



Living in bubbles during the coronavirus pandemic: insights from New Zealand

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Living in Bubbles during the Coronavirus Pandemic: Insights from New Zealand

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A Rapid Research Report, 13 May 2020

This **Rapid Research Report** has been published by a team of scholars from the United Kingdom and Aotearoa New Zealand to disseminate initial research findings on the 'social bubbles' policy that the New Zealand government adopted as part of its strategy for curbing the spread of the novel coronavirus SARS-CoV-2 (now commonly known as Covid-19). All opinions and views expressed in the report are those of the authors.

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Table of Contents

<i>Executive Summary</i>	4
1. Introduction	6
Aims	6
Approach and methods	7
Overview of report	7
Caveats	8
2. The Concept of the Bubble	9
What is a bubble?	9
'Bubbles' versus 'households' and 'home'	10
3. New Zealand's Policy Approach	12
Background	12
Key policies	13
Messaging	14
Enforcement	17
Community engagement and consultation	18
4. Living in a Bubble during Level 4	20
Overview of subjective wellbeing during Level 4	20
Buddying systems	21
Appetite for bubble expansion	25
5. Expanding a Bubble during Level 3	28
Rates and forms of bubble expansion	28
Choosing not to expand a bubble	29
Inability to expand a bubble	32
Choosing to expand a bubble and deciding who to include	33
Unwanted bubble expansions	39
Staying exclusive	40
Attempted bubble breaches	45
Bubble dissolution	48
6 Conclusions and Recommendations	50
Adopting a bubbles policy	50
Buddying systems	51
Supporting people in deciding whether and how to expand	51
Supporting people in their expanded bubbles	52
Helping bubbles stay exclusive	53
7. Final Reflections	55
<i>References Cited</i>	57

Executive Summary

A 'bubble' is an **exclusive social network**. Members of a bubble only have physical contact with each other, limiting their likelihood of exposure to the coronavirus. If anyone in a bubble displays Covid-19 symptoms, then the entire bubble will quarantine itself, thereby **containing the spread of contagion** and preventing onward transmission of the virus.

New Zealand introduced the concept of the 'bubble' as part of the initial 'Level-4' lockdown it imposed in response to the Covid-19 pandemic. It began as a small exclusive bubble, typically centred on a single household. As transmission slowed, bubbles were **permitted to expand and merge** in order to meet care and support needs.

1. The Effectiveness of the New Zealand Policy

- The concept of the 'bubble' **proved effective** at conveying the necessity of exclusive containment, while foregrounding the importance of mutual care and support that might stretch beyond a single household or home.
- A **buddying scheme** introduced for people who were particularly isolated and for households with complex care demands was valued by citizens, but had fairly low levels of uptake.
- There was some **stigma** attached to essential workers, because their bubbles were not exclusive.
- **Compliance** with bubble regulations has been high, even as bubbles have been allowed to expand.
- Most people only **expanded their bubble** by merging with one other exclusive bubble; their decisions involved careful attention to both the risk of contagion, and the emotional and care needs of people in their social network.

2. Recommendations for Policy-makers

- The concept of the bubble could be an **effective policy in other countries** to encourage compliance with social distancing regulations while meeting care and support needs.
- The **most acute care needs** should be prioritised when developing a bubble policy, which could be introduced in **phases** to avoid public backlash and to monitor impacts on coronavirus transmission within communities.

- Particular attention should be given to the **range of potential social and care arrangements** that might constitute a bubble in any given context when formulating regulations.
- Policies should allow some **flexibility** for those who need to leave their bubble, those whose bubble breaks down, or those who need to meet multiple care obligations over many months of social distancing.
- Clear guidelines must be **published accessibly** in multiple languages and promoted in collaboration with community leaders so the population understands regulations surrounding bubble exclusivity and expansion.
- Citizens should be furnished with **detailed advice** on issues to consider when forming and establishing 'ground-rules' for their bubbles; this will minimise the possibility of misunderstanding or conflict and allow citizens to feel safe and supported.
- **Strong compassionate messaging** around the 'spirit' of the bubble policy – to keep bubble members safe and well – should be paired with guidelines as bubbles are allowed to expand.

1. Introduction

1.1. Aims

During the coronavirus pandemic, social relations that typically serve as sources of emotional, financial and practical support have become possible vectors of contagion and thus subject to restriction and regulation. How this should be done is an acute policy challenge facing governments around the world, particularly as they contemplate whether and how they should modify strict lockdown measures that require those living under their jurisdiction to stay at home or shelter in place.

Solutions must balance two public health needs. They must protect citizens and national health systems from a resurgence of coronavirus infection and the mass fatalities that would result from this. They must also protect citizens from the mental health problems and emotional suffering that isolation and confinement can provoke. This latter concern is of significance in its own right as a public health issue, but may also be important for ensuring ongoing compliance with social distancing guidelines and the prevention of additional coronavirus spread.

There are multiple economic imperatives to balance as well. Many households face intensified care burdens as a result of lockdown. Policies that allow citizens to meet these effectively and efficiently will help to maximise their productivity at a time of economic downturn, reduce labour-market barriers to caregivers; and offer protection against the risk of exacerbated gender inequality. Yet policies must not risk causing a 'spike' in coronavirus cases or a second lockdown, the economic effects of which would be catastrophic.

One measure that has been proposed as a way of balancing these competing priorities is a system in which small numbers of people from multiple households are allowed to spend time together in an exclusive social 'bubble'.

Bubble systems are intuitively appealing, as they afford citizens an opportunity to resume social contact whilst ensuring that any coronavirus contagion is contained within small, exclusive social networks and thus unable to spread further. However, many questions remain about how such 'bubbles' operate in practice.

New Zealand is an important case study in this regard. The idiom of 'the bubble' has been central to its coronavirus response from the very beginning of its lockdown and it was amongst the first nations in the world to allow citizens to socialise in multi-household bubbles on a mass scale. New Zealanders' experiences of living in bubbles – what they did and how they felt – can thus offer important empirically grounded insights into both the benefits and the difficulties associated with such a scheme.

This report offers an initial ethnographic overview of New Zealand's 'bubble' system. It examines how this system has been enacted and experienced by New Zealanders, foregrounding their testimonies and opinions, in the hope that doing so will help to inform ongoing debates about whether and how to enact similar policies elsewhere.

1.2. Approach and Methods

The report draws on research conducted by a team of researchers from the UK and New Zealand, with disciplinary backgrounds in the fields of anthropology, criminology, cultural studies, Pacific studies, and law.

Since April 2020, we have been conducting mixed-methods research investigating the experiences of life under lockdown in New Zealand and the United Kingdom. This report draws on the findings of two public surveys that were distributed to New Zealanders via social media, including a digital marketing campaign. The first, distributed between 7 April and 27 April 2020 received 1770 valid responses. A second has been distributed since 28 April 2020 and is still recruiting. This report draws on the first 1014 responses. It also draws on an online research panel featuring over 100 people who took part in our original survey, and seven in-depth ethnographic interviews. The study has received full ethics approval from the Research Ethics Committee at the London School of Economics and Political Science, and abides by ASA guidelines for ethical research.¹ Data collection processes were compliant with GDPR regulations.

1.3. Overview of Report

In Section 2 we offer a simple introduction to the concept of 'the bubble', before providing an overview of the New Zealand government's broader policy and approach to messaging in Section 3.

In Section 4, we outline our findings regarding the experiences of 'Level 4'. This was the strictest level of lockdown, in which most New Zealanders were required to stay confined within a single household – albeit with certain exceptions, which we discuss and explore.

In Section 5, the most substantial part of this report, we outline our findings regarding the experiences of 'Level 3'; a form of lockdown in which social distancing measures had been slightly relaxed, and in which New Zealanders were allowed to expand their social networks to a small degree.

¹ <http://www.theasa.org/ethics.shtml>

In Sections 6 and 7, we outline our conclusions, offer some recommendations to policymakers, and share some final reflections.

1.4. Caveats

Survey participants were self-selected and, while the survey was distributed as widely as possible, respondents were disproportionately likely to be female, to be Pākehā (of European New Zealand ethnic origin / 'White') and to have a university degree. The online survey methodology leads to self-selection of those who have internet access, a positive disposition towards completing research surveys, and the free time necessary to do so. This has unfortunately led to the under-representation of New Zealand's most disadvantaged groups.

Pending further analysis, the statistics presented in this rapid research report represent the 'raw' figures from our convenience sample rather than weighted figures. Where preliminary analysis has indicated that factors such as gender, age, ethnicity, education level or employment status may have a bearing on respondents' answer or a question, we have indicated this in the text.

Personal testimonies shared by Māori respondents are not presented in this report but will inform future publications developed through consultation and collaboration with Māori scholars and communities. Māori respondents' answers to quantitative survey questions are, however, included in aggregate figures.

This is a rapid research report produced as part of an ongoing study. It is inevitable that future research and analysis will reveal additional insights that have not been included here, and that the benefits and drawbacks of the 'bubbles' policy will come into sharper relief with time, as its longer-term implications become clear. In particular, more research will need to be done to illuminate the experiences of New Zealand's male, youth, and minority populations. With New Zealand due to enter Alert Level 2 on 14 May 2020, at which point New Zealanders will be free to mix with people from outside of their bubbles, research elsewhere will be needed to understand the experience of living in an expanded bubble for sustained period of time. We also take no position on the question of *when* a 'social bubbles' policy should be introduced in any given country. That is a question that needs to take account of specific epidemiological considerations, including population size and density, the number and distribution of coronavirus cases, the capacity of testing and contact tracing infrastructures, and the present reproduction number of the virus. It will also be informed by ongoing virological research into the novel coronavirus and its modes of transmission. Our report focuses instead on the social and behavioural questions of what happens once people *are* allowed to live in multi-household bubbles, and the pleasures and problems such arrangements can confer.

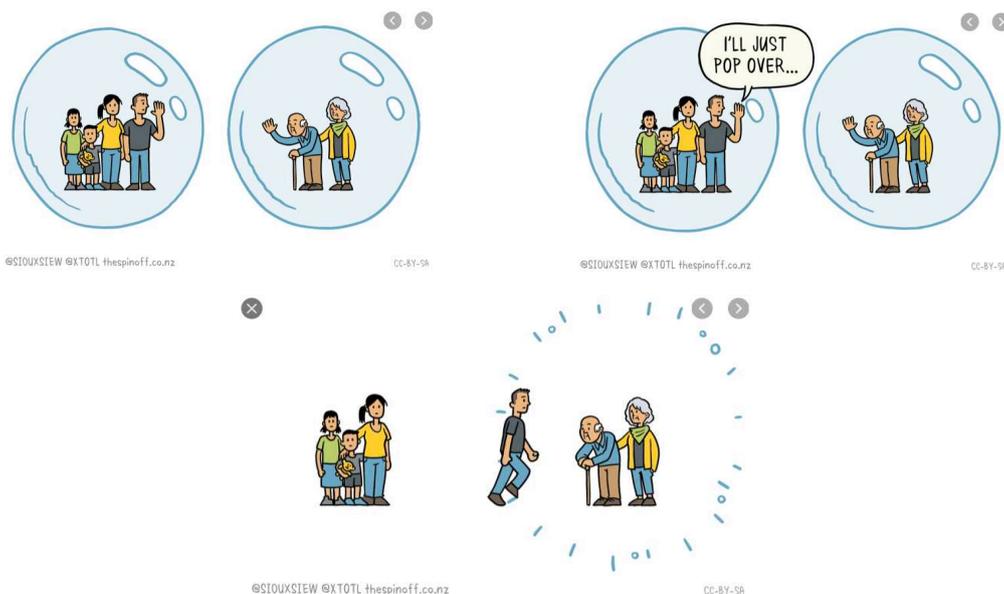
2. The Concept of Bubbles

- *Talking of 'bubbles' has several advantages over talking of 'households' or 'staying at home'.*
- *The language of 'the bubble' evokes the principle of containment whilst being non-threatening and flexible.*
- *The novelty of the 'bubble' concept can help people develop a language for working through the unprecedented experiences they are having during lockdown.*
- *Bubble policies should be designed in a way that acknowledges the specific needs of non-nuclear family households.*

2.1. What is a bubble?

A bubble is an exclusive social network.

Members of a bubble only have physical contact with each other, limiting their likelihood of exposure to the coronavirus. If anyone in a bubble displays Covid-19 symptoms, then the entire bubble will quarantine itself, thereby containing the spread of contagion and preventing onward transmission of the virus.



Scenes from an animated GIF created by microbiologist Siouxsie Wiles and illustrator Toby Morris highlight the importance of containment and the fragility of 'the bubble'.

2.2. 'Bubbles' versus 'households' and 'home'

At first glance, an instruction to 'stay in your bubble' during lockdown seems little different to an instruction to 'stay at home'. But there are some important differences:

Firstly, 'the bubble' is a powerful metaphor through which to evoke what is required of the public during the coronavirus pandemic. **It epitomises the principle of containment**, couched in the language of child's play. It connotes a sense of fragility and vulnerability. It 'asks everyone to take care because bubbles can burst so easily and each bursting comes with risks'.²

Secondly, **bubbles are not necessarily the same as 'the household' or 'the home'**. They can be (indeed, at the start of New Zealand's lockdown, they often were). But there were exceptions from the outset:

- people living alone could pair up to become 'lockdown buddies' in a multi-household bubble;
- solo parents, essential workers with children, and parents of children with certain medical needs could all incorporate a 'childcare buddy' from another household into their bubble; two households could become a single bubble if everyone living in one of them was a 'vulnerable person';
- co-parents sharing childcare could form a two-household bubble.

Those who had to go to work were allocated to 'work bubbles' – small, exclusive groups of colleagues – to ensure that workplaces became sites of virus containment rather than untrammelled transmission.³

Thirdly, **bubbles can expand**, remaining self-contained (but becoming more fragile as they do so). As coronavirus case numbers began to fall, every New Zealander was given the opportunity to live in a multi-household bubble, extending their bubble to incorporate isolated people, caregivers, family or whānau – a te reo Māori (Māori language) term that is now widely used by all New Zealanders, and which has a range of meanings encompassing extended family, close friends, supporters, and other loved ones.⁴ As this report will go on to show, official ambiguity over what was and was not a legitimate bubble expansion led to anxiety for some, but also allowed networks of New Zealanders to tailor their bubbles to their own specific needs, developing creative and collaborative forms of 'social containment'.⁵

² Appleton 2020

³ See e.g. https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12324089;
https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12327120

⁴ Metge 1995

⁵ Long 2020

Fourthly, **the language of 'the bubble' is new**. It offers a *novel* way of envisioning the spaces in which we live and the people with whom we spend our lives. It makes no assumptions that life under lockdown will be 'home life' as it has always been. Instead, the unfamiliar but non-threatening language of 'the bubble' offers a new vocabulary through which to reflect on the challenges and opportunities of living through a global pandemic in a highly artificial social form. This was seen in the New Zealand Drug Foundation's campaign urging people to 'be the best bubble you can be', which encouraged open reflection on 'the bubble juggle', 'bubble trouble', 'bubble feelings', 'bubble bonds', and other aspects of 'bubble living'.⁶

The novelty, flexibility and containment imagery built into the non-threatening concept of 'the bubble' can all help contribute to a bubble policy's success.

There is, however, a danger in being seduced by its simplicity. People live in such diverse networks of care and responsibility that it can be difficult to develop suitable guidelines on acceptable and unacceptable bubbling practices. Policies that assume a nuclear-family default are deeply unfair.⁷ Yet too many exemptions, let alone U-turns, vagueness or conflicting guidance, risk diluting the key message on the importance of social containment. Other countries can certainly learn from New Zealand's stumbles in this regard. We thus now turn in more detail to New Zealand's coronavirus response and the way it was experienced, as this provides key context to the bubble experiences we go on to describe.

⁶ <https://www.bestbubble.co.nz>

⁷ Trnka and Davies 2020

3. New Zealand's Policy Approach

- *New Zealand's swift and stringent imposition of a lockdown, together with its financial support packages, has allowed bubble living to take place against a backdrop of low infection rates and relative financial security.*
- *Government messaging has been distinctive for its emphasis on teamwork, unity, and kindness.*
- *Minorities and historically disadvantaged groups are less likely to feel they are full members of 'the team' than the Pākehā majority.*

3.1. Background

New Zealand's first coronavirus case was confirmed on 28 February 2020. Less than a month later, the country committed to a distinctive 'elimination' strategy, implementing a strict lockdown to prevent the onward transmission of the virus while case numbers remained low.⁸ Witnessing the devastation wrought by the coronavirus in countries such as Italy and China, the government took the view that acting 'early and hard' would lead to the virus having least impact on New Zealand's population while simultaneously doing the most to protect New Zealand's economy from long-term damage.

On 23 March 2020, New Zealand's Prime Minister, Jacinda Ardern, announced that New Zealanders had roughly 48 hours to prepare before the country would enter Level 4 ('Lockdown') of the Covid-19 alert system. Stringent restrictions were placed on personal movement: wherever New Zealanders spent the night of 25 March was where they would be staying for the duration of Level 4.

Widespread social distancing measures, together with a rigorous approach to testing and contact tracing, appears to have led to a successful containment of the coronavirus. On 20 April 2020, the government announced that cases had fallen sufficiently for the country to move to alert Level 3 ('Restrict') at 23:59 on 27 April. Shortly before this transition occurred, the government announced that it had successfully achieved its goal of 'elimination'.

⁸ Cousins 2020.

As of 12 May 2020, New Zealand had recorded a total of 1497 confirmed and probable cases, and only 21 coronavirus-related deaths.⁹

3.2. Key policies

3.2.1. Restrictions on social life

The New Zealand government website¹⁰ advises that measures introduced under Level 4 include the following:

- People instructed to stay at home in their bubble other than for essential personal movement (e.g. to seek medical assistance, buy groceries, or travel to work if employed within essential services).
- Safe recreational activity allowed in the local area, defined as ‘the area near your home that you regularly visit for essential services’. It was recognised that rural New Zealanders’ ‘local areas’ might be more expansive than those of city dwellers.¹¹
- All gatherings cancelled, including funerals and tangihanga [Māori funerary rites].
- All public venues closed;
- Businesses closed except for essential services (e.g. supermarkets, pharmacies, clinics, petrol stations) and lifeline utilities;
- Educational facilities closed.

Restrictions in place under Level 3 include the following:

- People instructed to stay home in their bubble other than for essential personal movement – including to go to work, school if they have to, or for local recreation.
- People required to stay within their immediate household bubble, but can expand this to reconnect with close family / whānau, bring in caregivers, or support isolated people. The extended bubble should remain exclusive.
- Physical distancing of two metres outside home (including on public transport), or one metre in controlled environments like schools and workplaces.
- Gatherings of up to 10 people are allowed but only for wedding services, funerals and tangihanga. Physical distancing and public health measures must be maintained.

⁹ <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-current-situation/covid-19-current-cases> (accessed 12 May 2020).

¹⁰ <https://covid19.govt.nz/assets/resources/tables/COVID-19-alert-levels-summary.pdf>

¹¹ <https://covid19.govt.nz/individuals-and-households/travelling-and-moving-around/leaving-your-house/>

- Low risk local recreation activities are allowed, including activities such as surfing and mountain biking that were not allowed under Level 4.
- People must work from home wherever possible.
- Businesses can open premises but cannot physically interact with customers.
- Schools (years 1 to 10) and Early Childhood Education centres can safely open, but will have limited capacity, largely catering to the children of workers. Children should learn at home if possible.
- Public venues are closed.
- People at high risk of severe illness (older people and those with existing medical conditions) are encouraged to stay at home where possible, and take additional precautions when leaving home, but may choose to work.

3.2.2. Economic support

At the time of the coronavirus pandemic, New Zealand had low levels of national debt, equivalent to just 19.2 per cent of gross domestic product (GDP).¹² It was thus well placed to consider economic assistance as it mandated its first-ever national lockdown and its parliament approved up to \$52b in emergency spending powers.

On 17 March 2020, the government announced a wage subsidy scheme to support employers so that they can continue to pay their employees, ensuring workers could continue to receive an income during the lockdown.¹³ Loans were provided to small business, which were allowed up to five years to pay the money back, and a variety of financial support packages were made available to citizens in financial distress.¹⁴

3.3. Messaging

Several key tropes ran through the New Zealand government's messaging, both in its public information campaigns and in its daily 1pm news briefings.

3.3.1 – The right people for the job

The government has consistently argued that it is taking advice from those best placed to give it. The expertise of scientists and medical practitioners has been foregrounded throughout. The Director General of Health, Dr Ashley Bloomfield, has given detailed updates on the coronavirus outbreak at daily 1pm briefings and has become a well-known and widely respected public figure. Other scientific experts, such as microbiologist Dr Siouxsie Wiles and epidemiologist Prof Michael Baker have featured prominently in the mainstream media, offering advice that largely reiterates the guidance given by the government. Dr Ayesha Verral, an infectious

¹² https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12321138

¹³ <https://www.employment.govt.nz/leave-and-holidays/other-types-of-leave/coronavirus-workplace/wage-subsidy/>

¹⁴ <https://treasury.govt.nz/news-and-events/news/government-loan-support-small-businesses;>
<https://covid19.govt.nz/individuals-and-households/financial-support/>

diseases specialist, has been vital in shaping the government's policy on contact tracing. Dr Shaun Hendy led the research and provided data models that shaped policy. Even in the early days of its messaging around COVID-19, the Prime Minister, along with her Chief Science Adviser (Dr Juliet Gerrard) and the science educator 'Nanogirl' (Dr Michelle Dickinson), took to social media to inform the public about the virus through an approachable yet scientifically grounded conversation. Those dissenting from the government line (e.g. proposing New Zealand adopt a strategy of the kind seen in Sweden, which relies on voluntary rather than mandatory social distancing) have been featured in the media, but have had limited influence on the government. The emphasis on scientific expertise has helped to give government messaging credibility and authority.

3.3.2. Teamwork and unity

New Zealand has been framed as a 'team of 5 million', and sporting rhetoric has carried over into terms such as 'we are just at half time', the 'game hasn't finished yet,' and 'don't blow the halftime lead.' While New Zealanders were urged to 'stay in their bubble', the primary message in its public advisory campaigns was one of national unity.



Ministry of Health communications advised New Zealanders that 'we must act, every single one of us', that 'everyone needs to dig deep, ...work hard, [and] smash it'. They emphasised the importance of collective effort whilst also projecting a sense of control via slogans such as 'Together. United. All of us. We got this.' While there has been occasional messaging that has engaged the language of military conflict, with frontline workers called 'troops' or references to having 'won the battle but not the war', the relative absence of such rhetoric has been one of the most distinctive features of New Zealand's coronavirus response.¹⁵

¹⁵ See also Cousins 2020

3.3.3. Kindness

In keeping with the idea that the coronavirus response is a ‘team effort’, the government has emphasised the importance of New Zealanders supporting each other as a national collective. Jacinda Ardern has won both domestic and international praise for the empathetic tone of her communications, which has been seen as instrumental in building public confidence in, and compliance with, the government’s coronavirus response.¹⁶

Sorry, we're closed until further notice to help slow the spread of COVID-19. Please take care, be kind to yourself and others. For information about council services please visit ccc.govt.nz [close](#)



Be kind. Check-in
on the elderly or
vulnerable.

Find out more at
Covid19.govt.nz
New Zealand Government

Unite
against
COVID-19



Adverts, billboards and websites have highlighted the importance of ‘being kind’, including ‘being kind to oneself’. New Zealanders were advised to stay calm, not to panic, and that ‘a little aroha (love) goes a long way’.¹⁷ Grassroots movements have called for renaming the ‘lockdown’ a ‘rāhui’, or ‘protective prohibition’, employing a te reo Māori term connoting collective care for the environment.¹⁸

Public messaging has often been light-hearted and humorous, with the New Zealand Police teaming up with actors from the mockumentary *Wellington Paranormal* to provide advice on such topics as social distancing and grocery shopping during a lockdown.¹⁹ Checking in on the elderly and vulnerable was actively encouraged. Such messaging may partly reflect the prominence of mental health on New Zealand’s public health agenda: the country’s suicide rates are climbing, with figures especially high amongst Māori, and its youth suicide rates are amongst the highest in the

¹⁶ Friedman 2020.

¹⁷ <https://www.youtube.com/watch?v=t3z9kUPnIFQ>

¹⁸ Trnka 2020 forthcoming. Some Māori leaders have questioned whether the concept of ‘rāhui’ truly captures the Ardern government’s policy, suggesting alternative Māori concepts, such as ‘taratahi’ (quarantine), would be a better fit – see Parahi 2020b.

¹⁹ See e.g. https://www.youtube.com/watch?v=1C_A7OdQDEw;
<https://www.youtube.com/watch?v=mWzX2HbaW-A>

world.²⁰ Suicide prevention and the safeguarding of mental health have featured prominently in many New Zealanders' explanations of why they mobilising to support their communities.²¹

3.3.4. "Love your bubble"

A final key trope, that of 'loving your bubble', was promoted by state television broadcaster TVNZ, and trended widely on social media.



Rather than presenting the instruction to stay at home as a necessity or an imposition, this messaging encouraged New Zealanders to view it as an opportunity for connection and relationality, whilst also emphasising the importance of showing compassion and kindness towards those with whom one was sharing a bubble at an anxious and difficult time.

3.4. Enforcement

New Zealand Police had power to enforce the rules, but policed by consent, aiming to educate in the first instance rather than adopting a punitive approach. While senior police have given assurances that their powers will be applied 'fairly and evenly', communities that have historically borne the brunt of institutionalised police racism, such as Māori and Pasifika communities have experienced the lockdown as a time of heightened vulnerability to discrimination and police violence.²²

²⁰ Flahive 2018; <https://www.health.govt.nz/system/files/documents/pages/data-story-overview-suicide-prevention-strategy-april2017newmap.pdf>

²¹ See for example the manaakitanga (reaching out with love and compassion) initiatives undertaken by Māori living in the Hawke's Bay area, documented in Parahi 2020a.

²² Aikman 2020.

In historically disadvantaged Māori-majority areas, such as the Bay of Plenty and the East Coast, some *iwi* (sovereign Māori confederations) have worked with local decision-makers and police to establish community checkpoints, restricting non-essential travel between areas. Such measures have been successful at protecting remote, vulnerable, and under-resourced communities from Covid-19. Controversy around the legitimacy of these roadblocks has exposed longstanding and deep-running fault-lines over questions of sovereignty, jurisdiction, and who can police who within New Zealand society.

Many New Zealanders of all backgrounds have adopted strategies of informal policing and surveillance to enforce the lockdown – including by advising friends and family on correct procedures, ‘calling out’ behaviours they see as risky, or reporting perceived breaches to the authorities. While respondents were sometimes unhappy about what they saw as a climate of suspicion, this atmosphere of surveillance has heightened public consciousness of, and adherence to, social distancing rules.

We will explore all the issues discussed in this section at greater length in subsequent work.

3.5. Community engagement and consultation

While guidance was produced in a range of languages (including New Zealand sign language), and many communities feel they have been adequately included by the government’s policies, others feel they have been overlooked, and that more active efforts could have been made to engage with community leaders.

Muslim communities have felt particularly excluded, feeling there had been little acknowledgement of the hardships they face during Ramadan, nor of the hardships caused by the closure of halal butchers, which were initially deemed a non-essential service on the (incorrect) assumption that their products could be obtained in supermarkets. Some Muslim respondents also reported difficulties in accessing information in their native languages. While New Zealanders understand why the government needed to act quickly, the lack of consultation has sometimes compromised the sense of being ‘all in this together’.

There are questions surrounding the government’s engagement with indigenous Māori, despite the Prime Minister’s assurances that policies were attentive to the historic health and income inequalities that have made Māori disproportionately vulnerable to both the novel coronavirus and to the economic damage wrought by lockdown.²³ Some Māori leaders have registered their unhappiness with the lack of consultation on key issues such as the banning of tangihanga under Level 4 (and

²³ On limited engagement see Jones 2020. On inequalities, see Marriott and Sim 2014; Parahi 2020a.

subsequent restrictions on numbers that are able to attend under Level 3).²⁴ Tangihanga are not only opportunities for the bereaved to bid farewell to their loved ones, but also important expressions of what it is to be Māori.²⁵ Their restriction is thus a direct encroachment on indigenous sovereignty. It also carries chilling echoes of the historical traumas Māori suffered during the 1918 influenza pandemic, when Māori were buried in mass unmarked graves.²⁶ Māori experiences of lockdown – and of the ‘recovery’ process that New Zealand now hopes to begin – remain an urgent priority for future research.

²⁴ Wakaia 2020.

²⁵ Sinclair 1990

²⁶ McLachlan 2020. For a comparative analysis of funerary practices during the Covid-19 pandemic (including how they have been experienced by historically disadvantaged groups), see Bear et al. 2020.

4. Living in a Bubble during Level 4

- *Using a 'buddying system' to live in multi-household bubbles during Level 4 has profoundly improved the lives of some New Zealanders who live alone or have complex childcare needs.*
- *Unclear messaging on who qualified for / as a buddy prevented many New Zealanders from enjoying the benefits offered by the policy, as did the requirement that buddies be local.*
- *Allowing people who need support to merge with a whole household, regardless of its size, would have been a more supportive policy.*
- *Fear of catching or transmitting Covid-19 prevented some people from establishing or being able to maintain a buddy relationship.*
- *New Zealanders felt that increased possibilities for social interaction would make the biggest improvement to their life once lockdown measures could be relaxed, but were generally prepared to accept a strict lockdown in the interests of eliminating the coronavirus.*

4.1. Overview of subjective wellbeing during Level 4

In the vast majority of cases, 'staying in your bubble' during Level 4 meant confinement to a single household. Being forced to stay in a small, 'tight' bubble was challenging for many, but liberating for some. Those who had the most positive experiences of lockdown tended to be those who led stressful and busy lives in which external pressures (often related to work) had made it hard for them to connect with loved ones, nature, or take care of themselves. Tropes of 'rest', 'quality time', and 'family' recurred repeatedly in their accounts.

Others found their lockdown to be marked by stress and anxiety. Living together 24/7 in a confined space could put pressure on relationships, and many respondents struggled to juggle their competing responsibilities, especially in the case of parents who were working from home but also had to care for their children. Solo parents found this especially taxing, and preliminary quantitative analysis of survey data suggested that being a parent, and especially a solo parent, was strongly associated with a worse experience of lockdown. Other factors that were associated with a bad lockdown experience were age (the lockdown became less difficult the older one was), living alone, and being in a relationship that had been going for less than a year.

A full analysis of experiences of confinement during Level 4 is beyond the scope of this report, which focuses primarily on multi-household bubbles. However, one

theme that emerged strongly in our research is that different attitudes towards the lockdown (including towards the necessity of certain hygiene or social distancing measures) could drive a wedge between friends and relatives who had previously been close. Lockdown was not just an experience of confinement, but of political becoming, in which one might discover that one had fundamentally different values – or even appeared to inhabit a different reality – to one’s loved ones.²⁷ Conformity or divergence in these ‘lockdown worldviews’ and associated practices had significant implications for what happened when bubbles began to merge.

4.2. Buddying systems

Two exceptions to the strict stay-at-home rules during Level 4 were people living alone or with complex childcare needs, who could expand their bubble to encompass a ‘buddy’. (There were other exceptions: co-parents living in different bubbles could also send their children between the two, two bubbles could interact if *everyone* in one of the bubbles was a vulnerable person, and those who felt their bubble was unsafe could leave it immediately). Whilst only offering a very limited degree of flexibility, this ‘buddy’ system is still more responsive to care needs, and to the variation between and across households, than some other governments’ indiscriminate mandates to ‘stay at home’. We were interested to see how they had been made use of.

4.2.1. Lockdown buddies for people living alone

Our research found that, on average, people in single-person households tended to have less positive experiences of lockdown than people living in multi-person households. This held true for all age brackets. While some respondents described themselves as ‘introverts’ and were unperturbed by the lockdown, for others, living alone at a time of personal and societal upheaval was cataclysmic:

Live on my own. By myself. Isolation is terrifying when you suddenly become unemployed. No-one to share your thoughts, fears [with]. Anxiety [has] a strong hold. If I don’t find work after lockdown, I will let my furkids [pets] down and that scares the hell out of me. Currently on a benefit [that is] half of my weekly wage. Scared as f@%! (Mixed ethnicity woman, 40s).

Some New Zealanders who lived alone used the 48-hour notice period before Level 4 began to move in with loved ones so they could have company during lockdown. For many, however, this was not practical or possible. In order to assuage feelings of isolation, the New Zealand government permitted people living alone during

²⁷ The invisible, intangible, nature of the viral threat can help fuel such divergent perceptions. See Gusterson 2020. Huygens et al. 2003 also note that an adversarial dualism, ‘the notion that someone must always win in a dyad or dialogue, something must always be right, or there must be a certain solution’ (pg 15) is a commonly-observed feature of Pākehā culture; one which perhaps entrenched a sense of divergent and competing worldviews for our Pākehā respondents.

lockdown to pair up with a 'lockdown buddy'. This buddy had to be local, and to also live alone – although a subsequent revision to the directive allowed people living alone to pair up with a 'small' household.²⁸

Only 18.6% of respondents living in single-person households during lockdown had paired up with a lockdown buddy, most commonly a friend, parent or grandparent. The experience of settling on a buddy was generally described as a positive and straightforward one.²⁹

When asked why they had chosen their buddy, some respondents described what the buddy could offer them – a companion with 'a similar mindset' but who was 'able to challenge [their] thinking'; similar interests, or the mutual emotional support that was possible when two romantic partners who lived separately could continue to meet. Many buddying relationships seemed to have occurred by happenstance, perhaps as a result of the insistence that a buddy be local. Some respondents had been forced to pair up with the only single-person household they knew in the area, no matter how close the existing relationship. Others had been brought together by lockdown crises: a faulty oven, a broken washing machine, needing a lift to the doctors, or needing support during a mental health crisis. Having 'been exposed to each other' (as one man in his late 40s put it; our emphasis), they turned the meeting into a regular buddying relationship and found it helped stave off feelings of loneliness. A final subset of respondents framed their buddying relationship primarily in terms of the support that they would be providing to (typically elderly) parents and neighbours. Such actions suggest that respondents were highly mindful of government messaging to 'be kind' and support the vulnerable when making plans for their buddying relationships. This could come at a personal cost; the buddying they undertook was occasionally described as burdensome. Nevertheless, most respondents (even in these latter cases) felt their experience of lockdown would have been worse had they not been allowed a buddy.³⁰

The most common reason that people in single-person households gave for not pairing up with a buddy was not knowing another person living alone who lived close enough for them to legitimately buddy-up with. Almost as many felt it was advisable

²⁸ See <https://www.health.govt.nz/news-media/media-releases/additional-guidance-alert-level-4-rules>. However, messaging around what was and was not permissible for people living alone was inconsistent throughout Level 4; at one point the Covid-19 response team claimed that "Living alone, in itself, [was] not a criteria for joining another bubble and moving between households", appearing to contradict the idea of a 'lockdown buddy' as it had been set out by Jacinda Ardern at the end of March. See Sachdeva 2020; Vance 2020.

²⁹ Respondents were asked to score how they found the process of settling on a buddy on a scale of 0 to 10, where 0 was 'very bad' and 10 was 'very good'. The mean score was 8.08, $s = 2.41$.

³⁰ Respondents were asked to indicate how different they thought the experience of lockdown would be in the New Zealand government had not allowed them the chance to have a buddy, where 0 was 'a lot worse', 5 was 'exactly the same', and 10 was 'a lot better'. The mean score was 2.62, $s = 2.11$.

to avoid contact with others because of their age or pre-existing medical conditions. A significant number said that they preferred their own company, describing themselves as introverts who were used to their independence. Some were not aware of the policy, while others, conscious that they could only have one buddy during the whole of lockdown, had chosen to wait until someone 'really needed them' to decide who that should be.

There was a general sense amongst people who lived alone that their lockdown experience would have been improved by being able to spend time with a household of any size during Level 4, rather than just a small one or another person living alone. Reconnecting with local family, children, and grandchildren would have staved off their loneliness; whilst respondents living in remote locations noted that it would allow them access to key support infrastructures such as broadband internet:

The thing I miss most is having my grandchildren stay over- usually up to three times per week when they have after-school activities here in town. They also call in frequently with their buddies for refreshments and [phone] charging when they're in town with friends. In fact writing this is bringing tears to my eyes I miss them so much. (Pākehā woman, 60s).

It would be really good if I could have had a buddy household instead of just a single buddy - my biggest stressor has been trying to do university online using mobile data. The only family I know around here (tbh I am in a remote community and most houses around are empty) has three members so we can't be buddies. But if we could, I could have used their broadband to attend class and that would have been really helpful (Pākehā man, age undisclosed).

Other respondents felt enthusiastic about the prospect of being given more freedom to choose how to spend their lockdown, even if they would ultimately choose to spend it alone:

I'm quite happy to be alone so I probably wouldn't buddy up with others, but I appreciate that the freedom to choose would influence how I feel. To have the freedom to choose would slightly improve my experience (Pākehā woman, 40s).

Overall, while the buddying system provided some support for people living alone, a slightly more flexible system would have allowed more people to ward off the worst aspects of isolation. Respondents were, however, generally willing to accept their privations as a necessary part of New Zealand's fight against coronavirus.

4.2.2. Childcare Buddies

Some New Zealanders qualified for childcare buddies during Level 4 - if, for example, they were essential workers who must leave the house to work (schools were closed during Level 4 of lockdown), if they were solo parents, or if their children had complex medical needs. As with the lockdown buddies for people living alone,

childcare buddies were not allowed to have other contacts beyond the household in which they were providing childcare.

Just under half (46.2%) of the respondents who were eligible for a childcare buddy had brought one into their bubble. In most cases this was one of the children's grandparents, or a co-parent who lived apart from them. This group of respondents reported finding it easy to settle on a buddy,³¹ and felt that their experience of lockdown would have been significantly worse had they not been allowed a buddy.³² 40% indicated that their experience would have been better had they been allowed a second buddy, but 50% felt an additional buddy would have made no difference. The prospect of pairing up with an entire household attracted more support (two thirds of respondents thought it would have made their situation better). Respondents noted that whilst buddies could help with the care of children, they did not, by their very nature, allow children access to playmates of the same age: an especially acute need for children without siblings.

One respondent flagged her discomfort with the non-reciprocal nature of the 'childcare buddy' relationship, in which she and her partner received support, but had little to offer the buddy in return:

[Pairing with another household] would have not only offered us greater support, but allowed us to offer support to our family by taking their children in return. Because we used the buddy principle we feel like we've made an unfair demand on one sibling who helped with our toddler without being able to return the favour. This has made me feel like it is not a fair or balanced exchange (Pākehā woman, 30s).

Some respondents circumvented such anxieties by choosing childcare buddies (often one of their parents) that would have been on their own otherwise.

The most common reasons for not having a childcare buddy were that respondents felt they could cope ok without one, that they didn't know anyone suitable, that they didn't want to be a burden, and that they were worried about transmitting coronavirus to their buddy. This latter point was a particular concern for essential workers. One North American hospital worker in her thirties shared that she was 'already stressed about bringing the virus home or to [the hospital] and wouldn't want the stress of worrying about another household too'; a Pākehā woman in her forties took pride in her bubble being a 'cul de sac of infection' and felt it would be irresponsible to potentially pass the virus on to others when her family was self-sufficient.

³¹ Respondents were asked to score how they found the process of settling on a buddy on a scale of 0 to 10, where 0 was 'very bad' and 10 was 'very good'. The mean score was 8.24, $s = 2.07$.

³² Respondents were asked to indicate how different they thought the experience of lockdown would be in the New Zealand government had not allowed them the chance to have a buddy, where 0 was 'a lot worse', 5 was 'exactly the same', and 10 was 'a lot better'. The mean score was 1.83, $s = 1.78$.

One 35-year old Pākehā solo mother commented that ‘single parents have had it particularly rough’. It was demanding trying to work whilst separated from her friends and colleagues, and looking after a 4-year old who had nobody else to keep them company. Though she might have benefitted from the support a buddy would provide, she was reluctant to pair with one: most of her friends were essential workers and could transmit the virus to her. If she got sick, who would look after her and her child? The very circumstances for which she needed support deterred her from accessing it. Some respondents also mentioned that a lack of publicity around the buddying scheme had not only left them confused about their eligibility but also fearful that they would be reported to the police by neighbours who suspected them of wilfully breaching lockdown rules.

4.2.3. Rejection by buddies

Two respondents described circumstances in which they had provisionally arranged for a buddy, only to be rejected – usually because of anxieties about coronavirus transmission.

I thought I had a buddy to catch up with now and then when we were hanging out together the day before. He lived a five minute walk away. Next time we talked he said there would be no such thing, he had never implied that, and he had been told by a doctor everyone should completely isolate. Didn't stop him dropping off his washing (Pākehā woman, 60s).

I actually had a buddy household - husband, wife, three kids, and we had a strict set of rules and agreed to be faithful just to each other and share shopping etc, but it never happened and we never talked about it. That was actually quite hard in a sense because they were supposed to be my people. I know the wife got freaked and I respect that so it never happened. I think I missed the message about it only being one other person. That wouldn't work for me, I don't have any other single people in the area (Pākehā woman, 30s).

In both cases, ambivalence on the part of our respondents' prospective buddies seems to have come from a tension between their desire to support our respondents and medical anxieties regarding contagion.

4.3. Appetite for bubble expansion

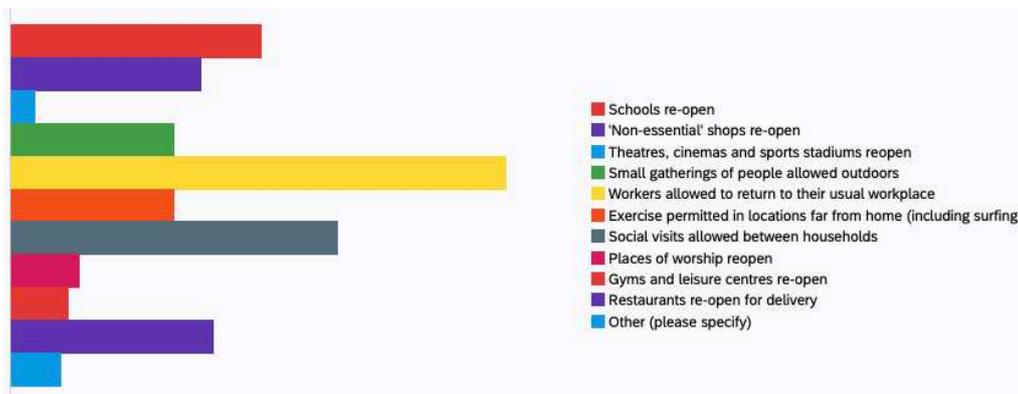
During Level 4, we asked respondents which of a range of possible lockdown relaxation measures would offer the biggest improvement to their life. The most popular option was very clearly ‘allowing social visits between households’, which was selected over twice as many times as the next most popular option (workers being allowed to return to their usual workplaces). When asked what should be the government's top priority, reopening workplaces was in first place over social visits

by a significant margin – although when the same question was asked retrospectively in our Level 3 survey, being able to expand bubbles was viewed as the top priority.

Q: Which of the following lockdown relaxation measures would lead to the biggest improvements in your own quality of life?



Q: Which of the following lockdown relaxation measures do you think should be priorities for the government? [asked during Level 4]



Q: Which of the following lockdown relaxation measures do you think should have been priorities for the government? [asked during Level 3]



When asked to indicate how much of an improvement possible bubble expansion arrangements would make to their experience of lockdown, respondents generally replied positively – although the bigger the bubble proposed, the more polarising, with a vocal minority of respondents expressing concerns about infection risk. Some respondents left moving comments that explained how they own care needs had fallen through the cracks given the limited purview of the buddying system:

Very conscious that I have elderly parents who have complex health needs and dementia issues. My father who had a stroke the weeks before lockdown is primary carer for my mother. Some situations needed a lot more support than was allowed. Understandable but...(Pākehā woman, 40s)

My husband is in a secure care unit with severe dementia but is, to date, aware of our relationship and who I am. I feel helpless and hopeless not being able to be with him. [It] is devastating and very confusing for him (New Zealand European woman, 70s).³³

Nevertheless, many respondents left free-text comments on all of these questions insisting that *none* of these measures (including reopening schools, workplaces, etc) should be adopted any time soon, and that locking down for as long as possible to eliminate coronavirus from New Zealand should be the government's absolute priority:

I understand the premise of these questions but it's far too risky to allow households to mingle as suggested, unless necessary because of helping lonely elderly relatives or for childcare reasons. Households are already interacting with supermarket workers and courier drivers. There would be too much potential for spread during a pandemic (Pākehā woman, 30s).

These options are all... Not good. Honestly, I think none of them really take into account keeping people safe in the long run and are all so selfish. Schools, restaurants, workplaces need to remain closed. I am appalled at this (Pākehā woman, 30s).

While there was a general openness to the idea that some people might need to expand their bubble for particular care or emotional needs (isolation, bereavement, childcare, etc), and some respondents were adamant that any form of lockdown was an unwarranted infringement on civil liberties, the survey responses suggest there may be little public support for any significant or widespread lockdown 'relaxation' measures unless they are confident that there is a strong scientific basis for believing that they were not premature.

³³ This respondent explicitly requested not to be labelled as 'Pākehā'.

5. Expanding a Bubble during Level 3

- *Expanding bubbles made significant improvements to many New Zealanders' experiences of lockdown.*
- *New Zealanders have internalised the importance of 'being kind' and are generally extending their bubbles to people who need their support the most.*
- *Despite the extremely low numbers of new daily cases, some New Zealanders remain extremely fearful of contracting or spreading the coronavirus.*
- *Differences of opinion over how to live safely during a pandemic can lead to frictions when bubbles merge; bubble members need to discuss and agree ground rules to avoid potential rifts.*
- *New Zealanders generally view the requirement to keep their bubble exclusive very seriously.*
- *Even seemingly 'non-compliant' practices (such as creating very large bubbles, or meeting up with people from outside the bubble) are enacted with respect and care for the perceived 'spirit' of the Level 3 guidelines.*

5.1. Rates and forms of bubble expansion

47.6% of our Level 3 survey respondents had expanded their bubble, while 52.4% had not. The rate of expansion in the overall population is probably higher, as wilfully choosing not to expand one's bubble was observed particularly widely amongst people with postgraduate degrees, who were over-represented in our sample. In most cases, people who had expanded their bubble had wanted to do so. Just under half of people who had not expanded their bubble had wanted to, but had not (yet) done so.

Q. 8.2: Has your bubble expanded under Level 3?

	Count	Percentage
Yes, and I wanted it to	408	42.0
Yes, but I didn't want it to	55	5.6
No, and I didn't want it to	282	29.0
No, but I wanted it to	227	23.4
	972	100.0

Of those who had expanded their bubble, 71.4% had only merged with one other bubble. For some, this had been their plan all along. Others had initially planned ambitious multi-household bubbles but quickly abandoned these plans in favour of the simplicity and safety of what they sometimes referred to as the 'double bubble'.

19.9% of respondents had expanded their bubble by two households, to three in total. In just under half of these cases (45 out of 92), one or more of the merging bubbles was someone who was living alone.

Q. 8.3: When you expanded your bubble, how many pre-existing bubbles did you merge with your own?

	Count	Percentage
1	330	71.4
2	92	19.9
3	17	3.7
4 or more	23	5.0
	462	100.0

Larger bubble arrangements were much rarer, and were often associated with one of the following situations:

- household groups in which childcare was shared across networks of co-parents;
- polyamorous relationships;
- bubble members having to work during Level 3, which they felt had forcibly brought them into their colleagues' bubbles;
- strong political objections to the very concept of lockdown.

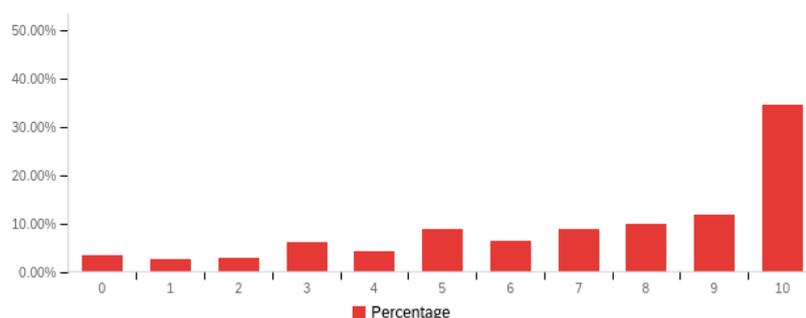
Just over half of the people who had merged with 4 or more bubbles under Level 3 indicated that this was not an arrangement they had wanted.

Overall, our survey respondents were only prepared to expand their bubble by a limited degree, if at all, even at a time when the coronavirus had been formally eliminated from New Zealand.

5.2. Choosing not to expand a bubble

Respondents who did not choose to expand their bubble generally found this an easy decision to make.

**Q: How easy or difficult was it to decide whether to expand your bubble?
0= extremely difficult; 10 = extremely easy [filtered for those who did not]**



Our Level 4 survey asked people who they would want to expand their bubble to, if and when they were allowed to. Respondents who replied 'I would not do this' were asked to explain their reasons, choosing from a pre-given list of answers.

Q: Why would you not choose to spend time with another household? Select all that apply. (n = 216)

	Count	Percentage
Worried about catching coronavirus	105	48.6
Worried about transmitting coronavirus	100	46.3
We prefer to spend time by ourselves	51	23.6
Prefer to interact online or over the phone	31	14.4
Too difficult to decide who to choose	29	13.4
Don't want to be a burden	18	8.3
Too busy to socialise	9	4.2
Other	17	7.9

By far the most common reasons not to expand were concerns about catching or transmitting coronavirus.

Contracting coronavirus was feared as a medical event in and of itself, especially amongst those who were (or shared bubbles with people who were) elderly, immunocompromised, or otherwise vulnerable. The implications of contagion events for interpersonal relationships were also noted by some respondents; as one Pākehā man in his sixties wryly put it, it 'doesn't go down well in the family if you kill the grandparents'.

Those who chose not to expand a bubble were not just motivated by a sense of personal *vulnerability*; they could also feel that doing so posed a danger to others. This could be a collective danger: a significant minority of respondents (16.3%) felt that New Zealand had relaxed its social distancing measures too early, and that expanding bubbles (and other relaxation measures) risked recklessly contributing to renewed coronavirus spread. To contribute to the public good, these respondents generally stayed in their Level 4 bubbles.

Obviously it would be great if you could extend your 'bubble' to include other households but whilst it may socially be enjoyable, it may/would not be in the best interests of non-spreading Covid-19 (Pākehā man, 70s).

Even those who did not outright oppose the relaxation measures had internalised the message that bubbles should only be expanded where it would keep people 'safe and well'. As one 36-year old Pākehā woman put it, 'we would add my parents but it would be for social reasons so unless I really felt like I needed them we won't extend'. Other respondents echoed this sentiment, distinguishing carefully between what was a **want** and what was a **need**. 'Dinner parties' one respondent reflected,

'can wait until Level 2'. With Level 2 most likely only a few weeks away, such a wait did not seem a particular hardship.

The sense of danger could also be more individualised and personal. Essential workers, and others who had gone back to work during Level 3, often felt that expanding their bubble would expose their prospective bubble-mates to unacceptable levels of risk. Some were very resentful of having to work as a result of this curb on their capacity for social interaction, especially if they felt their work was not essential. Several teachers, for example, indicated that they felt their schools, which were re-opening for children between years 1 and 10 who were unable to be looked after at home, were doing so too soon. Others were less concerned, as they felt their social needs were being met in the workplace.

Decisions over whether to expand could thus be particularly difficult and painful for people *living with* (essential) workers, who were faced with the unenviable choice of shouldering duties such as childcare and domestic work by themselves (often alongside their own paid employment) while their partner was at work, or exposing caregivers or loved ones to a heightened risk of contagion via their partner's chain of workplace contacts.

A significant number of respondents also indicated that they preferred to spend time by themselves. While this was sometimes explained as a character trait, something they were used to, or a reflection of how much they already had to do without taking on 'additional emotional labour in caring for another household too' (Pākehā woman, 40s), some respondents offered thoughtful reflections on the possible drawbacks of 'the shared bubble' as a specific social form:

I would not like to be responsible for other peoples' health. I prefer to be free to do what I want within my own bubble, when I want, and if I do something against the rules I want that to be my choice, and only affect me, not have the potential to infect others. For example something I do if I get really lonely is go to the supermarket where I can see people. If I had others in my bubble they might argue about who could go and when. I have heard some unkind stories. Also I have two dogs and I want to be able to walk them when and where I choose and not have someone worrying about whether they have been touched when I get home (Pākehā woman, 70s).

The prospect of tensions around how to live safely alongside others in a pandemic was enough to deter this respondent (who lived alone) from joining a bubble, even when she admitted to sometimes 'feeling really lonely'. This highlights a theme that has already run through this report and will continue to do so, namely that differences of opinion over what constitutes 'risky', 'responsible' or 'reasonable' behaviour are presenting thorny challenges to many New Zealanders' social relationships.

5.3. Inability to expand a bubble

Even if essential workers and their households wanted to expand their bubble, it was far from certain that they would be able to. One nurse of South Asian background had found that people didn't want to share her bubble because her job meant she risked carrying the virus; her colleagues had encountered similar issues. Several interview and survey respondents reported that they would not extend their bubble to include essential workers, even those who were close family or friends, for fear of catching Covid-19. Such attitudes were heightened further in cases where they felt their prospective bubble-mates were unreliable, withholding information, or unable to provide the assurances that they needed in order to be safe:

Partner's dad wanted to come over and visit, however he is also going to his workplace, and didn't provide information on how many other family members he was going to visit, posing too much of a risk for our bubble in our opinion (MELAA woman, 20s).³⁴

The reluctance to expand bubbles to encompass (essential) workers and their families not only deprives people who have been working hard to support the nation of caregiving and emotional support, it also stands to exacerbate existing inequalities. Many (though certainly not all) essential workers are employed in relatively low-paid, blue-collar professions. While their own anxiety about transmitting coronavirus to loved ones is understandable, this should not be allowed to legitimise ongoing disadvantage, especially in countries where coronavirus has not been eliminated, but has become endemic.

New Zealand's geographic restrictions on bubble expansion could also present difficulties, especially for those respondents who felt the only people they knew well enough to reconnect with were located in distant regions of New Zealand. Migrants who had recently arrived in New Zealand rarely had the well-established social relationships needed to take full advantage of the bubble policy (or indeed the Level 4 buddying scheme).

Lockdown as a new immigrant has been extremely hard. There is no way to get basic items including basic furniture. Pets are locked away. I don't know anyone in this country. There is no one to help with any of it. (European expat woman, 20s).

As a migrant without any local family outside our two person bubble, it might lead to awkwardness rather than improvement to "select" other household to socialise with (European expat woman, 40s).

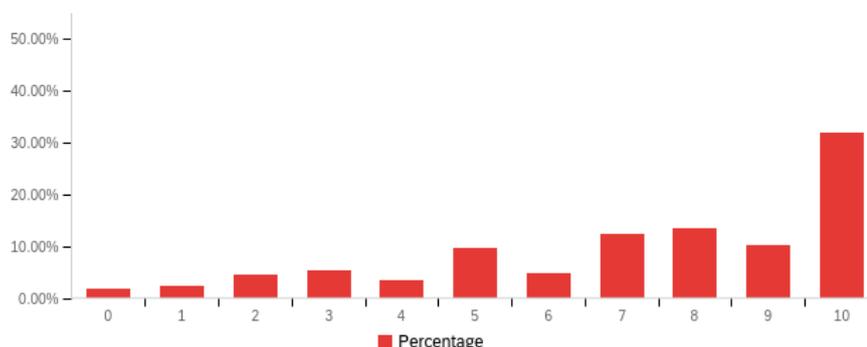
³⁴ MELAA is an acronym for Middle Eastern, Latin American or African. It serves as top-level ethnic category in the New Zealand census.

These are issues that affected a significant proportion of New Zealanders, given the country's high rates of in-migration: in the year up to April 2019, 149,200 migrants arrived in the country – 3% of the total population.³⁵

5.4. Choosing to expand a bubble and deciding who to include

Choosing to expand a bubble was also generally seen as an easy decision to make.

**Q: How easy or difficult was it to decide whether to expand your bubble?
0= extremely difficult; 10 = extremely easy [filtered for those who did]**



Most people who expand their bubble choose to reconnect with family, typically along the parent/child axis. Motivations for the decision varied widely; closely linked to thoughts and feelings towards the person(s) that would be encompassed by the expansion. Many respondents felt a strong need to be back around ‘their people’, saying how much they had missed their loved ones, and emphasising the importance of physical touch, co-presence and commensality (hugging; playing together; sharing food and drink together). Online interactions were often described as ‘exhausting’ and a poor substitute for physical proximity, especially for young children. The closeness of the relationship is often what drives the choice of who to encompass, though some tempered that with concerns about contagion, preferring to connect with people from smaller households:

I think it would be nice to have one other person come around. It would just be nice to be able to talk to someone other than the person you're living with and the fact that they live alone makes me feel safe as opposed to someone who lives with more than one other person (Pasifika woman, 20s).

The decision to expand was sometimes framed in terms of meeting a personal care need. Parents, especially solo parents, valued the childcare support that bubble expansion provided. Some also noted that their childcare needs had *intensified* during Level 3, as their partners were returning to work, but their own capacity to work from home meant they were not able to send their children to school. This

³⁵ <https://www.stats.govt.nz/news/new-zealand-net-migration-rate-remains-high>

effectively left them to cope single-handedly, unless they were able to expand their bubble:

A number of my friends are mums with young kids around my son's age and oh my goodness, the relief for them when they could see their parents or their parents-in-law again and foist the kids onto them for 24 hours! (Pākehā non-binary person, 30s).

I am able to do some work from home but I have found it almost impossible. Mentally I have not been able to get in the mood for work and more importantly, my children (4 and 7) make it difficult for me to do so. In level 3, my husband will return to work but I will continue at home with the children. He is a manager and there will not be flexibility in his schedule so I will do even less work. I am desperate to get out of the house and reconnect with my economic self but childcare will fall squarely on my shoulders. This is the case for ALL the mothers I am friends with, without exception. This lockdown has and will continue to be more difficult for mothers than fathers. (Pākehā woman, 30s).

As well as offering much-needed respite to parents, reconnecting with loved ones brought happiness to their children, which in turn boosted their own morale. Those who had been struggling with poor mental health during Level 4 highlighted how useful it was to reconnect with their wider networks of support. An ability to connect with additional loved ones was also especially valued by those who had found themselves confined to difficult situations during Level 4:

Expanding my bubble earlier would have been hugely beneficial to my mental health, because although I live with other flatmates, we are not close and they do not like to socialise/come out of their rooms except for food. I could go for days without talking to anyone, yet not "buddy up" as the government suggested for isolated people because I did not actually live alone (Pākehā woman, 20s).

If I could have 1 or 2 friends over even if once a week each I feel I could have managed an even longer lockdown. 4 weeks in such social isolation has been extremely difficult as I do not get along well with my family and so realistically have been quite alone this whole lockdown which isn't exactly good for anyone's well being (Mixed ethnicity man, 20s).

Just as often, however, decisions to expand a bubble were motivated by a desire to help someone that they knew to have been isolated or 'struggling' during the lockdown. Whilst this was typically a relative or close friend, respondents also described reaching out to people they knew less well but believed to need support, such as acquaintances from their church or local neighbourhood who they knew to be isolated.

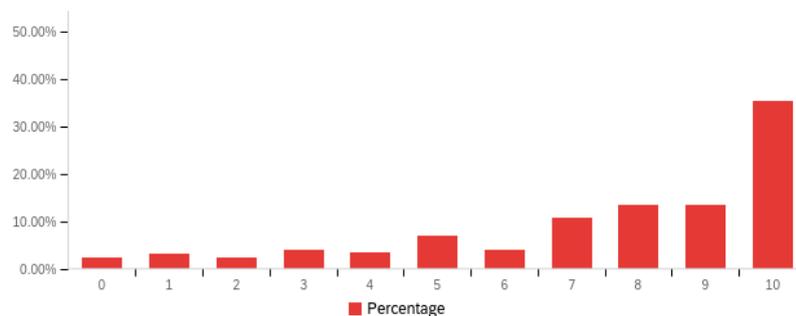
Our decision on who to include was super easy. Our friend was living alone and she was really suffering from loneliness and [no] human contact. As soon as the bubble

extension was announced, we messaged her with the offer. She needed people, and we were happy to do that for her (Pākehā man, 20s).

The importance of supporting 'elderly' people was often mentioned in survey responses. This may have come at the expense of other, less visible forms of isolation, such as that faced by recent migrants to New Zealand, or those withdrawing from others as a result of depression.

Viewing bubble extension as a practice of care-giving has helped people to navigate the potentially thorny question of who should and should not be included in the expanded arrangement. When our Level 4 survey asked people how they would feel about being allowed to spend time with another household when lockdown measures were relaxed, quite a few respondents expressed their concern that it would be impossible to decide who to include. Many worried it would be a source of domestic conflict. This has also been a key concern in media coverage of bubble policies adopted in other countries, such as Canada.³⁶ In practice however, most New Zealanders in our survey who expanded their bubble reported that the decision was quite easy.

Q: How easy or difficult was it to decide who to include in your expanded bubble? 0= extremely difficult; 10 = extremely easy



When there were competing candidates for new bubble-mates, the question of who needed support the most was carefully considered. One Pākehā mother decided to prioritise the boyfriend of her 18 year-old daughter, whose first year at university had been interrupted and who was finding life tough. Her own friends would have to wait! One couple prioritised the husband's son and grandchildren over the mother's adult daughter so they could be around to help with their grandkids. While most found that prioritising care needs was a relatively clear-cut decision, that was not always the case. In particular, how to balance one's *own* mental health or care needs with the needs and wants of others presented some respondents with difficult dilemmas:

³⁶ Coletta 2020

I have two high risk people in my bubble, two other people who are essential workers, working outside of the home, and then we have a designated shopper. Having these 3 people leave our bubble every day is stressful enough, having any other person, even if they live alone, enter our bubble [would cause] me stress. I think it'd potentially make lockdown better for them so they're not so isolated, but for my own lockdown experience it'd be worse. Spending time with entire households of people would be a disaster for my own mental health, but the people in my bubble might enjoy that (Pasifika woman, 30s).

Rationalising bubble expansion through logics of care and support also allowed respondents to explain to other friends and relatives why they would not be included in the bubble, and such explanations appear to have been generally well-received. Support was not the only factor considered when deciding who to include, however. Respondents noted that they would 'not even try' to connect with friends and relatives they knew were high risk, in order to protect them. The size and perceived exclusivity of prospective bubble-mates' bubbles was also a critical concern. As noted earlier, this led to many people declining to join bubbles containing essential workers.

It is important to remember that decisions about who to include were made on the assumption that New Zealand would probably be moving to Level 2 in a matter of weeks. The membership of bubbles might have been more contentious had they been anticipated as longer-lasting arrangements.

5.4.1. Non-normative bubble arrangements

Deciding who to include in an expanded bubble could be particularly challenging in cases where multiple housemates were living together but had quite different social networks:

It is difficult with flatmates because we have different friends and would pick different people who live alone/households we want to see (Asian woman, 20s).

In some cases, housemates also had limited experience of making decisions as a collectivity. Those who felt they had navigated the situation successfully emphasised the importance of having extensive and transparent conversations, and of making the decision *together*:

Case Study

'Alvin'³⁷ is a Asian man in his 30s who migrated to New Zealand seven years ago. He works in the events industry and lives in Auckland with three housemates. While the four housemates enjoyed spending time together as an exclusive bubble during Level 4, none of their romantic partners were with them, and so moving to Level 3 was a relief.

³⁷ All first names are pseudonyms.

They were very collaborative in their discussions about how to go about expanding their bubble. They researched what was legally permissible, and what the 'spirit' of the policy was. They decided to each expand their bubble to one other person who was a close friend or partner. This was important for them, but also for their friends and partners who were also isolated. One was even suicidal. They turned down people who already had close friends and partners living with them during Level 4.

Alvin and his flatmates were very explicit and transparent in their conversations with each other and with their expanded bubble members about the number of people they were in contact with. This transparency and trust with each other made the expansion successful. They assumed they were each telling the truth and did not question each other. This transparency was also so that if any of them became ill they could directly tell the health investigator.

As far as Alvin was aware, this level of expansion was technically 'illegal', but they believed they were following the 'spirit' of the policy. They were ready to defend the way they had gone about expanding their bubble and its importance to their own wellbeing.

Alvin's case study demonstrates how valuable collaborative discussion, transparency and equality can be as people decide how to expand their bubble, whilst also revealing some of the limitations of the New Zealand government's policy. By assuming that a bubble equates to a household, which equates to a family, which equates to a unified decision-making unit, the recommendation to 'slightly extend' one's bubble offers little provision to people living in situations such as his.

Other respondents who lived in flatshare arrangements also expressed their disappointment that the guidance issued had been so focused on 'traditional households'; one Pākehā man in his thirties had found it so 'nerve-wracking [trying] to figure out what was acceptable' for a flatshare arrangement that he ultimately decided not to expand his bubble to reconnect with his partner.

Nevertheless, Alvin and his flatmates carefully researched the 'spirit' of the relaxation measures (understood here as supporting others whilst remaining in an exclusive social network) and was therefore able to produce a bubble arrangement in which he had confidence, and which he saw as offering much-needed support to vulnerable people. Similar practices of building large multiple-household bubbles were evident amongst many of our respondents who were in polyamorous relationships who acknowledged that the arrangement required absolute trust, but felt that they had been able to achieve that through their relationships. Indeed, the practices of open disclosure, dialogue and conversation that characterise many polyamorous networks could serve as a useful model for others as they embark upon creating and living together within an expanded bubble.

The clear risk with such large bubble arrangements, however, is that they inadvertently become chains. One respondent described being invited to spend time with a friend and her flatmates; they were relieved to have declined when they discovered that some of these flatmates had also been visiting 'a friend each', some of whom also lived with flatmates. Such situations could have been avoided with clearer guidance, supportive technologies (such as a 'bubble builder' app that would allow people to visualise how contained – or not - their bubble arrangements were), an a policy that offered some flexibility to those in flatshare and other non-normative arrangements – for example, by allowing them to change the membership of their expanded bubble every three or four weeks.

5.4.2 Clarity of messaging

There have been inconsistencies in government and media messaging over what degree of bubble expansion was permissible. Official government guidance simply indicated that a bubble could be 'slightly' expanded, leaving ambiguity over what that entailed.

A subsequent Q&A released by the Ministry of Health in the *New Zealand Herald* on 26th April advised that bubbles should only be expanded by 'one or two people' whilst also indicating it would be possible to 'add all your grandparents [to your bubble]... if they lived in the same bubble'.³⁸ The same Q&A advised that 'you can only add 1-2 people to your bubble and two individual bubbles can join together but not three or more bubbles'. It is not clear from this formulation whether 'adding people to your bubble' is conterminous with, or separate from and prior to, the process of bubbles 'joining together'.

Such ambiguous messaging gave room for people to tailor the guidelines to their personal situations, whilst nevertheless emphasising that bubble expansion should be modest. However, what some saw as constructive ambiguity provoked anxiety in others, or led them to undertake arrangements that they subsequently abandoned:

At the beginning of level 3 we misinterpreted the rules on bubble extension. My flatmate's partner came on the first day/night, as guidance indicated you could bring in a close relative as long as it was small and contained. This means our bubble expended to include our flat and his, so a total of 2+3 people, which we deemed as small and contained. However the next day there was further guidance in the newspaper about the fact that two flats should not merge. So her partner hasn't been back since and we are keeping the two flat bubbles separate for the rest of lockdown (Continental European woman, 30s).

On the other hand, some respondents worried that the concept of bubble exclusivity was proving difficult for some people to grasp. They described how they had needed

³⁸ New Zealand Herald 2020.

to painstakingly explain to their elderly parents that it was not possible for them to see all of their different children during Level 3, as this would create a chain of transmission. Some shared suspicions that people they knew had inadvertently created a chain due to misunderstanding the rules. There was also uncertainty over whether meeting up with others for beach walks at a distance of 2 metres was a breach of bubble exclusivity or not, since government guidelines had advised that you could chat to your neighbours at a distance of 2 metres, but had discouraged social visits.

It has evidently been difficult for the New Zealand government to generate clear guidance that can nevertheless accommodate diverse living arrangements and relational needs. Rather than issuing public advisories that then invite qualifications and exemptions, other governments wishing to implement a bubble system might be well-advised to develop a more interactive way in which citizens can get bespoke feedback on the epidemiological riskiness of their planned arrangements – e.g. via a website or app.

5.5 Unwanted Bubble Expansions

When the New Zealand government tells its citizens that ‘you can expand your bubble a small amount [under Level 3]’, it assumes that people have a high degree of agency over the expansion of their bubble, or at the very least are included in discussions about whether and how to expand. This is not always the case. A significant minority of respondents described situations in which their bubble had expanded against their wishes.

Unwanted expansions were most common in situations where respondents were sharing childcare with a co-parent who lives elsewhere; typically an ex-partner. While the two parents had already been allowed to function as a shared household unit during Level 4, it was common for each partner to want to bring their own loved ones into an expanded bubble. Historic tensions between the co-parents and their respective loved ones meant that such arrangements could be difficult to negotiate successfully. Many respondents complained of situations where a ‘unilateral’ expansion of their co-parent’s bubble (often, but not always linked to a co-parenting arrangement involving the ex’s new partner) had put them at risk or left them unable to bring their own loved ones into their bubble:

Expanding our bubble was dictated to us due a shared care arrangement with 2/3 of our children with their mother. She expanded her bubble during level 4 to a man (and his 3 year old also in shared care) she has recently started dating and exposed the children therefore there is now no leeway for us to expand out bubble any further. A very upsetting and hurtful experience (Mixed ethnicity woman, 40s).

Returning to the workplace in Level 3 was generally viewed positively by respondents, who looked forward to the change of scene and hanging out with their colleagues. Many saw it as a necessary step if the organisations they worked for were to survive. However, over a third (34.5%) of respondents who had returned to work reported that they had not been able to keep a safe distance from others in the workplace, effectively breaching their bubble boundaries.

Employers only care about profit not covid. We are all using the same toilet, phones, computer, and [these are] not getting cleaned so 10 staff have now come into my bubble. When you bring it up the employers don't care (Pākehā woman, 40s).

As such remarks show, workplace bubble-breaches could be a source of great frustration, stress and anxiety. Some people have had to abandon the bubble expansions that they, their partners and children had been looking forward to, in order to protect their loved ones from workplace-associated risk.

In other cases, unwanted bubble expansions had arisen as a result of poor communication within their own social networks:

Our daughter needed help with getting her motor mower started & brought it around. We hadn't confirmed that she was part of our expanded bubble but she assumed she was! We were considering going to expand to include my elderly parents but now won't as our daughter has been back at work. We should have had the conversation about the "bubble expansion" needing to be consensual (Pākehā woman, 50s).

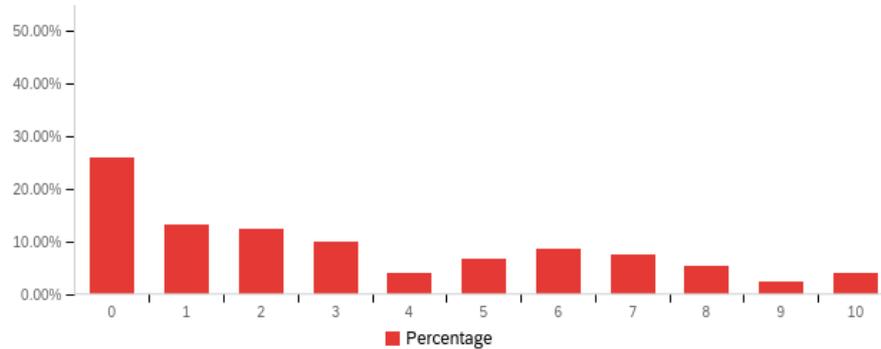
Unwanted bubble expansion can be a significant source of anxiety and unhappiness during a pandemic. Clear guidance needs to be prepared for people living in shared childcare arrangements, which already have the potential to link multiple households in a chain. Workers need to be confident that their workplace is safe and that they are not sacrificing the safety of their loved ones or their social relationships in order to restart the economy. This holds true however a lockdown is modified; many of the concerns described in this section might also have been experienced even in the absence of a 'bubble expansion' policy.

5.6. Staying exclusive

In order for an expanded bubble to be effective in the fight against coronavirus, it is crucial that it remains exclusive. Given that coronavirus can be transmitted by carriers in the absence of symptoms, it is only by ensuring exclusivity in social networks that the virus can be effectively contained, and its onward transmission curtailed.

5.6.1 Attitudes to exclusivity

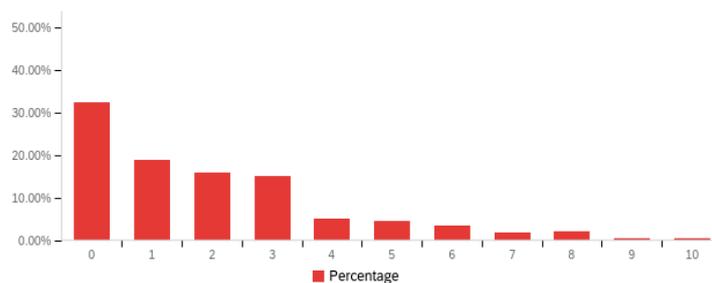
Q: I am often tempted to spend time with people outside my (expanded) bubble. 0= strongly disagree; 10 = strongly agree



Respondents reported varying levels of temptation when it came to spending time with people from outside of their bubble during Level 3. Understandably, temptation tended to be slightly higher amongst those who had not yet expanded their bubble, despite wanting to.

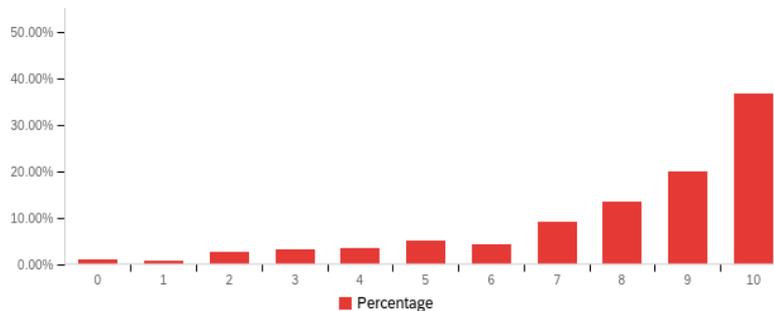
Nevertheless, most respondents attested to the importance of sticking to social distancing rules, even though some felt the measures to be unnecessary given the low levels of current infection.

Q: Now we are in Level 3, it doesn't matter so much if people occasionally break social distancing rules. 0= strongly disagree; 10 = strongly agree



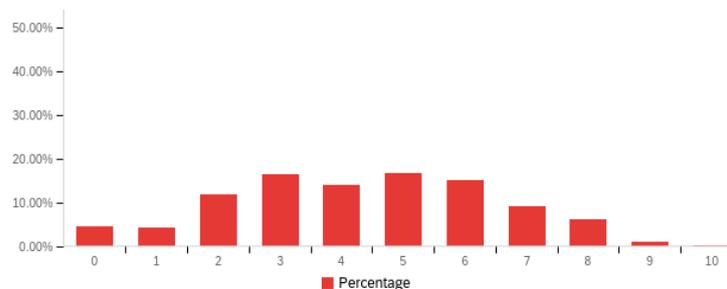
They were generally confident that their bubbles would remain exclusive. The group who had least confidence in their bubble's exclusivity were those whose bubble had expanded against their wishes.

Q: I am confident that my (extended) bubble will remain exclusive during Level 3. 0= strongly disagree; 10 = strongly agree



Interestingly, however, our Level 3 survey respondents reported much lower levels of confidence that other New Zealanders would stay exclusive during Level 3; a finding which appears to reflect low levels of public trust, no doubt heightened by media coverage of rule-breaches, but sometimes articulated in ways that indicated the influence of longer-standing cultural prejudices: that ‘Chinese’ New Zealanders might not speak good enough English to understand government guidelines, or that ‘Pasifika’ populations might lack the strict discipline needed to adhere to the rules.

Q: I am confident that most New Zealanders will keep their bubbles exclusive during Level 3. 0= strongly disagree; 10 = strongly agree



Given these low levels of trust in fellow New Zealanders, we were interested in learning what strategies respondents had adopted for ensuring that their bubbles would stay exclusive and on what grounds they felt they could trust their fellow bubble-members.

5.6.2. Social Trust

In some cases, no formal discussion about exclusivity had ever been held amongst the people in expanded bubble arrangements. Respondents had chosen to extend their bubbles to people they already felt they could trust absolutely. Respondents felt confident the bubble would stay exclusive because of the strength of the relationship, their knowledge of their bubble-mates’ behaviour during the earlier

phase of lockdown, their appraisal of their bubble-mates' character, and their belief that there was a shared public understanding of how to behave during the pandemic.

There have to be very high levels of trust in these situations, but I feel we have it (Pākehā woman, 50s; paraphrase of interview).

[I included] the people closest to me family wise. The ones I can trust do not have the virus and display no symptoms and have been self isolating themselves in such a way to make sure of this (Pākehā man, age undisclosed).

I do not have any particular strategies to ensure my bubble stays as exclusive as possible, policing of travel and social distancing by both law enforcement and members of the public (there have been hundreds of reports of lockdown breaches made to police) has meant that merely respecting policy keeps bubbles exclusive (Pākehā woman, 20s).

A few participants in the study shared poignant stories of their trust having been betrayed. In some cases this resulted from outright deception (friends or relatives 'cheating' on them with another bubble). It could also arise from non-disclosure of important details, such as whether someone who 'lives alone' makes use of shared kitchen and bathroom facilities (in, for example, a boarding house or caravan park).

Expanded bubble arrangements based on trust ran into difficulty when bubble members had different opinions regarding the riskiness of certain behaviours. 'Jane', a Pākehā woman living on one of New Zealand's small islands, experienced a painful breach in her relationship with her neighbours, who she had planned to merge bubbles with during Level 3. The arrangement foundered after her neighbour saw her having a conversation with a colleague who lived across the road. Jane felt this conversation was safe: there were no coronavirus cases on the island, and she considered her colleague's family to have been 'impeccable in their actions' during the lockdown. Her neighbours, however, were profoundly worried about the virus and shocked by Jane's actions. The angry confrontation that ensued not only wrecked Jane's plans for bubble expansion but has also soured a neighbourly relationship that was previously harmonious.

As this case illustrates, there are widely divergent opinions when it comes to what is a 'reasonable' or 'unreasonable' level of risk-taking during the coronavirus pandemic, and these often lead to social rifts. Many are discovering that people they thought they knew, or trusted to have their best interests at heart, cannot necessarily be guaranteed to make the same appraisal of certain risks.

5.6.3. – Active consensus-seeking

Some respondents had held collective conversations in order to determine the shared principles that they would all live by under Level 3. Clear and detailed

consensus-oriented discussion, regularly revisited, allowed them to have confidence that their bubble was exclusive and safe:

We had a bubble meeting [for members of the extended bubble] and set some rules around living in the bubble. One person would do shopping. No contact outside bubble. Let everyone know if anything changed etc. Just sticking to the rules set by the government (Pākehā man, 60s).

We communicate regularly with our own bubble and anyone that's joined ours. Before anyone from the extended bubble comes to us we ask again if they have been with others. We were clear from the beginning (Pākehā woman, 40s).

It also enabled them to adapt their practices if necessary, as seen in the following case of a respondent whose childcare arrangements led to her inhabiting what she herself described as a 'large contact chain'.

We have had clear discussions with our co-parents about who we are in contact with, their health conditions, and who their contacts are so everyone knows the whole picture. I expressed my concerns to my children's father about his sister and her extended bubble (my children having contact with her via his mother). He hadn't fully realised the extent of ill health in other households involved and seems to have taken it on board now - he visits his mum without the kids and she comes to him when he has them (to limit the potential for contact with his sister, I think) (Pākehā woman, 40s).

Detailed discussions of this kind seem to have been more common amongst people who are living in shared-housemate arrangements ('flatting'), whereas those who extend their bubbles to incorporate 'family' may feel that such issues do not need to be addressed. Even amongst kin, however, such discussions can be important for improving the confidence of people who are anxious about their health.

Case Study

'Debbie', a Pākehā woman in her sixties and living alone described how she and her son had 'a long discussion about health and wellbeing' after he invited her to join his bubble. He was also planning to join with his sister-in-law's bubble so that his children could have more company. While Debbie already 'knew all the people involved very well' and 'trust[ed] all that they say', the conversation reassured her that she knew their philosophy of shopping, their commitment to cleaning all surfaces (including supermarket purchases) and their observance of good health practices, allowing her to feel safe when her son came to visit her during Level 3.

However, as noted earlier, not every living arrangement is equal in its capacity to have successful consensus-oriented conversations or transparent discussion. Negotiations can be particularly difficult – or even absent – between former partners who have been brought into the same bubble in order to share childcare duties. This helps to explain why it was respondents who reported that they had been forced to

expand their bubble against their wishes that had least confidence in their bubble remaining exclusive during Level 3.

5.6.4. House guest model

In some cases, a bubble 'expansion' did not mean two bubbles regularly spending time together so much as new people coming into an already existing bubble. For example, a child's partner or a partner's parent might be welcomed into the household as a long-term guest. Some households had already taken in such guests under Level 4, but others had not had time to do so, or now felt greater urgency in doing so (for example, to meet a mental health need). Such arrangements raise fewer anxieties about exclusivity and the trustworthiness of bubble-mates, as the bubble remains spatially contained. One Pākehā woman in her 50s, who lived on a 6 hectare property in a rural area explained that it 'wasn't too hard' to ensure exclusivity because she lived in the country: 'people don't generally drop by, they come to stay.'

5.6.5. One-off meetings

While bubble expansion allows the possibilities of regular socialisation between households, the short time horizon anticipated for Level 3 (implemented for just two weeks in the first instance, as Covid-19 cases dropped to very low numbers) led a few respondents to adopt a different strategy, having a single 'one-off catch-up' as Level 3 began, followed by a return to their usual bubble arrangements.

One MELAA community nurse in her forties described hosting a 'family dinner' with her mother, who lives alone, her brother and his wife, and her own family of three. But she had no plans for any further catch-ups before level 2 began. This meant there was no need to worry about ongoing exclusivity, which was likely to be compromised anyway by her partner's return to work and their child's return to school.

5.7. Attempted bubble breaches

Keeping a bubble exclusive does not just depend on bubble members staying 'within' the bubble but also on people from outside the bubble respecting its boundaries.

We asked Level 3 survey respondents whether anyone from outside their bubble had asked to spend time with them since Level 3 began. By framing the question in a way that made respondents the 'victims', rather than the instigators, of attempted bubble breaches, we hoped to offset the risk of social desirability bias that can come in self-reports of compliance with regulations. The figures we draw on here come from the answers given on the 5th and 6th May, since these provide an overview of what has happened during the first full week of eased lockdown.

25.8% of people reported people from outside of their bubble asking to spend time with them during the first week of Level 3 (approaches that included both deliberate attempts to burst a bubble and casual enquiries about merging bubbles). Only in 29% of these cases (i.e. 7.5% of total cases) did our respondents report actually spending time with the people who approached them. Our survey results for 5th and 6th May indicate that men may be more likely than women to have been approached by people outside of their bubble and also may be more likely to eventually spend time with them. Unfortunately, an extremely strong female skew in our survey responses on these two days makes it hard to draw firm conclusions as to whether there may be a gendered dimension to bubble 'popping'. The number of responses from men is simply too low. With data on bubble popping from earlier in Level 3 showing a more even gender balance, all that can be said for certain at this stage is that more research on this issue is required.

When requests to socialise were made by phone or social media, these were easily declined, although doing so could sometimes create tensions in the relationship, especially if the other party was persistent or believed respondents' concern about coronavirus infection to be overstated. Some New Zealanders have handled these tensions by offering 'polite excuses', such as by warning that there is a nursing home nearby with many coronavirus cases, and hoping their interlocutors will understand the subtext.

More difficult were situations where loved ones turned up in person, tacitly pressuring respondents to extend hospitality, or where respondents had serious concerns about the mental health or emotional wellbeing of those who had reached out to them.

In such cases, respondents often did spend time with their loved ones, but – as had also been the case at Level 4 – did so in creative ways that drew on the physical distancing principles recommended by the government to make the interactions as safe as possible. Just as workplaces had adapted their environments to be safe, these people attempted to live out their most cherished relationships in a similar, socially distanced, manner.

Public messaging on interactions such as these has been inconsistent. New Zealand media has offered largely positive coverage of initiatives such as socially distanced 'driveway drinks', highlighting the mental health benefits they offer. One journalist described socially distanced interactions between neighbours as part of an 'outbreak of kindness'. The government and medical experts, however, have warned that such encounters risk spreading coronavirus and are best avoided.

While these interactions may not technically comply with guidelines for best practice during lockdown, respondents appeared to be making sincere attempts to balance a

respect for what they see as the spirit of the lockdown with the obligations to care for others that they feel as a result of their interpersonal relationships, kinship roles, and sense of public duty to 'be kind'.³⁹ They could thus be seen as forms of 'creative compliance' or 'semi-compliance', although respondents sometimes displayed a high degree of awareness, and discomfort, that they were stretching the rules.

My friend and I swapped fruit and preserves (jam, chutney) like a drug drop! Put stuff down outside on the street then each collected, and had a 5 min chat at quite a distance. Even though [there was] no touching and at a distance [I] still felt naughty (Pākehā woman, 30s).

My mother in law turned up and insisted she could sit at one end of our deck and we could be at the other end and this would be fine. If it was my mother I would tell her off. But it's pretty hard to tell your mother in law off (Pākehā woman, 40s).

My close friend's father died. She needed support so asked if she could visit my house in a socially distanced way. We stayed outside, stayed more than two meters apart and wore gloves (Pākehā woman, 30s).

My friend who was very isolated and having a very hard time asked to meet for a coffee at 2 m distance from a shop where we both got the coffee separately and then talked at a 2m distance for 10 mins or so. It was awkward and hard to stay the distance but we managed it and she was very grateful for having the time together (Pākehā woman, 50s).

As this last remark illustrates, maintaining a safe distance could sometimes be difficult. Respondents often took advantage of material infrastructures (such as by sitting at two ends of a garden deck) in order to achieve this. Outdoor interactions were perceived to be safer, and indoor interactions were rarely reported.

It is hard to be certain whether a safe physical distance was always maintained as successfully as respondents claimed. One panel participant described very candidly how her own attempts to interact at a social distance could quickly slide into unsafe practices:

Since level 3 we have been really slack as a household with keeping our bubble exclusive. 'Social distancing visits' have become a thing which obviously makes bubbles pointless. The idea is to meet up with people but keep 2 metres away. This rule has not been followed during any of the visits. People want to hug each other, get each other drinks, feed each other, exchange gifts... It rains so people need to gather under shelter or inside. I couldn't count the number of people who are in our now very extended bubble. We all made exceptions because of breakups, birthdays and friends who are living alone (Pākehā woman, 20s).

³⁹ Similarly 'experimental' strategies of compliance with medical advice have been widely noted by medical anthropologists, including those working in New Zealand. See e.g. Conrad 1985; Trnka 2014.

However, this respondent also noted that she would 'definitely' follow the rules more strictly 'if there were more cases' or if someone she knew got infected; she would never have considered 'social distance visiting' before she thought New Zealand was 'in the clear', and had been 'furious' when she discovered her mother had been meeting up with people.

Overall, the survey indicates a high degree of conscientiousness and a strong desire to comply with public health advice so as to prevent the spread of coronavirus. Even when people socialise outside their bubbles, they stay true to what they see as the spirit of the restrictions and try to do so in a way that incorporates physical distancing.

5.7.1. Comparison with Level 4

Unfortunately, we lack good data on bubble breaches during Level 4, as they were not covered in our initial survey. Of the 140 people who took our survey on the very first day of Level 3, 26 (18.6%) had reported people from outside their bubble attempting to spend time with them during 'the past seven days' (most of which will have been towards the end of Level 4). 7 (26.9%) of these had done so. This suggests that attempted breaches had been less common during Level 4 than during Level 3, but that rates of uptake were roughly similar, leading to a total reported 'breach' rate of around 5%, as opposed to Level 3's 7.5%. The change is suggestive, but the small numbers mean it is not statistically significant. Of course, the final week of Level 4, when relaxation measures had already been announced, may not be representative of the alert level writ large.

Qualitative descriptions of what took place during Level 4 bubble 'breaches' paint a very similar picture to portraits of life under level 3. Meetings took place to deal with acute emotional and mental health needs, typically in a socially distanced way. A few respondents had decided to expand their bubbles a few days before Level 4 formally began, and reported this as a breach of their bubble in the survey. At both levels, the number of cases in which respondents actually spent time with a person from outside of their bubble in a way that made no attempt to respect social distancing guidelines was low.

Various factors could account for the apparent increase in rates of attempted breach during Level 3. These include a greater level of uncertainty about what is permissible during Level 3, behavioural fatigue, or a slackening of resolve during Level 3 fuelled by the growing perception that the worst of the crisis had passed and the virus was now 'eliminated'. All factors are likely to contribute to a degree: several respondents who have written to us in recent days have reported feeling that New Zealand is now so safe that they don't need to be so vigilant, and others report a sense that public support for the lockdown is gradually waning. A more general question on 'following

government guidance' (in general, not specifically related to bubbles) found that over 90% were doing so 'very or extremely closely' (above 8 on a scale of 0 to 10) - down from 97% during Level 4 – and the proportion of respondents who selected '10: extremely closely' was 46%, rather than 74%. This does not suggest complacency, but does indicate that New Zealanders might have been forgiving themselves occasional slips in best practice. We would imagine that compliance would be higher in situations where lockdown regulations are modified against the backdrop of an ongoing threat of contagion.⁴⁰

While a few respondents had blatant disregard for the rules, and some may have misunderstood them, the vast majority of our respondents made a conscientious effort to conform with the spirit and/or the letter of the government guidelines, and to ensure that they and their loved ones would stay safe and well.

5.8. Bubble Dissolution

While most expanded bubbles were able to remain intact during the two weeks of Level 3, we did encounter cases where this had not occurred.

Tricia, a Pākehā woman in her forties, described having spent Level 4 of lockdown with her children. During this time, she was apart from her partner who lived elsewhere. Despite Zooming and messaging during Level 4, the lockdown created (or perhaps exacerbated) difficulties in their relationship. On the first day of Level 3, they met, discussed the relationship, and agreed to separate. They exchanged Easter gifts that they had bought for each other, swapped items that each had been keeping at the other's house, and agreed to go their separate ways.

Tricia still viewed her ex-partner as being in her expanded bubble, but did not plan to see him again. Her capacity to expand her bubble in Level 3 had been used for this 'one-off' meeting. Others also described cases where they had separated from a bubble-mate, usually after a discovery that the bubble with which they had joined was not as exclusive as they had originally imagined, and that their bubble-mate, or people they lived with, had been visiting other bubbles.

Like any relationships, those in bubbles can founder. While this is always sad, the New Zealanders we spoke to could take consolation in the hope that their country would soon return to Level 2, at which point socialising with friends and family would become commonplace once again. For countries considering a bubbles scheme in the context of long-term lockdown, it will be vital to have procedures in place to ensure that people like Tricia can create a new bubble (after an appropriate period of self-isolation) so they can continue to receive support and care after their original bubble arrangement has come to an end.

⁴⁰ See Harper et al. 2020 on 'functional fear' as a predictor of compliance.

6. Conclusions and Recommendations

6.1. – Adopting a bubbles policy

Key Conclusions

- At both Level 4 and Level 3, New Zealand’s bubbles policy has allowed isolated people, vulnerable people, and those facing particular care burdens to access the support they need in a way that is likely to minimise the spread of coronavirus;
- Framing the policy as an ‘easing’ or ‘relaxation’ of lockdown is likely to be politically unpopular, and to lead to heightened anxieties about the recklessness of the measure and the selfishness of those who take advantage of it;
- Framing the policy as a source of support and care for those in need will lead to it being more politically palatable and more effective at supporting those who are struggling;
- The New Zealand case suggests that there would be public support for a bubbles policy if the public can be confident that the coronavirus contagion is sufficiently under control for it to be safe;

Recommendations

- Governments must think carefully about the point at which it is most advisable to introduce this policy, as is true of all lockdown modification measures;
- The policy should be introduced in a phased manner, as was done in New Zealand. Early measures, targeted at supporting the most isolated and vulnerable are most likely to have the most immediate benefit and are most likely to receive public support. This will also set the tone for future expansions of the scheme;
- Language of ‘easing’ or ‘relaxing’ the lockdown should be avoided;
- The timing and messaging behind the policy must be carefully considered; citizens must feel that social contact is safe enough to want to do it, but not so safe that they become complacent;
- If unrolled in a spirit of fostering mutual support, bubble policies can play an important role in supporting members of the public during the next phases of lockdown.

6.2. Buddying Systems

Key Conclusions

- Both of New Zealand's buddying systems had relatively low rates of uptake, but were greatly valued by the people who used them;
- Stringent criteria for who can qualify as a buddy (e.g. that they must be local, and must be live alone) presented barriers to people who would otherwise have benefitted from the schemes;
- It is more useful for people who need support to be able to buddy with entire households, provided that it is epidemiologically safe for them to do so;
- Some people who need support (e.g. recently arrived migrants; key workers) may not be able to find buddies easily;
- Citizens will not take advantage of buddying schemes designed to support them unless they are confident that doing so would be safe.

Recommendations

- Other governments should strongly consider implementing a version of New Zealand's buddying scheme to help people who are isolated or have complex childcare needs;
- More flexibility as to who one can buddy with would allow the policy to reach more of the people it is intended to target;
- Formal befriending schemes would be a useful complement to buddying schemes for those who are finding it difficult to identify someone who is willing to be their buddy during the pandemic;
- While fears of contagion continue to be high, buddying systems need to be complemented with structural and financial forms of support (e.g. paid childcare leave for working parents).

6.3. Supporting people in deciding whether and how to expand

Key Conclusions

- Government messages that bubbles should only to expand people 'where it will keep you and them safe and well' was carefully heeded and helped people decide how to proceed;
- New Zealanders' decisions about whether and how to expand their bubble involved careful attention to both the risk of contagion and the emotional and care needs of people in their social network (themselves included);
- Most people who expanded their bubble only merged with one other household, but this arrangement was less suitable for those with non-normative living arrangements. Some people in such arrangements (e.g.

people isolated in flatshares) are amongst those whose have been suffering most during lockdown;

- Government guidelines over what was permissible were not clear, leading some people to decide for themselves what was safe, and what was in the 'spirit' of the policy;
- Essential workers and their households face stigma and may struggle to expand their bubbles;
- Bubble expansion can be a flashpoint in co-parenting relationships.

Recommendations

- Other governments can learn from the New Zealand example by framing bubble expansion as an act of care and support, rather than as a 'return to normal' or a 'social pleasure'. This will ensure the policy helps those who need it most;
- Citizens, particularly those living in non-normative households, would benefit from interactive interfaces, such as websites and apps, that can give them objective feedback on the riskiness of their proposed bubble arrangements. This may be preferable to an unduly blunt 'one-size fits all approach' or an unduly vague policy (such as 'extend by a small amount');
- All workplaces must be Covid-19 secure.
- Careful thought should be given to how to support the households of essential workers (and others who have returned to the workplace) if they are unable or unwilling to expand their bubble. Possible ideas include testing infrastructures that would allow daily monitoring of their infection status or befriending schemes that allow them to connect with volunteers who are happy to spend time with them;
- Guidelines on best practice should be drawn up for how one should expand one's bubble (if at all) when in a long co-parenting chain.

6.4. Supporting people in their expanded bubbles

Key Conclusions

- Thorough and transparent dialogue is key when deciding who to include in an expanded bubble;
- It is important for bubble-mates to discuss the ground-rules of their bubbles in order to avoid scenarios where one party feels they have been put at undue risk.
- Conflicts over such matters such as socially distanced visits, whether to disinfect items purchased in a supermarket, and whether to change clothes upon entering the house can lead to rifts between people who were previously close if not thought through in advance;

- Dialogue about activities and ground rules should continue throughout the lifespan of the bubble expansion.

Recommendations

- Governments should produce guidance on issues that bubble-mates need to consider when deciding whether to merge their bubbles together, in formats that lends themselves to open and collaborative dialogue. These could range from guidance on a website through to a more interactive 'compatibility quiz' on a contact tracing mobile app;
- Publishing advice in multiple languages and communicating closely with community leaders will improve understanding of, and compliance with, the policy;
- Governments should publicise stories of bubble-sharing that have gone well and gone wrong to help citizens decide whether the arrangement is for them, and to normalise best practices of dialogue and consensus-seeking;
- Clear strategies need to be publicised in advance for people whose bubble-sharing breaks down. For example, they could be advised to self-isolate for 14 days and then be allowed to expand their bubbles in different directions.

6.5. Helping bubbles stay exclusive

Key Conclusions

- Compliance with Level 3 bubble regulations appears to have been high in New Zealand, even taking into account the fact that data has come from self-selected survey respondents who may be disproportionately conscientious;
- While the threat of coronavirus is perceived to be high, bubble members will be highly motivated to act in ways that safeguard their own health and that of their loved ones;
- An expanded bubble is still an artificial social arrangement, and people will want to spend time with loved ones outside of it, especially in response to sudden and unforeseen events (bereavements, break-ups, mental health crises, etc);
- The high level of 'socially distanced visits' undertaken in New Zealand suggests that even when people socialise outside of their bubble, they generally make efforts to do so in a way that they believe protects public health;
- These breaches of exclusivity were already happening under Level 4 and are not inherently associated with the bubble expansion policy;
- People may be more likely to bend the rules if they think that coronavirus is no longer a threat.

Recommendations

- Government messaging should stress the importance of staying exclusive, and make clear what that means, in order to support citizens in their endeavours;
- Very clear guidance needs to be given as to whether citizens can meet with friends and family from outside of their bubble at a social distance, and how they can do so safely;
- Publishing advice in multiple languages and communicating closely with community leaders will improve understanding of, and compliance with, the policy;
- If such interactions are to be discouraged, clear explanations will need to be given as to why they are permissible in the workplace;
- International governments can draw inspiration from the New Zealand's messaging that joining a bubble is to 'keep you and others safe and well', as these principles reinforce the need for exclusivity.

7. Final Reflections

Social bubbles that can expand across multiple households offer an intuitively appealing solution to the dilemma we set out at the start of this report, namely, how to allow citizens some access to their established networks of emotional and financial support without those very networks becoming vectors of rapid infection.

In many ways, the New Zealand experience surpasses expectations. Respondents did not necessarily fall back into pre-existing social relationships; they actively sought out those who needed their assistance and gladly provided it, welcoming them into their bubble even when this came at a personal cost. Notwithstanding the fact that our respondents were predominantly Pākehā, and that the difficulties and discrimination experienced by Māori, Pasifika, and other minorities were under-represented within our survey data, we often found ourselves moved by the thoughtfulness with which our respondents had followed the government's injunction to 'be kind'.

There are also lessons to be learned from the New Zealand experience.

One of these concerns clarity. It must be clear from the outset what is or is not permitted. Yet clarity does not necessarily equate to bluntness or a one-size-fits-all approach. Regulations must not be so rigid that they withhold the benefits of bubbling from those who need it most. Having pioneered the idea, it is not surprising that New Zealand needed to make adjustments to their policy as it went along. Other governments should seek to do better.

A second lesson concerns fear. Even at a time when case numbers were in single digits, our respondents' engagement with the bubble policy – and with each other – was often mediated by profound anxieties about contagion. This could lead to exclusion and stigma of essential workers, and interpersonal rifts. Governments can provide support to their citizens by helping people think through, in advance, the conversations they need to have and the ground rules they need to establish when living together in a bubble. Expanding a bubble might feel like 'reconnecting' with loved ones but it is actually a new way of connecting with those loved ones – the creation of a new social form – that needs to be carefully thought through in advance. Governments should also provide information that will allow citizens to make informed and realistic assessments of infection risk. They must also make sure that workplaces are Covid-19 secure, and that the public can be confident of this. Otherwise, there is a danger of creating a two-tier system, where those who can work from home enjoy the benefits of bubbles, while those who have to leave their

homes to work (and the people they live with) face increasingly difficult care burdens.

Not all experiences of 'the bubble' will be perfect; no experience of living together ever is.⁴¹ But our research makes it clear that, even at a point where it seemed New Zealand's lockdown would soon be over altogether, being able to mix with others in a multi-person household bubble was a profoundly life-enhancing, sometimes even life-saving, opportunity. It was also a government policy of which many New Zealanders felt very proud, and from which they felt other countries could learn:

I think the UK can learn a lot from New Zealand regarding bubbles. My mother is 86, lives on her own in a village in Yorkshire, and doesn't drive. I have two sisters who live nearby – one on her own, and the other with her husband. Each have been exclusively in their own bubbles. **Why on earth couldn't households such as these join bubbles?** The maximum number in this joint bubble would have been 4, (far lower than many UK households), yet my mum has had to go through the lockdown on her own. **I think it is an absolute disgrace** – a vulnerable old lady. Yes, one sister did the shopping and left it on her doorstep, yes, I have been phoning regularly, but that is a far cry from having physical company – e.g. chatting in the kitchen over a cup of coffee etc. The impact on mental health cannot be underestimated! (English expat woman, 50s; emphasis original).

New Zealand has been rightly lauded for its success in combatting a virus that has wrought so much devastation in other countries around the world. Some experts say it is 'probably too late' to learn from its example, and as far as the elimination of the novel coronavirus is concerned, this may well be true. Yet as the coronavirus pandemic rolls on around the world, and the toll of lockdown on citizens' mental health and well-being worsens, it may well be New Zealand's experiments in enabling innovative and flexible social arrangements that combine care and support with principles of viral containment – bubbles – that will offer the most valuable lessons of all.

⁴¹ A long tradition of work in anthropological studies of kinship and family explores this very point, e.g. Geschiere 2013; Peletz 2001; Trawick 1990.

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