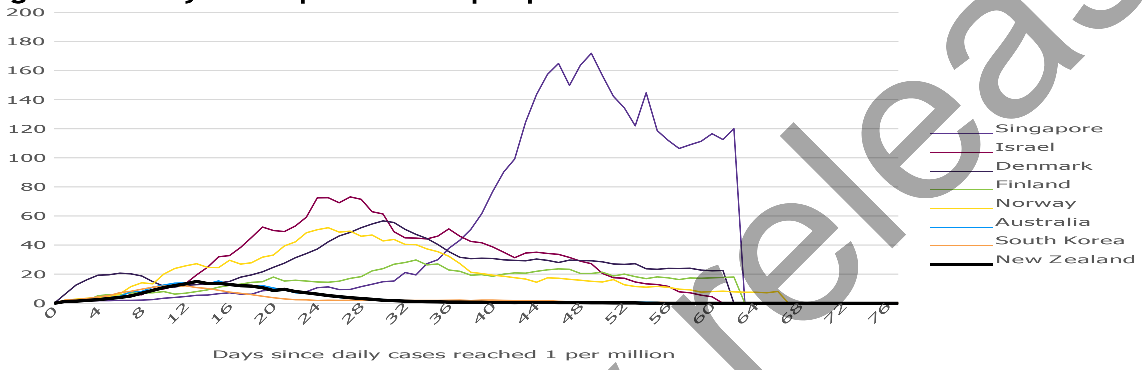
Source: Ministry of Health

International comparisons of cases and testing

International comparisons are limited by different case reporting standards, testing processes and test reporting methodologies.

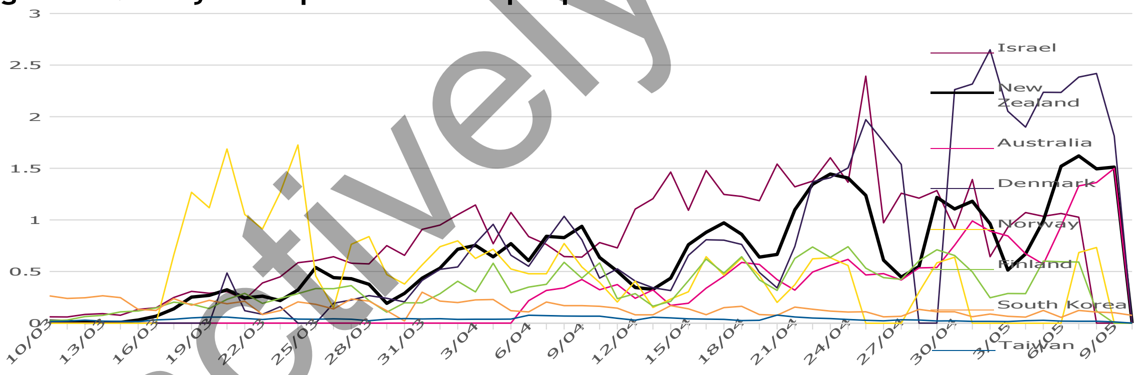
However, New Zealand appears to have performed well internationally in reducing daily cases and maintaining high levels of testing (Figures 9, 10 and 11).

Figure 9: Daily cases per million people



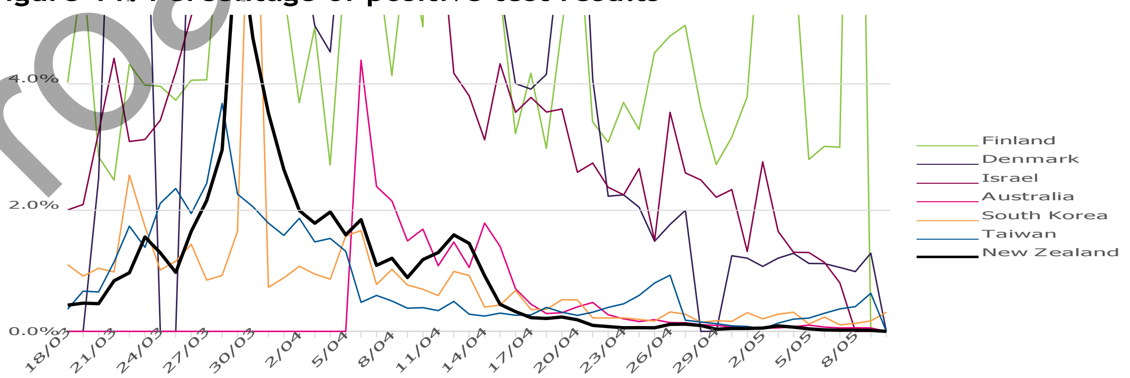
Source: Our World in Data

Figure 10: Daily tests per thousand people



Source: Our World in Data

Figure 11: Percentage of positive test results



Source: Our World in Data

Health system capacity

Our health system is not currently under significant strain due to cases of COVID-19 (Figures 12, 13, 14, 15).[5]

Figure 12: Availability of ventilators, by DHB

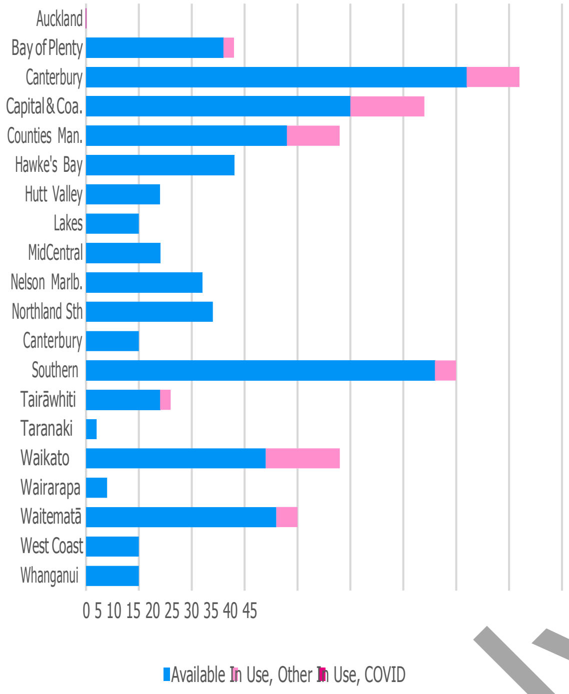
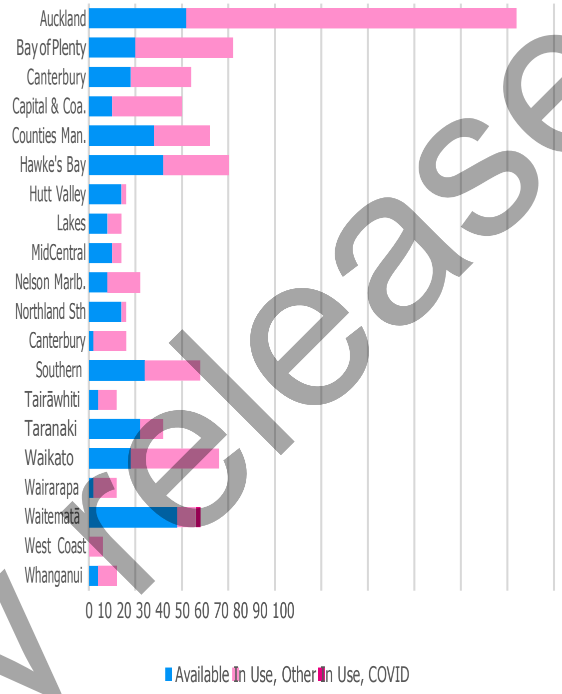


Figure 13: Availability of ICU beds, by DHB[5]



Source: Daily COVID DHB SITREP as at midnight 7 May

Figure 14: Available ventilators and ICU beds, nationally

National ventilators		National ICU beds	
In use, COVID	0	In use, COVID	1[5]
In use, other	30 (11.0%)	In use, other	223 (58.2%)
Available	242 (89.0%)	Available	159 (41.5%)
Total	272	Total	383

Source: Daily COVID DHB SITREP as at midnight 7 May

Figure 15: Health workforce surge availability

Total registrations in surging workforce database (available to support the COVID-19 effort if required)	3,550
Total registrations in surging workforce database (available, unavailable or availability unknown)	9,811
Registrations deployed into roles	22
Number of current demand requests	16

Source: MoH COVID-19 recruitment database as at 8 May

[5] Note that this data is accurate as of midnight 7 May. That is the reason why there is one person shown as using an ICU bed. That is no longer the case. We are working with the Ministry of Health to get more timely data for this report.

PPE stocks are generally stable with stock in the national reserves exceeding recent distributions for most products and large orders due in the next fortnight (Figure 16). The data below only includes PPE for the health sector and non-health essential services. Efforts have continued to build up stocks in the national reserve to provide security against any future disruptions in supply or a significant increase in cases.

Figure 16: PPE availability for the health sector and non-health essential services

Product Description	Stock on Hand		PPE Received Last Week (week ended 3 May)	PPE on Order		Average Weekly Distribution (20 April – 3 May)
	DHBs (5 May)	National Reserves (6 May)		Expected in Next Fortnight	Total on Order	
N95 Mask (or equivalent)	1,064,433	9,552,900	1,000,200	800,000	11,000,000	259,719
Procedure Mask (or equivalent)	5,321,086	16,496,650	2,500,000	32,842,044	105,552,044	2,736,800
Isolation Gown (or equivalent)	439,149	852,125	383,500	620,000	3,401,400	30,250
Disposable Apron	1,191,180	1,000	0	900,000	2,803,000	47,000
Glasses/goggles (or equivalent)	42,435	289,800	100,000	378,101	849,101	74,950
Face shield (or equivalent)	108,125	626,100	100,000	220,000	550,000	400
Nitrile Gloves (all sizes, Each)	16,983,770	8,301,600	0	23,000,000	123,000,000	1,856,921
Hand Sanitiser (500mL equivalents)	45,801	0	0	300,000	300,000	0
Hand Sanitiser (2L equivalents)	0	0	0	150,012	150,012	0
Detergent Wipe (or equivalent)	0	0	0	0	457,828	0
Disinfectant wipe (or equivalent)	0	2,669,300	1,000,000	7,200,000	126,388,000	968,500

Source: MoH PPE data as at 7 April

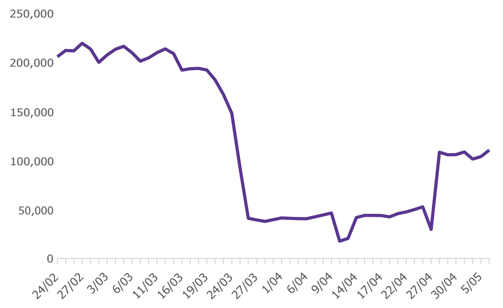
Assessment of current PPE issues provided by the Ministry of Health

- The stock of gloves in the central store is estimated to last less than 3 weeks based on the current level of orders. Quantities ordered are being reviewed closely and for a few providers, not the full amount ordered had been approved. We understand a glove supplier in NZ has maintained 5M of reserve stock for the Northern DHBs that could be made available to the Ministry of Health
- Northern region DHBs were short of gowns this week and gowns were expedited from the Central Store to them on Monday. Sufficient stocks of gowns have landed and should be sufficient to meet demand provided DHBs "shop as normal".
- Community providers have continued to order hand sanitiser. As these items could not be airfreighted, there is currently no stock in the Central Store. The limited quantities that the Ministry of Health have ordered are expected to arrive in the week commencing 25th May 2020 by sea. Pharmac, the lead for hand sanitiser has indicated that their orders are expected to arrive in early June 2020.

Public and business compliance and movement

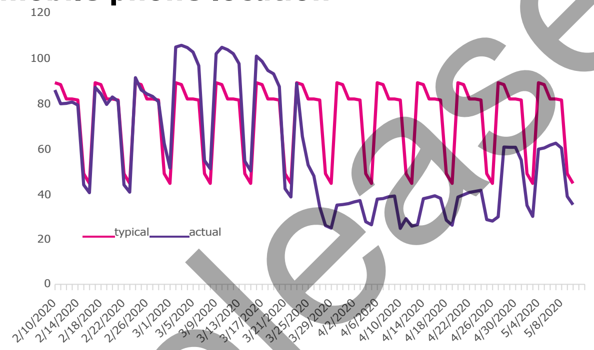
The shift from Alert Level 4 to Alert Level 3 has seen a significant increase in movement, but it remains stable and significantly below normal levels.

Figure 17: Light vehicle traffic volumes in main centres



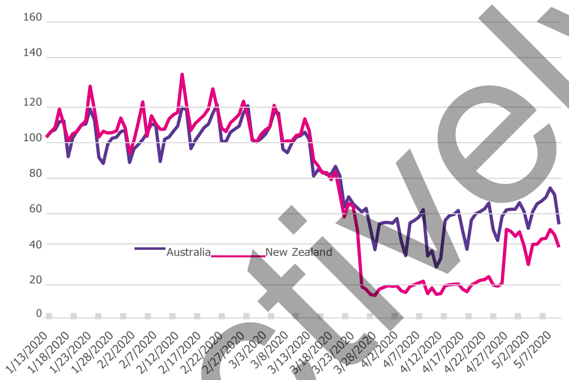
Source: NZTA

Figure 18: People movement (between neighbourhoods) based on mobile phone location



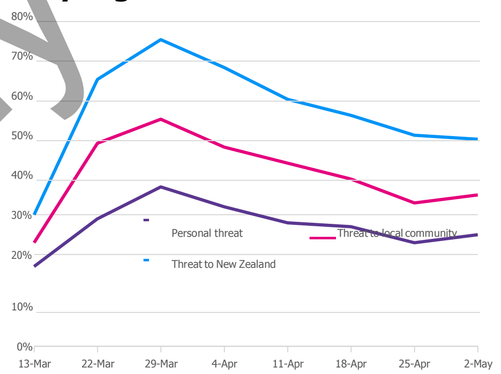
Source: Data Ventures, AOG calculation – st. dev. of SA2 hourly populations

Figure 19: Volume of driving direction requests on Apple Maps (13/01=100)



Source: Apple Mobility Trends

Figure 20: Proportion of people who perceive COVID-19 to be a 'high' or 'very high' threat

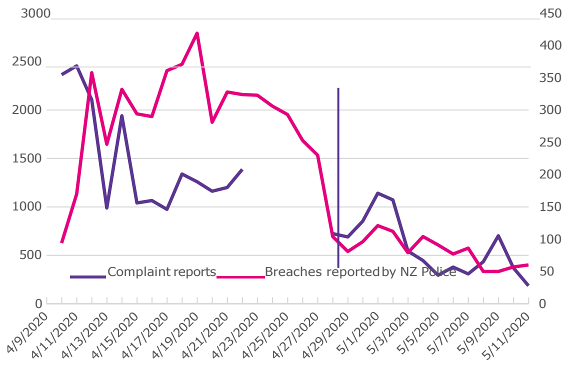


Source: Ipsos

It is difficult to draw conclusions about trends in compliance. Online public reports of breaches and Police recorded breaches have continued to reduce over the past week (Figure 21). However, it is unclear whether is represents a true decline in non-compliance, or greater complacency as the perceived threat from COVID-19 recedes (Figure 20). Police have reduced the use of checkpoints under Alert Level 3 (72 per day, compared to 163 per day under Alert Level 4), although prevention-directed patrols have remained relatively constant at around 990 per day.

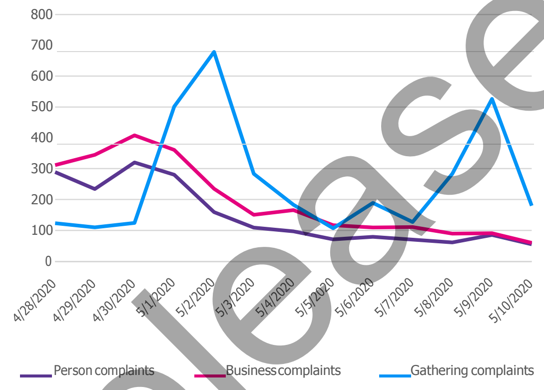
Complaints about mass gatherings have been prominent: there were 809 complaints about mass gatherings on Friday and Saturday, although this was fewer than the 1,179 received on those days the previous week (Figure 22). These are likely to be an area of focus under Alert Level 2, given limits on the size of gatherings.

Figure 21: Complaints from public (left axis) and lockdown breaches reported by New Zealand Police (right axis)



Source: NZ Police

Figure 22: Complaints from the public about different types of breaches under Alert Level 3



Source: NZ Police

More information is becoming available about workplace compliance. As at 6:30pm on Monday 11 May, WorkSafe had received 284 COVID-19 related notifications of concern under Alert Level 3, and conducted 755 COVID-19 related assessments of workplaces. WorkSafe as taken 29 actions, comprising directions, improvement notices and compliance letters.[6]

Suspected and confirmed COVID-19 cases, as well as close contacts of confirmed cases, are meant to self-isolate. We currently have limited understanding of compliance with that self-isolation. Healthline checks in on these people daily by phone.

[6] WorkSafe Activity Daily Report Tuesday 12 May

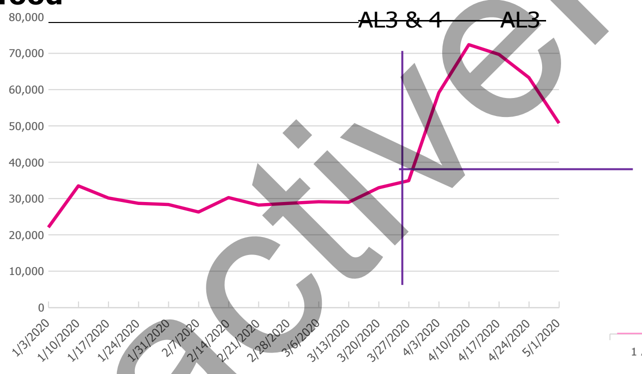
Effects of the measures on society

COVID-19 is continuing to impact material wellbeing. Demand for Special Needs Grants for food has reduced slightly, although remains at an elevated level (Figure 23). The largest proportional increases in monthly demand between the end of February and the end of April have been for Māori (225%), followed by European (197%), and Pacific people (176%). Demand on foodbanks has somewhat stabilised with many operating at 200% their usual operating capacity and some at 400% or more. The highest demand is in the major centres. There is also high demand in more isolated areas such as Northland, Gisborne/Tairāwhiti and Kaikōura.

Payment holidays jumped 45% in the last week to 64,000 (Figure 24). Most (55%) payment holidays are with telco and energy providers.

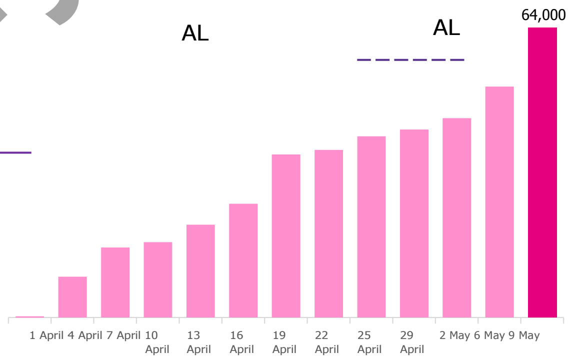
After a slight increase in the first week of Alert Level 4, police call-outs for family harm have stabilised at close to pre-lockdown levels (Figure 25). Call-outs for sexual harm remain lower than lockdown levels. Reports of Concern to Oranga Tamariki increased last week (ending 6 May) but are still 25% lower than the same week last year (Figure 26). Contacts to Youthline remain high and increased again in the week ending 3 May. Physical abuse became one of the top ten presenting issues for the first time since lockdown.

Figure 23: Special Needs Grants for food



Source: MSD

Figure 24: Creditor payment holidays

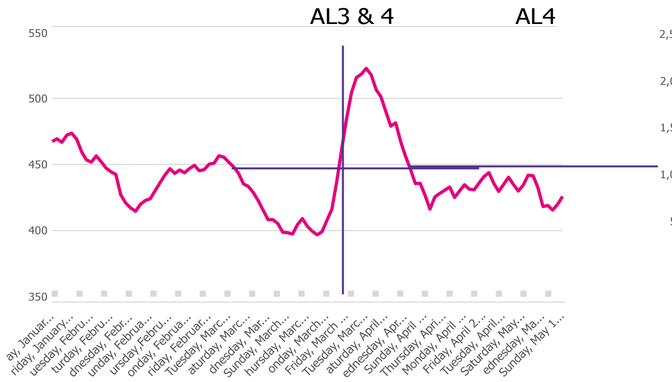


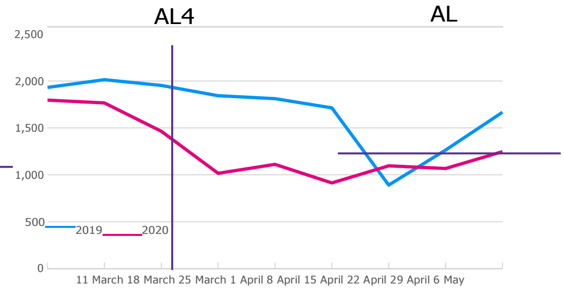
Source: Centrix

Note: Centrix data does not include all credit providers in NZ but it depicts an accurate trend

Figure 25: Family harm investigations

Figure 26: Reports of Concern





Source: NZ Police provisional data, subject to change

Source: Oranga Tamariki

Only 1.8% of adult New Zealanders felt unsafe or very unsafe at home (week ending 27 April), based on responses to the COVID-19 Justice Survey. However, provisional results from the Ministry of Youth Development's (MYD) Survey indicate that safety was a greater concern for young people (aged 12-24). Almost a fifth (19%) of respondents reported feeling unsafe during lockdown. Disabled and rainbow youth were most likely to report this.

The impact of COVID-19 on education will be unclear for some time. For now, we know that most (64%) young people have found it difficult to study at home, based on the results of the MYD Survey. Most respondents (77%) wanted support to get back to their education or training. Youth services are concerned that some young people who have disengaged from school may not return when lockdown is lifted.

Provisional results from the Health and Wellbeing Survey suggest New Zealanders' psychological wellbeing is steady with signs of some improvement. Depression and anxiety rates have been stable. Anxiety specific to COVID-19 has been decreasing weekly (Figure 27). After an initial increase in the early part of Alert Level 4, feelings of loneliness and isolation have been steady (Figure 28). These outcomes warrant ongoing monitoring given expected longer-term and economic impacts of COVID-19 on psycho-social wellbeing. Youth remain a concern, with contacts to Youthline about suicide and self-harm remaining high compared to pre-COVID-19 levels.

Figure 27: COVID related nervousness and stress leaving home

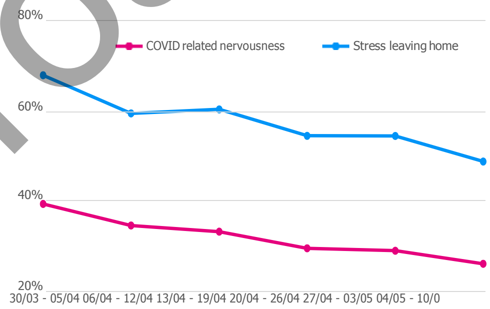
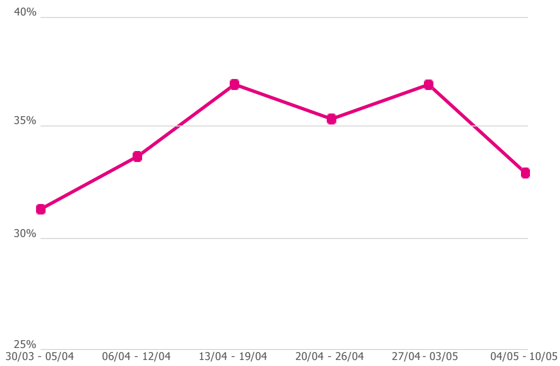


Figure 28: Percentage of survey respondents feeling isolated or lonely



Source: Provisional data from the COVID-19 Health and Wellbeing Survey, Ministry of Health

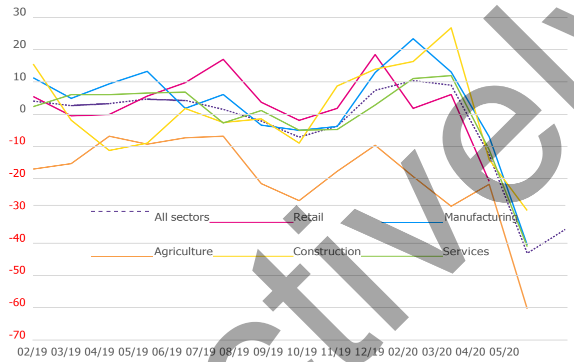
Key issues raised by selected Priority Communities:

Poorly translated information has caused some confusion in Pacific communities. There is concern over support for Pacific families who are not legal residents. Food parcels are often too small for larger Pacific families. Some Māori continue to face difficulties accessing the basics (food, water, power and healthcare), especially in rural areas. Hunting restrictions have been an issue. Rural services report high need for emotional and mental health support. It is reported that employers are making older people redundant. Those requiring a high level of care continue to face difficulties accessing care and health services. PPE and guidance continue to be the key concern for disabled people and their families.

Effects of the measures on businesses

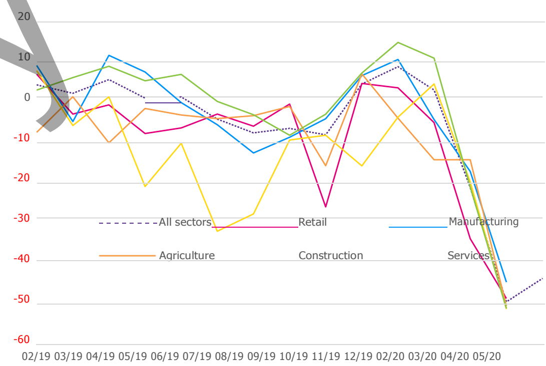
Business confidence appears to have been buoyed by the move to Alert Level 3, based on the preliminary read of the May ANZ Business Opinion survey. Indicators improved from April although they still indicate very weak employment growth and investment activity in the year ahead (Figure 29 and Figure 30).

Figure 29: Net positive investment intentions



Source: ANZ Business Outlook

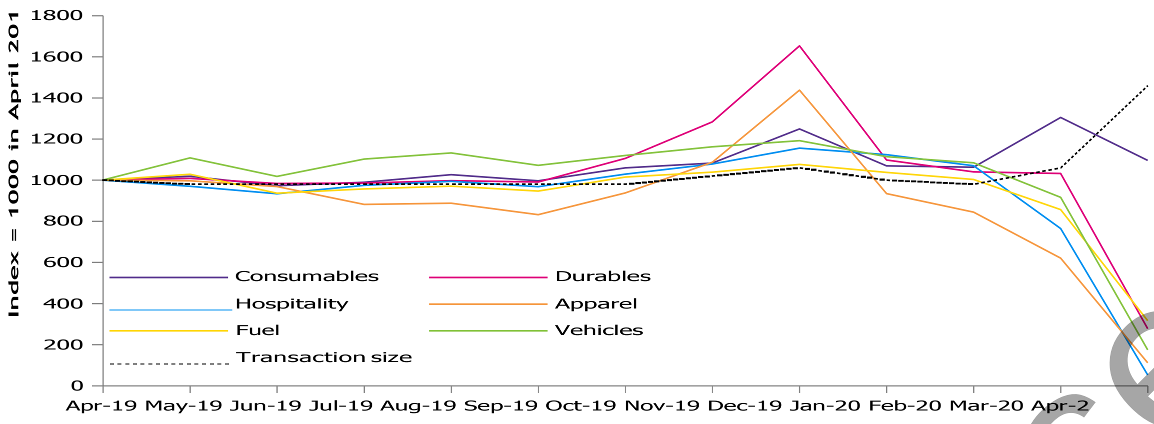
Figure 30: Net positive employment intentions



Source: ANZ Business Outlook

The trends seen in the confidence survey are consistent with real time business activity data. These generally show a gradual increase through Level 3 but with activity still well below 'normal'. Electronic card transactions data shows spend has continued to recover, although is still around 40% lower than a year ago. The composition of spending shows the impact of lifting some restrictions. However, spend on arts and recreation and in clothing, footwear and department stores, remains close to zero.

Figure 31: Debit and credit transactions



Source: Statistics New Zealand

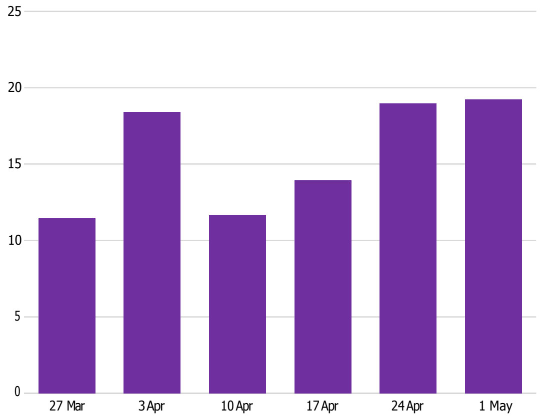
To gain more insight into the impacts of COVID-19 on NZ businesses, MBIE (led by Better for Business) have undertaken a Business-Health Survey with Research NZ. The results from the survey, conducted between 4–10 May revealed the following:

- 85% of businesses were operating in some capacity under Alert Level 3.
- 14% of businesses indicate they are not currently operating – but only 1% indicated that they have already closed permanently.
- A similar proportion of self-employed and employers were operating under Level 4. Level 3 has seen relatively more employers begin operating – 88% of employers are operating in some way but only 75% of self-employed
- 75% of all businesses operating state they received the wage subsidy (61% of self-employed vs. 79% of all employers).
- For employers receiving the wage subsidy, 87% retained all staff.
- Of those currently operating, 78% are reasonably or extremely confident they will still be operating in six months' time, with cashflow reported as being the most important factor keeping them in business.
- When asked about key pain points for their business, 46% said cashflow, 32% said tax obligations, 23% paying rent and 17% said paying employees/staff
- Government support was identified as having had the most impact on businesses ability to keep operating. This is above anything businesses themselves have done such as reducing their own pay, and any support they could access via the private sector e.g., loans and mortgage holidays. When asked to volunteer the most helpful thing government has done, the wage subsidy is almost universally mentioned.

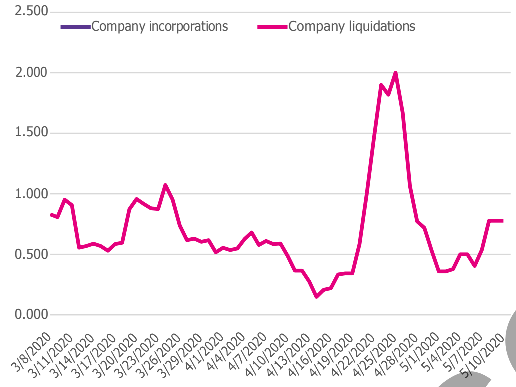
Other data are yet to show the full effects of businesses' lost revenue. Total missed payments on loans are notably higher than prior to lockdown, but appear to be stabilising in response to various support measures. However, the situation is expected to change once support measures cease. Company liquidations have so far remained at lower rates than this time last year.

Figure 32: Missed business loan payments (thousands)

Figure 33: Companies Office activity (ratio to year earlier, 7-day rolling average)



Source: Reserve Bank of New Zealand



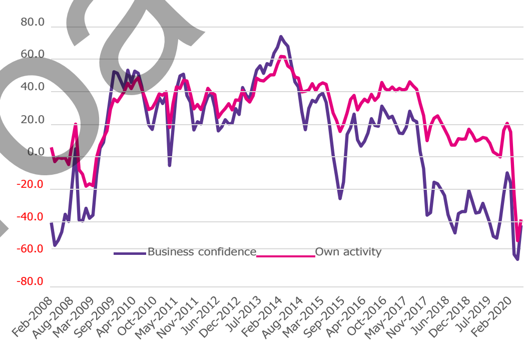
Source: Companies Office

Macroeconomic and fiscal effects of the measures

Once New Zealand moves to Alert Level 2 this Thursday, almost all of the economy is set to reopen. Treasury estimates that output is reduced by 10–15% from normal levels under Alert Level 2. Under Alert Level 3 output is reduced by approximately 25%.

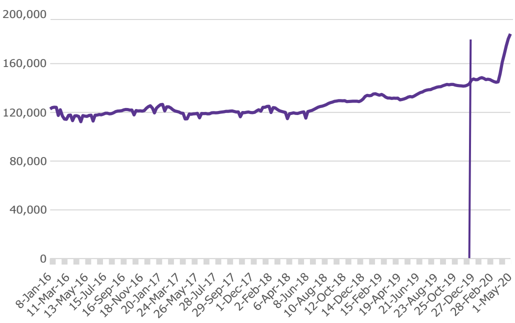
The preliminary ANZ Business Outlook Survey results for May show modest improvement across all forward-looking indicators compared to the April results, but outlook remains poor. A net 42% of businesses are expecting weaker activity in the year ahead, an improvement of 13 points from April, and headline business confidence is at -46%. The number of jobseeker recipients has increased sharply by almost 40,000 since 20 March, despite over 1.72 million individuals now being covered by the wage subsidy, and over $10.6 billion paid out.

Figure 34: ANZ Business Outlook



Source: ANZ

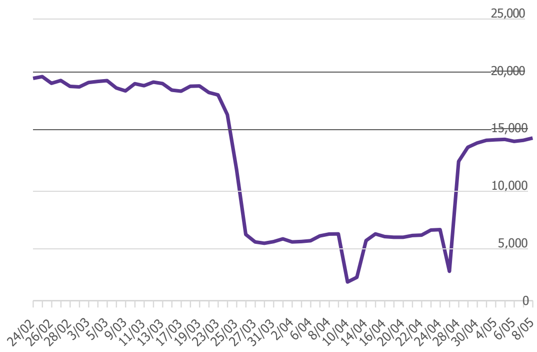
Figure 35: Jobseeker Support recipients



Source: MSD

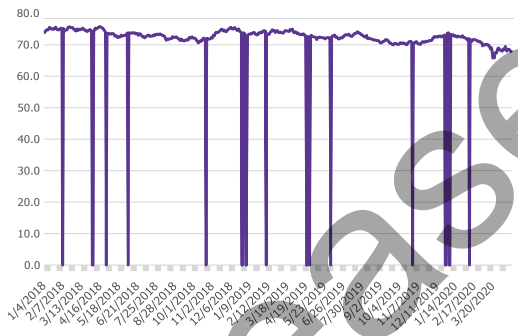
Heavy traffic volumes have increased substantially under Alert Level 3 compared to Alert Level 4. Merchandise exports to China and imports from China in the past four weeks are higher than the same period as last year, however total exports and imports are below last year's levels. International prices for NZ commodity exports have weakened. New Zealand's trade weighted index has stabilised in the past two weeks, reflecting broadly stable risk sentiment across global markets.

Figure 36: Heavy traffic volumes in main centres



Source: NZTA

Figure 37: Trade Weighted Exchange Index



Source: RBNZ

Fiscal response packages announced to date amount to around $22bn in committed spending (across a range of income support, general business support and sectoral measures) and the expected costs of guarantees and indemnities (Figure 38).

Figure 38: Fiscal costs of commitments and programmes already announced

Spending package	Total impact on net core Crown debt ($bn), period to 2023/24
Income Support	14.884
General business and firm support	5.734
Aviation support	0.600
Health	0.606
Other	0.402
Total all packages	**22.226**

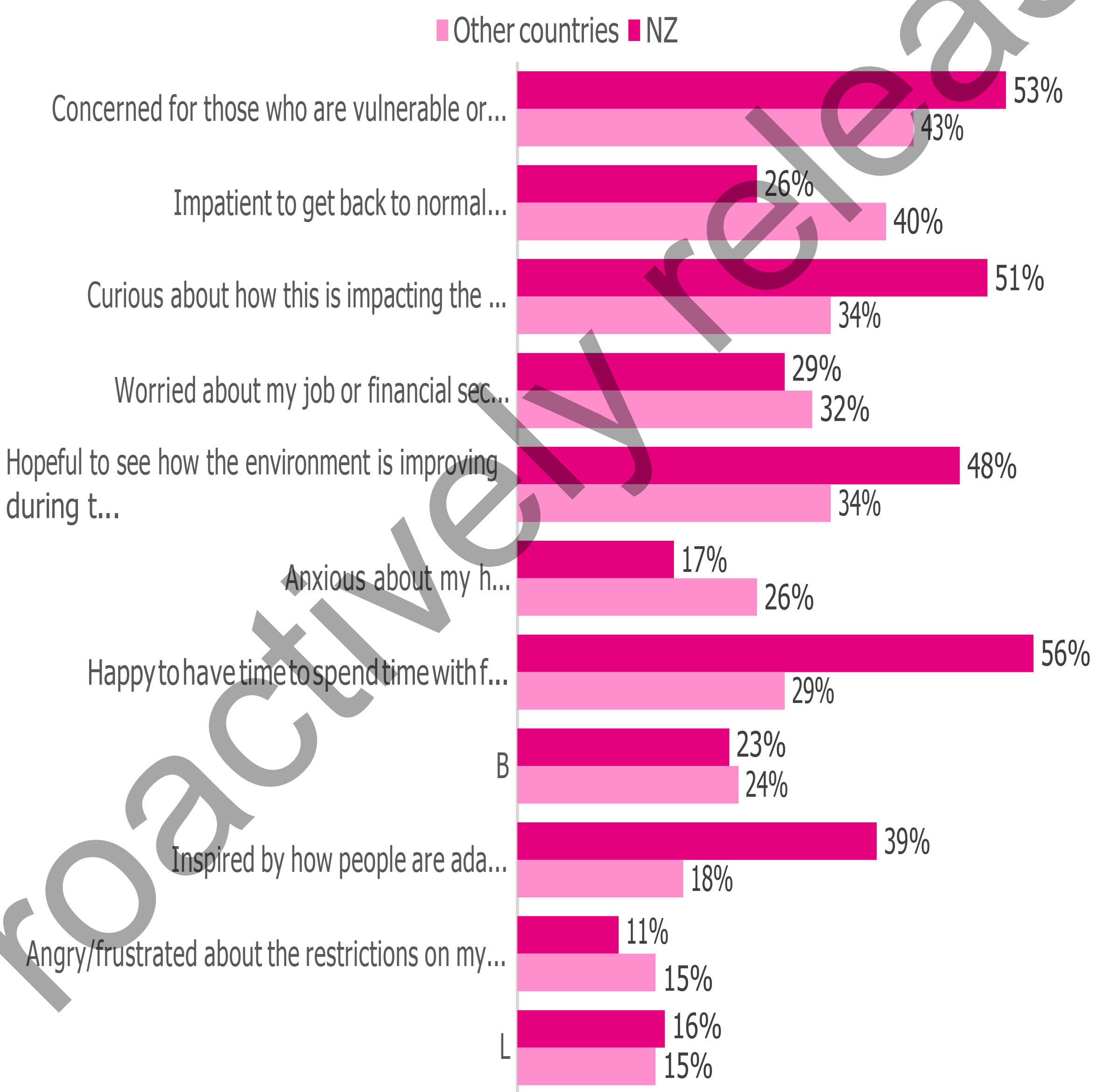
Note: the table above is correct to COP Friday; significant decisions were taken 11 May that will be reflected in the next update. The figures above includes the cost to the Crown of the Business Finance Guarantee scheme, but not the costs to the Crown of the Small Business Cashflow Scheme. While there is still no firm estimate of the cost of the SME loan scheme, we can indicate a likely range of $3–$4.5bn.

Public attitude towards the measures

New Zealanders feel that the current measures are working, but over the past week there was an increasing impatience for a move to Alert Level 2.

Ipsos research (1 – 3 May) found New Zealanders are inspired by other people adapting to the way of life under Alert Level restrictions (39% compared to 18% global) and continue to have lower levels of impatience and anxiety compared to the worldwide average (Figure 39).[7]

Figure 39: Survey question - Which best describes how you are feeling today?



Source: Ipsos COVID-19 Report May 1-3, 2020

[7] Countries surveyed: Australia, Canada, France, Denmark, Italy, Japan, Russia, UK, USA, China, India, Brazil, Mexico, Spain, New Zealand

Social media sentiment analysis has found New Zealanders continue to be generally in agreement with the current measures in place, but there a divide in attitudes about Level 2. Many people are keen to be reunited with friends and family. Others express strong concern about the ability to socialise safely if people relax at Alert Level 2 too quickly.

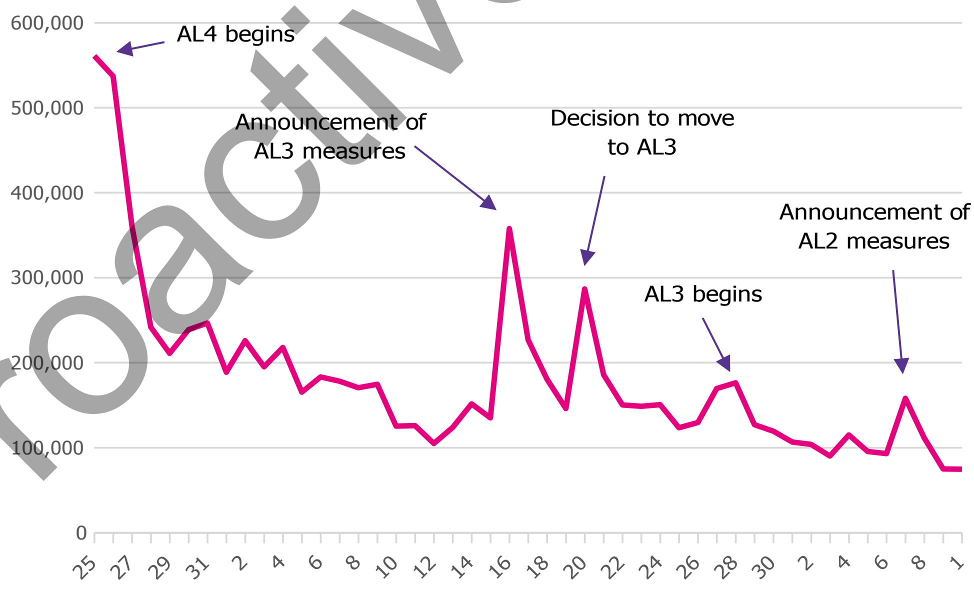
Comments on social media are mixed, with many people already expressing concern about seeing others in public socialising. Some are frustrated by the limitations on their freedom and inability to see their loved ones. Media stories published about people unable to visit loved ones as they are dying are driving negative sentiment.

Overall, this split in attitudes illustrates the stress the Alert Level system has put on social behaviour and ties like friendship, family and community. However, a significant proportion of the conversation on social media is in support of maintaining safety throughout the levels.

Traffic on the covid19.govt.nz website (Figure 40) has seen an average of 114,468 users per day during Level 3 (Level 4, average of 252,201 users per day). This may indicate people feel more confident about what they can and can't do at each Alert Level.

Covid19.govt.nz web traffic, social media and call centre data has reported an increase in public interest about Alert Level 2, with over half of the searches on the website relating to Alert Level 2 (55%, 4 May – 11 May). This shows there was significant public interest in what Alert Level 2 meant ahead of the announcement on 11 May.

Figure 40: Unite against COVID-19 website users



Source: Google Analytics