COVID-19 Weekly Monitoring Report

Tuesday 26 May 2020 [IN-CONFIDENCE]

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

Current Alert Level: 2

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.

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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 continued to decline with only two cases reported in the last fortnight.
- Business activity continues to gain momentum under Alert Level 2 with many spending and activity metrics showing comparable levels to pre-COVID.
- Mobility has increased significantly under Alert Level 2 but remains around 20 percent below pre-COVID levels. Relative to pre-COVID, New Zealand mobility now appears similar to Australia's for the first time since we entered Level 4.
- Public complaints and Police breaches have continued to decrease
- The pace of workplace compliance concerns and enforcement has remained stable.

Changes to the report:

• Page 8 now includes data on the number of individuals in managed isolation and quarantine. This responds to a request by the Minister of Finance that these figures be provided to Ministers weekly.



COVID-19 in New Zealand

New case numbers have declined further in recent weeks with only two cases reported in the last fortnight. There are now 22 active cases (Figure 1). 1

On 22 May one case was publicly announced as confirmed. This case was first reported on 1 May following symptom onset on 27 April and had been under investigation. Because it was reported over 14 days ago, it does not show up in figures 3,4 and 5.

Figure 1: Cumulative, active and recovered cases

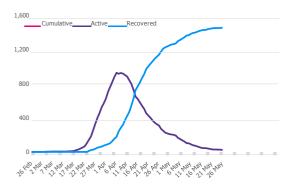
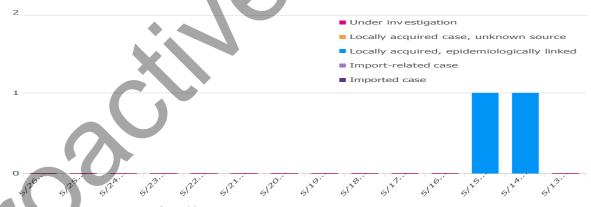


Figure 2: Daily cases and symptom onset date (since 29 April)



Source: EpiServ via Ministry of Health, Statistics New Source: EpiServ via Ministry of Health Zealand

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



Source: EpiServ via Ministry of Health

Definitions:

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

¹Please 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 any change in status in the 24 hours to the 9am reporting time. The numbers in this report are based on the actual calendar dates of case reporting and symptom onset.

Detailed transmission information

The table below provides more detailed information of the source of transmission for cases in the last fortnight. At this stage the only non-imported cases with symptom onset after 1 May are healthcare staff or household contacts. The one reported case in the last fortnight infected outside a household was a historical case identified through cluster testing.

Twenty-eight days after the shift to Alert Level 3, we are not aware of any cases attributable to relaxed restrictions or non-compliance under Level 3 or 2.

Figure 4: Detailed transmission source for cases reported in the past 14 days (from 12 May) excluding historical cases

Case transmission category	Number in last 14 days	Symptom onset date for most recent case ²		
Imported	10			
Travelers to New Zealand	0			
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	0			
Locally acquired (cannot be traced back to an imported case)				
People infected in health care setting (staff)	0			
People infected in health care setting (resident)	0			
People who were infected as a household contact of a known case	1	10 May		
People who were infected from a known case in the community (non-household non-health care)	1	23 March		
Unknown source				
People whose source of infection is unknown and no longer under investigation	0			
People whose source of infection is unknown but investigations are still proceeding	0			
Total	2			

Source: Ministry of Health via EpisSurv

Cases regionally

² Cases identified through asymptomatic testing often do not have an onset date and are not reflected in this column.

Regionally, non-imported cases over the past 14 days have been limited to Waitemata and Canterbury DHBs (Figure 5).

Please note that the chart below shows the individuals DHB based on their residence. It does not show where the individual is 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.

Whang... West C... Waite... Waira... Wai Tara... Tairaw... Import-related case Sout... ■ Imported case South Canter... Locally acquired, epidemiologically North... linked Nelson Marlbor... Locally acquired case, unknown source MidCen... ■ Under investigation Hutt Va... Hawke's... Counties Man... Capital and C... Canter... Bay of Pl... Auck... 3

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

Source: EpiServ via Ministry of Health

Testing, tracing and isolation system

Our testing capacity is now consistently over 10,000 tests per day (Figure 6). As at 26 May, complete test stock on hand in labs is 199,000, which is 48 days' supply at current (7-day average) levels.

Testing rates have started to dip reflecting reduced demand for testing (rather than supply). This could be a result of the sustained low cases reducing the sense of urgency to seek testing or having a greater number of people returning to work and school, increasing competing demands on time.



Figure 6: Testing capacity

Source: Ministry of Health

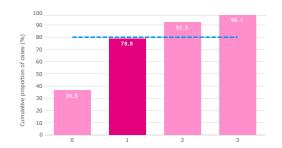
In addition to capacity, timeliness measures are critical to understanding the performance of the testing system. These include the time between symptom onset and a swab being received by a lab, and the time between the swab being received and the notification of the test result (Figures 7 and 8).

Data is only available by date, rather than time, so we are reporting in terms of number of days. At this stage neither target is being fully met, but most of the data is from April given the small number of cases in May. Systems will likely have improved since that time. This data is only currently available up to the 11th of May, however due to the small number of cases since the 11th of May, this data is likely to have changed little.

Figure 7: Time between symptom onset and a swab being received by the lab, 13 April - 11 May



Figure 8: Time between a swab being received by the lab and notification of the test result, 13 April - 11 May



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.

Timeliness measures are the key metric to understanding the performance of contact tracing systems. Figure 9 shows the time between notification of a cases and tracing of all close contacts and the associated target of this being achieved within 48 hours for 80% of cases. Again, only data by date is available. Achieving the target would require more than 80% being achieved within two days. At this stage, the data overwhelmingly reflects those infected under Alert Levels 3 and 4 when most people had few close contacts.

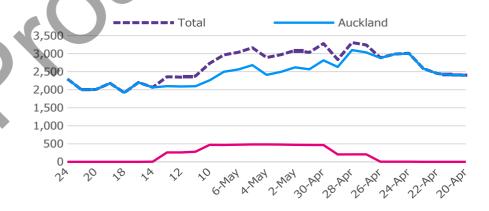


Figure 9: Time between notification of case and tracing of close contact, 13 April-15 May

Source: Ministry of Health

We currently have the capacity to manage up to 3,569 people in managed isolation or quarantine at the New Zealand border. While the number of people in managed isolation and quarantine has been falling since the end of April (Figure 10), with the move to Alert Level 2, and other countries easing restrictions, it is expected that more New Zealanders and approved entrants will be travelling to New Zealand over the coming month.





Source: Isolation, Quarantine and Repatriation SITREP, AoG calculation

Note: Wellington not included in graph, as there were only 2 people maximum in managed isolation or quarantine



Health system capacity

Our health system is not currently under significant strain due to cases of COVID-19 (Figures 10, 11, 12, 13).

Figure 11: Availability of ventilators, by DHB³

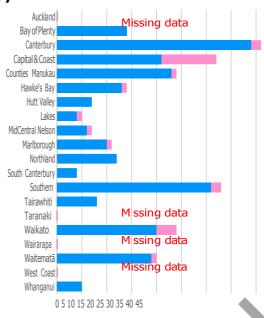
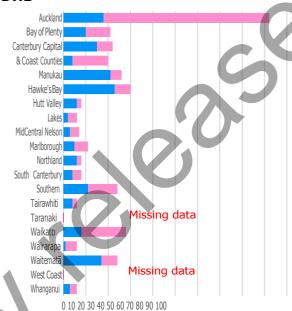


Figure 12: Availability of ICU beds, by DHB³



Available In Use, Other In Use, COVID

Available In Use, Other In Use, COVID

Source: Daily COVID DHB SITREP as at midnight 24 May

Figure 13: Available ventilators and ICU beds, nationally³

National ventilators		National ICU beds		
In use, COVID	0	In use, COVID	0	
In use, other	25 (9.6%)	In use, other	192 (54.4%)	
Available	236 (90.4%)	Available	161 (45.6%)	
Total	261	Total	353	

Source: Daily COVID DHB SITREP as at midnight 24 May

Figure 14: Health workforce surge availability

•	igure 11. Heaten workforce surge availability	
	Total registrations in surging workforce database (available to support the COVID-19 effort if required)	3,43 9
	Total registrations in surging workforce database (available, unavailable or availability unknown)	9,91 8
	Registrations deployed into roles	28
	Number of current demand requests	7

Source: MoH COVID-19 recruitment database as at 22 May

³ Note that there is missing data for the Auckland, Taranaki, Wairarapa and West Coast DHBs

PPE

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 14). 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 15: PPE availability for the health sector and non-health essential services

	Stock on Hand		PPE	PPE on Order		Average Weekly
Product Description	DHBs (19 May)	National Reserves (20 May)	Received in Week to 20 May	Expected in Next Fortnight	Total on Order	Distributio n over Last Fortnight
N95 Mask (or equivalent)	916,792	10,188,420	0	1,650,000	11,000,000	107,552
Procedure Mask (or equivalent)	5,244,088	24,789,900	0	17,062,04 4	105,302,04 4	1,350,250
Isolation Gown (or equivalent)	454,183	706,900	358,700	450,000	5,021,400	141,638
Disposable Apron	1,114,815	0	0	900,000	2,700,000	0
Glasses/goggles (or equivalent)	117,130	363,513	0	250,000	745,101	0
Face shield (or equivalent)	153,141	629,780	0	246,320	565,640	43,500
Nitrile Gloves (all sizes, Each)	17,776,276	6,598,600	0	3,000,000	243,000,00 0	1,979,275
Hand Sanitiser (500mL equivalents)	52,473	0	0	299,990	300,000	0
Hand Sanitiser (2L equivalents)	0	0	0	150,012	150,012	0
Detergent Wipe (or equivalent)	588,150	0	0	0	457,828	0
Disinfectant wipe (or equivalent)	2,395,140	8,040,650	0	3,600,000	119,788,00 0	1,335,425

Source: MoH PPE data as at 20 May

Assessment of current PPE issues provided by the Ministry of Health

- Gloves continue to be managed closely with a shipment that was due next
 week delayed until the end of June. The Ministry is investigating the
 purchase of 6 million gloves from a local supplier, and continue to pursue
 sourcing gloves from other possible avenues. DHB's current usage is
 approximately 800,000 per day and current and planned stocks are
 sufficient to sustain DHB's until the next shipment. However, there are no
 stocks available to be issued to Non-Government Organisations (NGO's).
- There is a reduction in requests for N95 masks which is in line with the reduction in probable and positive COVID-19 cases.

Public and business compliance and movement

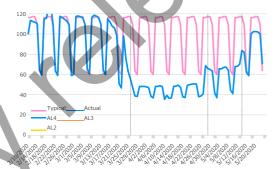
Direction requests on Apple Maps, light vehicle traffic volumes and mobile phone movement data all suggest that mobility has increased significantly under Alert Level 2, but still remains below pre-COVID levels (Figures 16, 17 and 18). Unlike the shift to Alert Level 3, which involved a single one-off increase, movement continues to increase as Level 2 continues.

Further increases in movement is likely as more people begin to return to working outside the home, and as the perceived personal and family threat of COVID-19 continues to abate (Figure 19).

Figure 16: Light vehicle traffic volumes in main centres



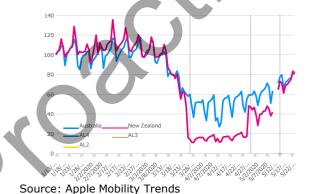
Figure 17: People movement (between neighbourhoods) based on mobile phone location



Source: NZTA

Figure 18: Volume of driving direction

requests on Apple Maps (13/01=100)



Source: Data Ventures, AoG calculation - st. dev. of SA2 hourly populations

Figure 19: Proportion of people who were worried about the health of their family members, or their personal risk of getting COVID-19



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

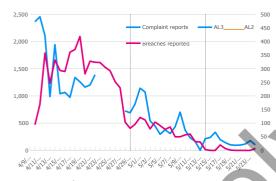
Note: Provisional data from the COVID-19 Health and Wellbeing Survey is dated as at week end of the survey week

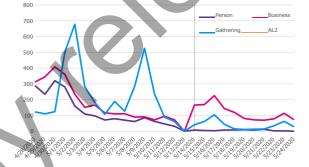
COVID related compliance

Online public reports of breaches and Police recorded breaches have continued to reduce with the move to Alert Level 2 (Figure 20). Given the relatively few restictions under Alert Level 2, there are far fewer activities that could lead to a breach. Public complaints related to gatherings are significantly reduced since the start of Alert Level 2 despite the continued limits on gatherings. Complaints related to businesses remain at a higher level than at Level 3, likely associated with the significantly greater number of businesses able to operate (Figure 21).

Figure 20: Complaints from public (left axis) and lockdown breaches reported by New Zealand Police (right axis)

Figure 21: Complaints from the public about different types of breaches since Alert Level 3 began





Source: NZ Police Source: NZ Police

COVID related workplace compliance

In general, the pace of workplace compliance concerns and enforcement has remained stable, and potentially somewhat slowed between Alert Level 3 and 2 despite the greater number of businesses operating.

Worksafe has conducted 505 COVID-19 related assessments of workplaces under Level 2. A total of 940 assessments were undertaken across the whole of Alert Level 3.

A total of 23 Covid related actions have been taken under Alert Level 2, of which 21 were verbal directions. A total of 42 actions were taken across the whole of Alert Level 3.

Worksafe has received 120 COVID-related notifications of concern under Alert Level 2. A total of 328 notifications were received under the whole of Alert Level 3.

⁴ WorkSafe Activity Daily Report Tuesday 26 May

Effects of the measures on society

Demand for Special Needs Grants for food continues to slow, however it remains above 2019 Christmas levels (Figure 22). It is difficult to gauge the impact of COVID-19 on demand for Special Needs Grants, over and above other factors, such as the start of Winter Energy Payments and recent operational changes.

Creditor payment holidays continue to increase, up 14,000 over the past week (Figure 23).

Data from Police provides a consistent picture of family harm stabilising close to pre-lockdown levels (week ending 22 May). Call-outs for sexual harm haven't significantly changed since the start of Alert Level 2 (Figure 24).

Figure 22: Special Needs Grants for food

60,000

Christmas peak
40,000

Unnamed Series 2

20,000

Lington Properties P

Figure 23: Creditor payment holidays



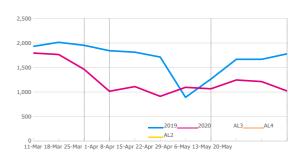
Source: MSD Source: Centrix

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

Figure 24: Family harm calls for service (7 day rolling average)



Figure 25: Reports of Concern



Source: NZ Police provisional data, subject to change, using a 7 day average for ease of presentation

Source: Oranga Tamariki

Note: To ensure the quality and accuracy of data, Police statistics on Family Harm Investigations and other Official Crime Statistics are updated monthly, one month in arrears. That is statistics for April will be published on last working day of May 2020. To support the effort to supply timely information and establish daily trends relating to the Covid-19 pandemic, the data supplied are sourced from provisional and operational databases for operational use only. The information should not be disseminated further and cannot be regarded as official statistics for reporting purposes.

Reports of Concern (RoC) were 29% lower in the week ending 20 May compared to the previous week (Figure 25). Since Alert Level 4, these have averaged 1,120 per week. This is substantially lower than typical levels from last year, however not too dissimilar to levels seen during the school holidays last year.

Contacts to Youthline remain high. Last week there was a large increase in the number of texts to Youthline concerning physical abuse and violence. Contacts concerning Fear & Anxiety also markedly increased compared to the previous week and remains above the weekly average received in 2019. However, the number of contacts concerning suicide has declined, and was fewer than the weekly average received in 2019.

Provisional results from the Health and Wellbeing Survey suggest that, overall, New Zealanders' psychological wellbeing is stabilising at an improved level compared to Alert Level 4. COVID related nervousness decreased over the past week, continuing a downwards trend from early April (Figure 26). Depression and anxiety symptoms, while not significantly changed over the past fortnight, are lower than at the beginning of Alert Level 4.

While fewer respondents are reporting loneliness or isolation since the move to Alert Level 2, this isn't the case for respondents who are identified as disabled. For this group of people, the proportion that are reporting loneliness or isolation this week remains at levels similar to what was reported through Alert Levels 3 and 4 (Figure 27).

Figure 26: Percentage of survey respondents reporting COVID related nervousness



Figure 27: Percentage of survey respondents feeling lonely or isolated



Source: Provisional data from the COVID-19 Health and Wellbeing Survey, Ministry of Health Note: Data reported is dated as at week end of the survey week

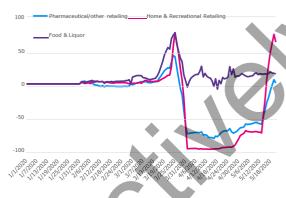
Effects of the measures on businesses

Business activity continues to gain momentum under Alert Level 2 with many spending and activity metrics showing comparable levels to pre-COVID.

According to Marketview, consumer spending in the last week was the same as the corresponding week last year. Domestic spending was up 1.8% on the same time last year, after being down more than 50% during Alert Level 4 and more than 35% down during Alert Level 3 (Figure 28). The biggest recoveries have been in pharmaceutical retailing and home and recreational retailing, although all categories (with the exception of food and liquor) have now increased under Alert Level 2 (Figure 28). Even international card spend has recovered somewhat, to be just 44% lower than the same time last year, after dropping as low as 85% below the previous year during Alert Level 4. Some of this is likely 'catch-up' spending post lockdown.

Energy demand has also increased substantially through Alert Level 2, rising 7% on a week ago and is currently around 6% higher than this time last year (Figure 29).

Figure 28: Electronic card transactions (selected sectors)



Source: Marketview

Figure 29: Energy demand (7 day rolling average, 100 = historical average)

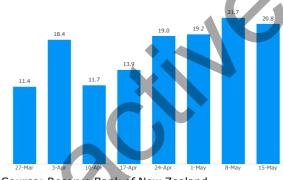


Source: Electricity Authority

Many of the key metrics from the New Zealand Companies Office suggest business activity is returning to more normal levels. Company incorporations and liquidations during May have been at similar rates to last year, notwithstanding some week-to-week volatility (Figure 31). Motor vehicle searches and annual return submissions are in 'catch-up' mode, making up for the reduction in activity during the Alert Levels 4 and 3. And Personal Property Securities Register (PPSR) Financing Statements registrations have been increasing, suggesting loan activity is on the rise, although we note that registrations remain about a quarter below the level of activity this time last year. Meanwhile, NZBN registrations saw a sharp increase in demand as a result of the NZBN being included as a mandatory field on the Small Business Loan application form (Inland Revenue) and also for downloading the Ministry of Health contact tracing app.

The number of missed payments on outstanding loans have eased off slightly in all categories in the last week (Figure 30). As well as the total number of payments falling, the value of missed payments has decreased, with the missed payments on mortgages and business loans comparable to late March (prior to entering Alert Level 4). Missed payments for consumer loans have increased by about a third on average, likely reflecting the increased use of credit cards during the lockdown.

Figure 30: Missed business loan payments (thousands)



Source: Reserve Bank of New Zealand

Figure 31: Companies Office activity (ratio to year earlier, 7-day rolling average)



Source: Companies Office

Macroeconomic and fiscal effects of the measures

New Zealand has now been at Alert Level 2 for almost two weeks, with almost all of the economy open. As we have moved through Alert Levels, activity has increased substantially. Heavy traffic volumes have returned to normal levels, down only 5% on the same time last year (Figure 34). The total value of exports and imports remains below last year's levels.

Treasury estimates that output is reduced by 10-15% from normal levels under Alert Level 2. In the main Budget forecasts, real GDP is forecast to fall sharply in the June quarter, resulting in an annual contraction of -4.6% over the June 2020 year, with GDP falling a further 1% by June 2021. The unemployment rate is expected to approach 10% in the September quarter, and reduce to 8% by mid-2021. The preliminary ANZ Business Outlook Survey results for May show modest improvement across all indicators compared to the April results, but outlook remains poor (Figure 32).

Job losses are underway, with the number of Jobseeker Support recipients increasing sharply by over 43,000 since 20 March, though the rate of increase has slowed in the past three weeks (Figure 33).

Figure 32: ANZ Business Outlook

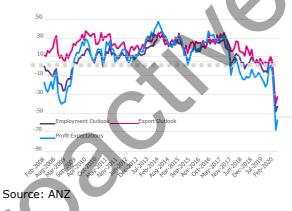


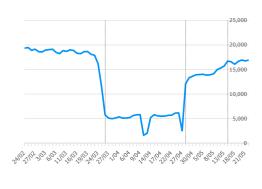
Figure 34: Heavy traffic volumes in main centres

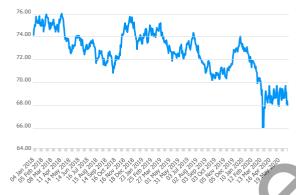
Figure 33: Jobseeker Support recipients



Source: MSD

Figure 35: Trade Weighted Exchange Index





Source: NZTA Source: RBNZ

Fiscal measures

New Zealand's fiscal response packages for COVID-19 announced to date amount to around \$42 billion in committed spending, \$15.9 billion of which was announced on budget day. The focus areas of the announced initiatives were: Education; Training and Jobs; Infrastructure; Housing; Business Support; Environment and Energy; Community Wellbeing; Income Support; and Sector Recovery. As at 14 May, \$20.2 billion remained in the CRRF. The Small Business Cashflow Scheme has disbursed over \$850 million to 49 thousand applicants.

Figure 36: Fiscal costs of commitments and programmes already announced

Spending package	Total impact on net core Crown debt (\$m), period to 2023/24
Infrastructure	3006.084
Education, Skills and Training	4268.935
Business and Firm	9692.864
Income Support	19817.975
Health	1298.817
Housing	928.268
Other	3513.701

Total Allocated Spend to date 42526.644
Unallocated CRRF remaining 19678.886

Public attitude towards the measures

Provisional results from the COVID-19 Health and Wellbeing Survey run by the Ministry of Health continue to show that fewer respondents are being worried by the information from their main source of information. In early April, around 68% of respondents stated that the information they were consuming from their main source of information caused them at least some worry. This has since fallen to around 31% of respondents (Figure 37). This change is consistent across different information sources.

Additionally, almost all respondents continue to find the rules and restrictions "very clear", "clear" or "not unclear nor clear" and the rules and restrictions "very easy", "easy" or "not hard nor easy" to follow."

Traffic on the covid19.govt.nz website (Figure 38) had seen an average of 119,563 users per day during Alert Level 3 (Alert Level 4, average of 209,600 users per day). Since the move to Alert Level 2, this has fallen to an average of 68,462 users per day. This can be expected, as the day to day effects of COVID19 on people's lives as the alert level lowers reduces significantly.

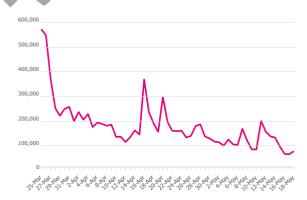
At present, information about the COVID Tracer app, contact tracing information, information posters and Alert Level 1 are popular searches.

Figure 37: Percentage of survey respondents that say their main source of information caused them at least some worry



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

Figure 38: Unite against COVID-19 website users



Source: Google Analytics

Note: Survey data reported is dated as at week end of the survey week