

# MATES in Construction New Zealand: Industry Wellbeing Environmental Scan and Survey

Kelsey Morrison, Danny Tu, Gabrielle Jenkin





ALLEN+CLARKE

# MATES in Construction New Zealand: Industry Wellbeing Environmental Scan and Survey

---

Kelsey Morrison, Danny Tu, Gabrielle Jenkin



## FUNDING PARTNERS

Research conducted with the support of CHASNZ, Site Safe, and Registered Master Builders



Document status:	Overview report
Version and date:	V3.0 02/02/22
Author(s):	Kelsey Morrison, Danny Tu, Gabrielle Jenkin
Filing Location:	NZ – Work / Mates in Construction/ Survey Data Analysis
Peer / technical review:	Greg Martin
Verification that QA changes made:	Danny Tu
Proof read:	Tahlia Studdart
Formatting:	Danny Tu
Final QA check and approved for release:	Kirsten Lovelock

Allen + Clarke has been independently certified as compliant with ISO9001:2015 Quality Management Systems



---

# CONTENTS

## Table of Contents

EXECUTIVE SUMMARY .....	4
1.Environmental Scan.....	4
2.Industry Wellbeing Survey .....	4
3.Recommendations .....	5
ENVIRONMENTAL SCAN .....	6
4.INTRODUCTION .....	6
4.1.Background.....	6
4.2.Aim .....	6
5.METHODOLOGY .....	6
5.1.Academic literature search .....	6
5.2.Grey literature search .....	6
6.KEY FINDINGS .....	7
6.1.Academic literature search results .....	7
6.2.Grey literature search results .....	8
INDUSTRY WELLBEING SURVEY .....	10
7..... METHODOLOGY .....	10
8..... WORK CHARACTERISTICS .....	11
8.1. .... Your career.....	11
9..... DEMOGRAPHICS.....	14
9.1. .... Ethnic groups .....	14
9.2. .... Age groups.....	14
9.3. .... Region .....	15
9.4. .... Relationship status .....	15
10.... STRESS FACTORS .....	16
10.1. .... Stressors .....	16
10.2. .... Work life .....	18
11.... GENERAL MENTAL HEALTH .....	20
11.1. .... Overall mental health.....	20
11.2. .... Change in mental health.....	20
12.... MENTAL HEALTH CONDITIONS.....	22
12.1. .... Anxiety and depression.....	22
12.2. .... Suicide.....	25

---

13.... HELP SEEKING AND SUPPORT .....	27
13.1. .... Help seeking .....	27
13.2. .... Workplace support .....	30
14.... COVID-19 .....	32
14.1. .... 'Coronaphobia' .....	32
14.2. .... COVID-19 information .....	33
14.3. .... Self-isolation .....	37
RECOMMENDATIONS TO PROMOTE MENTAL HEALTH.....	38
APPENDIX 1: SEARCH STRATEGY .....	41
APPENDIX 2: FINAL ACADEMIC PAPERS .....	43
APPENDIX 3: PRIORITY GREY LITERATURE RESULTS.....	46

---

## OVERVIEW

In late 2021, it became noticeable that workers were experiencing a significant increase in anxiety, fear, anger and frustration. There is a term that has been labelled “coronaphobia” which is fears relating to contracting the virus, we felt that this could be causing increased anxiety. We were also hearing about segregation and stigmatisation between our workers, (the vaxed versus the unvaxed) The stigma of COVID-19, in the present context, could be comprehended as a social process that sets to exclude those who are perceived to be a potential source of disease and may pose threat to the effective social living in the society. This may have been exacerbated by the introduction of the mandating of vaccines.

MATES wanted to get a better understanding of how COVID-19 was impacting our workforce. With the help of funding from our mates at SiteSafe, CHASNZ and Registered Master Builders MATES was able to commission research agency Allen + Clarke to conduct a Global Environmental to understand how Covid had hit others and interventions we could learn from. Following the scan, we were able to form a survey to industry on the impacts over a four month period since Delta hit New Zealand in mid-2021.

Recommendations are outlined in the report and future monitoring will be undertaken by MATES.

This research underscores the importance of prioritising our people as we continue to work through the pandemic and look to rebuild our economy and businesses. At MATES, we are expanding around the country to offer mental health support through workplaces, but it's clear we need a joined-up approach by industry, government and providers to support our people through the stormy seas ahead.

## EXECUTIVE SUMMARY

### 1. ENVIRONMENTAL SCAN

Although very little relevant academic peer reviewed published research existed addressing mental health in the construction industry during the pandemic, much action on the ground was already occurring as evident from the website search.

Interventions initiated by the bodies involved in the construction sector were evident in the United States, the United Kingdom, Canada, Australia, and New Zealand. Many of these drew on and extended existing MATES like initiatives already established to improve mental health in the construction industry.

Interventions ranged from the simple to the complex. Simple low-cost interventions to improve mental health included blogs and media reporting on the problems with simple advice, to tailored advice via blogs, webinars, information and fact sheets and links to national and government resources (and 0800 numbers) to address income and welfare issues. More resource intensive interventions included the provision of webinars, videos on how to recognise and deal with stress and other issues, research surveys reporting on the wellbeing of the industry, the extension of EAP services and low-cost counselling for industry workers, the provision of additional mental health first aid training (in some cases for free), and guidelines for employers and industry to improve and monitor mental health in the industry. We found only one Covid-specific health promotion campaign, based in Melbourne that made use of newly established mental health hubs who triaged and referred clients on to appropriate services.

### 2. INDUSTRY WELLBEING SURVEY

- Two in five (43%) respondents report that since COVID-19 arrived in New Zealand their mental health is worse than usual. This figure is concerning and indicates a need for ongoing monitoring. Monitoring would likely be invaluable during the Omicron outbreak.
- In the last 4 months 4% of respondents (n=45) seriously thought about ending their life, 2% (n=17) made plans to end their life, and 1% (n=14) made an attempt to end their life.
- Suicidal thoughts, plans, and attempts are reported more frequently by participants who are younger (aged 15-24, 18%) and older (65-74, 11%), Māori (8%) and Pacific Peoples (8%), not in a relationship (9%), and who have worked in the construction industry for 10 years or less (6%).
- One in five (22%) would find it difficult to talk to someone at work about feeling down or being depressed.
- Participants who would find it difficult to talk to someone at work about feeling down or depressed are more likely to be younger (aged 15-24, 28%, and 25-34, 28%) and aged 55-64 (25%), European (26%), and having worked in the construction industry for 10 years or less (25%) and 31 years or more (24%).

- One third (33%) report that in the past 12 months their employer checked in on their wellbeing whilst at work at least once a week or more. This figure indicates great room for improvement.
- If participants have problems with their mental health or wellbeing, they would be most likely to first seek help from (1) family, whānau or friends (47%), (2) their partner (40%), or (3) a GP/Doctor (33%).
- Overall, the three most commonly selected issues of concern are: sleep (38%), physical health (37%), and time for self-care (32%).
- In the workplace, the three most common issues of concern are: high workload (37%), COVID-19 protocols (31%), and pressures from delays (30%). It is expected that these concerns will remain – and potentially intensify – with the impending Omicron outbreak.
- Over three quarters (78%) agree that they are able to manage things that stress them out most of the time.
- Those who feel unable to manage things that stress them out most of the time are more likely to be younger (aged 15-24, 45%), Māori and Pacific Peoples (both 25%), not in a relationship (26%), and working onsite (24%).
- Almost three quarters (70%) have met MATES in Construction on their site. Participants who live in the Auckland region (81%) are more likely to have done so than participants who live outside of the Auckland region (56%). This is likely due to greater presence of MATES in Construction in Auckland and indicates a need for expansion to other regions.
- Approximately one in three (28%) report that they are most afraid of COVID-19.
- Participants who are ‘most afraid of COVID-19’ are more likely to be younger (15-24, 17%) and older (65-74, 17%), Asian (53%) and Pacific Peoples (38%), living in the Auckland region (32%), and working onsite (34%).
- The majority agree that that they can get information about COVID-19 in words that they understand (89%), and that they have good information about COVID-19 (87%).

### 3. RECOMMENDATIONS

Drawing on insights from the environmental scan and the survey responses we make the following recommendations to be spearheaded by MATES:

- Regular measuring and monitoring of mental health and wellbeing in the industry is urgently needed using validated measures to collect quality comparable data.
- A plan for follow up, and if needed, aftercare, of those who have sought help from MATES is urgently needed.
- A Covid specific multi-level campaign to address increased poor mental health in the industry due to Covid should be considered. This could include: a MATES outreach service to check up on those isolating, regular employee wellbeing checks (by employers and/or MATES volunteers), a MATES for young men group, and a series of MATES social connection activities to reduce social isolation.
- We recommend that MATES work with other industry bodies and/or other male dominated industries to set up a COVID-Mental Health Taskforce (or similar), to strategise, plan and advocate for better government support and funding for additional support services to address the remaining recommendations (made at the end of this report).

---

# ENVIRONMENTAL SCAN

## 4. INTRODUCTION

### 4.1. Background

There has been a notable increase in stress and anxiety among workers in the construction industry coinciding with the Delta variant of COVID-19, shifts in alert levels in New Zealand, and the government shift in response (from elimination to suppression). A range of issues will be contributing to the increase in anxiety, depression and frustration and perceived increases in challenging practices on construction sites, such as segregation by vaccination (have and have nots), bullying, and functional impairment. The cluster of issues have by some been attributed causation to what is referred to as “coronaphobia”.

Other jurisdictions have most likely experienced similar issues in relation to COVID-19 and then the Delta variant and so may have made further progress or developed interventions to provide better support for the mental health and wellbeing of the construction sector workforce. It is possible that grey and recent published literature exists that may assist in informing a response in New Zealand.

### 4.2. Aim

*Allen + Clarke* were contracted to:

1. Conduct an environmental scan of academic peer reviewed research papers and a grey literature search on work addressing mental health in construction workers (with a focus on blue collar workers) during the COVID-19 pandemic, prioritising literature from similar jurisdictions (New Zealand, Australia, United Kingdom, United States, and Canada).
2. Design a suite of survey question options for an industry wellbeing survey.
3. Survey a sample of those working in the construction industry.
4. Triangulate the findings from the environmental scan and survey results to provide advice on evidence-based interventions to promote mental health and wellbeing in construction workers.

## 5. METHODOLOGY

Our environmental scan comprised of an academic search of peer reviewed literature published since the beginning of the COVID-19 pandemic and a scan of relevant websites.

### 5.1. Academic literature search

Academic published research was sourced by searching multiple databases (specifically Scopus, Medline, EMBASE, Psycinfo, Pubmed, Cochrane, and Web of Science) using terms relevant to mental health, wellbeing and interventions to improve these in the construction industry during COVID-19 (see Appendix 1). After removing duplicates and scanning the title and abstracts retrieved from the searches, we found 35 potentially relevant publications (Appendix 2). From these we screened to find work focused on “COVID” and ‘construction’, leaving 12 potentially relevant papers. Full reading of these results further reduced the relevant papers to six (see Appendix 3). Useful findings from these papers were extracted and are summarised in Section 5.

### 5.2. Grey literature search

For the grey literature scan we canvassed websites of like kind jurisdiction health and safety bodies, non-governmental programmes/organisations who provide interventions in the construction sector, industry publications and commentaries, and occupational health blogs which address the implications of COVID-19. Our search focused on any material examining wellbeing in the construction industry during the pandemic and interventions designed and implemented around mental health focusing on content most relevant for blue collar workers in the industry.

We conducted customised Google searches based on a combination of keywords (construction, building, tradie, workplace, employment) AND (mental health, psychological, psychosocial, anxiety, stress) AND (covid, coronavirus).

We also conducted targeted website searches (e.g., health and safety at work organisations, relevant unions, relevant

---

training organisations, regulatory health and safety organisations, and mental health organisations). These were focused on New Zealand (NZ), Australia, the United Kingdom (UK), the United States (US), and Canada – at a national level. International websites were also checked. Our search focused on any interventions that have been designed and implemented.

## **6. KEY FINDINGS**

### **6.1. Academic literature search results**

From the academic literature search we found six potentially relevant papers all published in 2021 (see Appendix 2). Of these, three were literature reviews (international), one reported survey results (Australia), one reported on an analysis of complaints data (US), and one reported on an interview-based study (US).

At the high level, it was noted that in general heavy workloads, home situations, and concerns about job stability often contribute to anxiety, depression, and even suicide – all of which are likely to be exacerbated during the COVID-19 pandemic. Many authors pointed out that employers in most countries are obliged to ensure psychologically safe working conditions. Most of the literature noted roles for the employer, managers, EAP programmes, unions and governments to mitigate the potential adverse mental health impacts of COVID-19 on construction workers.

#### ***The reviews***

The first review noted the following as challenges to mental wellbeing in the construction industry: social isolation (due to teleworking), stress and burnout, responsibility for personal and family needs when working, learning various communication tools, overcoming technical difficulties, feelings of not contributing enough to work, and adjusting to new work schedules. However, the paper did not explore interventions to improve mental health.

The second review, with a social determinants approach to mental health and suicide prevention in the sector, made suggestions regarding what government, unions and employers could do to help improve mental health through better provision of Employee Assistance Programmes (EAP), income and housing support, and retraining and redundancy support. The review highlighted the need for mental health interventions (especially for blue collar and migrant workers) and suggests telehealth (because it removes some of the stigma around help-seeking), and workplace-based suicide prevention (because it leads to better mental health literacy and help seeking/offering behaviours).

The third review highlighted the importance of investment in mental health services and regular counselling sessions for workers, as well as industry-based suicide prevention. Strategies useful at the government level were noted and included setting up a COVID-19 taskforce for the industry, business subsidies to reduce risk of default, and programmes to reduce unemployment.

All three reviews noted the differential impact on the two most vulnerable groups in the construction sector: migrant workers and lower skilled occupations within construction.

#### ***Survey, interview and complaints-based research***

Some sectors within the construction industry have been able to work from home during the pandemic. Key findings from the survey-based research (n=548) – although focused on the managerial sector of the industry and exploring their shift to working from home – identified the associated risks and benefits to mental health. The survey covered important domains of mental health and wellbeing with questions on sleep, diet, exercise, work-life balance, work pressure and engagement, work interface with social and family life, and mental health. The study reported an overall decline in mental wellbeing over the consecutive survey waves. However, this decline in mental health was the same for those working on site and at home. Importantly the findings revealed a significant positive relationship between work–life satisfaction and mental wellbeing (regardless of work location).

The study based on complaints data found the major mental health related concerns of US construction workers included worry about: virus exposure at work, lack of tools and equipment, conflicts at home, not enough time to relax, guilt about not contributing enough to work or being on the front line, employment uncertainty and adapting to a different workspace or schedule, with worry about family and finances as aggravating factors. Interventions recommended included: anticipating and monitoring behaviour changes in employees, avoiding discrimination, building resilience and capacity to manage job stress, decreasing workloads/extending deadlines, hosting of Q&A sessions with managers regularly to discuss concerns,

---

more flexible sick leave, guidelines on making workplaces healthy, managing fatigue, the provision of resources for dealing with stress and anxiety, and talking openly and honestly about the effects of the pandemic on the business.

The interview-based US study of project managers and engineers also identified mental health challenges including worry about being laid off (especially with family and housing costs), workers unable to work due to childcare unavailability or caretaking responsibilities for sick family, and anxiety about exposure to the virus in the workplace. Social distancing requirements at work also reduced social interactions among workers. Proposed solutions included efforts to build comradeship between workers. The authors note that a significant number of the construction workforce could transition to working from home. Problems associated with working from home included software and IT issues, more distractions and home duties, and childcare interfering with work.

## **6.2. Grey literature search results**

From the grey literature we found 302 website/links with information and links to resources dealing with COVID-19 in the construction industry.

We thoroughly screened the links (and to 3 mouse clicks through the related links) and removed duplicates and links/sites with no relevant mental health/COVID-19 related material.

The 119 most relevant results are presented in Appendix 3 (ordered by country). Those shaded in grey (n=67) were considered most relevant, followed by those unshaded (n=52). We have included MATES NZ website/links in these results to illustrate visibility of current MATES NZ Covid related mental health resources.

The majority of relevant sites with resources were from the UK (n=46), followed by Australia (n= 34), the US (n=26), NZ (n=6), and Canada (n=3), with only one global resource. We applied the following coding to the sites/links to describe broadly what they contained:

1. News item/online article/blog
2. Advice/info/promo and links/resources
3. Factsheet/s
4. Links to support services and videos
5. Links to research/report/guidelines/courses
6. Campaign
7. Podcast
8. Mental health month/day
9. Counselling courses
10. Mental health first aid training
11. Extra counselling services
12. Talking toolkits
13. Deployment of trained mental health first aiders onsite.

### ***What we found***

Interventions varied from the simplest – problem identification – by noting concern over the poorer mental health of construction workers during the pandemic, to general advice on how to improve mental health for construction workers, to tailored advice on managing stress, anxiety, job uncertainty, often with links to other organisations – such as Mates-like websites (or their country specific organisations) with or without links to general mental health 0800 helplines and/or construction industry specific 0800 help lines. A key part of problem identification included conducting surveys to provide a snapshot of mental health and wellbeing in the industry/and or ongoing monitoring of wellbeing.

Some sites provided additional links to advice, government or industry support to help address legal, contractual, financial and business challenges, furloughing, and force majeure with links to subsidies and unemployment support.

Advice took a number of formats ranging from the simple bullet list of tips on how to identify signs of stress and how to manage it (often accompanying blogs and online news items), to well-crafted Factsheets and detailed written guidelines for

use by employers and staff.

Webinars, conference links and links to academic reports and publications were also featured on a number of sites. Some construction sector sites reported on their own surveys conducted during the pandemic to document, understand and address stressors faced by construction workers. For example, Ozhelp launched a National Tradie Wellbeing survey in 2021 – although this was not focused solely on the construction sector.

Some sites offered YouTube videos using local construction staff playing out various stressful scenarios occurring in pandemic times and how to manage these, and others promoted mental health days/weeks. We found very few mental health and COVID-19 specific construction industry campaigns, with one exception being a six-week mental health campaign ‘Lighten the load’ launched by Northwestern Melbourne Primary Health Network in Melbourne, Australia.

‘Lighten the load’ targeted construction workers and small businesses (and families of construction workers) suggesting they seek help early, with the slogan ‘The longer you carry stuff around, the heavier it gets’. This is linked to the state-wide Head to Health service provided through the newly established 15 mental health hubs in the region designed to join up primary care and mental health services (all set up and funded by the Australian government to support Victorians during the pandemic). Head to Health services are accessed by calling an 0800 number. They operate on weekdays from 8.30am to 5pm (with a call back option), so are not a mental health crisis service, but rather a triage service for initial assessment and referral to/connection with appropriate low cost or free services delivered through the mental health hubs in the state of Victoria. Their service includes counselling, with face to face and telehealth options. The level of care and referral is informed by the Initial Assessment and Referral (IAR) and the Initial Assessment and Domains tools, to perform intake and inform the level of care required. People with level 1 and 2 needs are connected with existing lower intensity services, level 3 and 4 may receive care at the hubs, either onsite or through telehealth, or other more suitable services and, level 5 will be connected to specialist or acute mental health services, including into emergency care or into an area mental health triage. The mental health hubs are operating now in NSW and other states. See <https://nwmpnhn.org.au/our-work/mental-health/head-to-health/> for more information.

Organisations in many countries that were already dealing with suicide in the construction sector also had tailored advice and interventions to address the potential exacerbating impacts of the pandemic on construction workers’ mental health.

Other less common interventions found were mental health Apps, Podcasts, and ‘Downtools’ events to promote the need to address poor mental health in the industry. Occasionally we found some sites offering funding for mental health first aid courses or training, the provision of extra counselling or EAP services, and talking toolkits. Additionally, we found the current activities and interventions from MATES NZ (Box 1).

#### **Box 1: MATES NZ COVID-19 specific resources**

##### **MATES’ Mental Health Toolbox - 4 resources**

PowerPoint presentation with embedded videos and advice adapted to COVID-19

Three videos: (1) MATES Mental Health Toolbox – ‘Anger’ – video of man reacting to COVID notification, (2) MATES Mental Health Toolbox – ‘Shutdown’ – woman reacting to COVID notification, and (3) MATES Mental Health Toolbox – ‘Stress and anxiety’ – man onsite reacting to COVID notification. All three videos provide tips on how to ask for help and show MATES helpline.

##### **Working during COVID-19 resources**

A series of five fact sheets: self-care guide, working during COVID-19 tips, working during COVID-19 - 5 steps to destress, managing your emotional responses, tips for working from home.

##### **COVID-19 Resources for managers**

Series of three fact sheets: welfare checks onsite, welfare checks for employees that are self-isolating, and how to start a conversation about mental health.

##### **Job loss resources - taking care of yourself after losing you job**

Three resources: brochure (advice with Mates 0800 number and other helplines), fact sheet (going through organisational change- for employers), taking care of yourself after losing you job (34-page report with advice on practical things to do if you lose your job, signs of distress, etc).

### Elsewhere on the MATES website

Guidance on applying for wage subsidy (links to instructions for applying for government COVID-19 Wage Subsidy (August 2021 payments)).

Two further fact sheets: Contact type definitions – what it means and what you need to do for three types of Covid contacts (close contact, secondary contact, casual contact)

FACT SHEET: Covid-10 Contact Classification Process.

0800 help line: Need help now: Call 0800 111 315.

## INDUSTRY WELLBEING SURVEY

### 7. METHODOLOGY

The Industry Wellbeing Survey was conducted from 15 December 2021 to 17 January 2022. The questionnaire of the survey has been co-designed by Allen and Clarke and the MATES NZ.

The online survey was pre-tested to ensure that the questions were appropriate and flowed well, effective, and easy to understand. After this process, some modifications were made to the questionnaire. The pre-test also estimated the duration of taking the online survey was approximately 10 minutes.

The Industry Wellbeing Survey's target population was all people working in the construction industry in New Zealand. We used a "census" approach (complete enumeration survey method) wherein everyone who is registered in MATES NZ's database is selected for the study. The MATES NZ's database, which includes most people working in the construction industry, was used as the survey's sampling frame to identify and contact survey participants.

A total of 11,679 email contacts were extracted from MATES database. we found that 43 emails are invalid; 2,639 emails cannot be reached by the online survey platform (email bounced back or opted out issue); another 2,890 email invitations have not been opened by the recipients. In total, 6,107 people received and opened the email invitation with a link to a personal copy of the online survey. A reminder email was sent to those who had not responded approximately one week later. To further boost the final participation rate, three more follow-up emails were sent in subsequent weeks.

We received 1202 valid responses, giving a response rate of 20.0 percent. This included 164 incomplete responses. These were excluded in the analysis as the majority were missing responses to a third of questions in the survey.

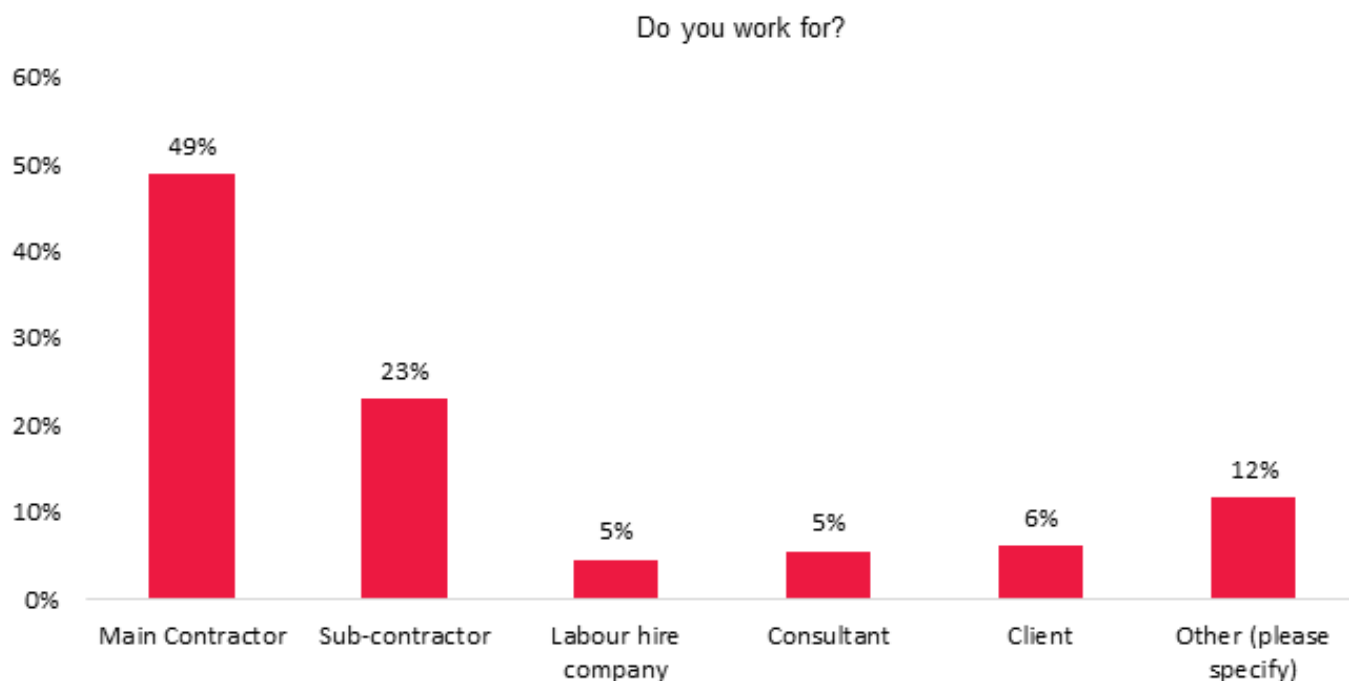
A prize draw for one of five \$200 Prezzy Cards were offered as an incentive of the survey study. At the end of the survey, respondents had the opportunity to enter their contact details which were not used for any other purpose than to contact prize winners.

## 8. WORK CHARACTERISTICS

### 8.1. Your career

Who do you work for?

Just under three in four participants (72%) work for either a main contractor (49%) or sub-contractor (23%).

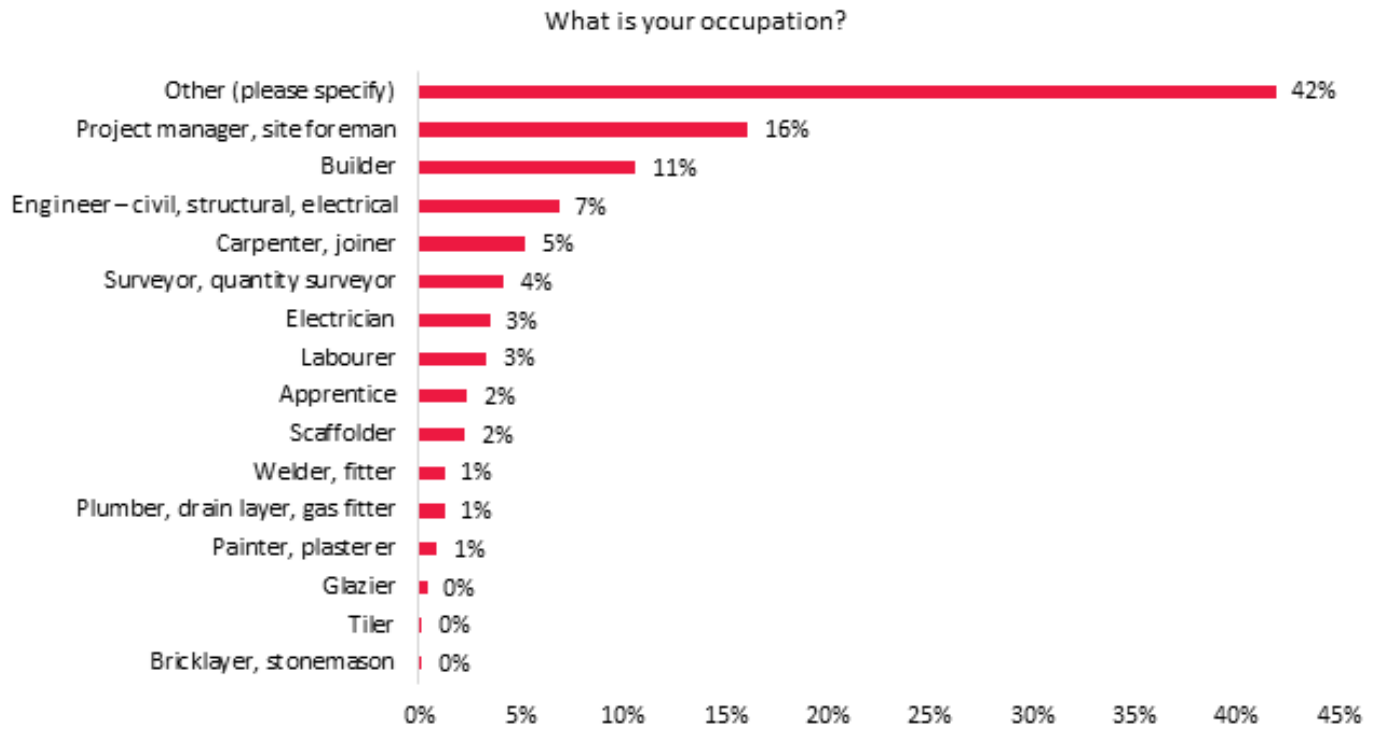


#### ***What is your occupation?***

The five most common occupations are:

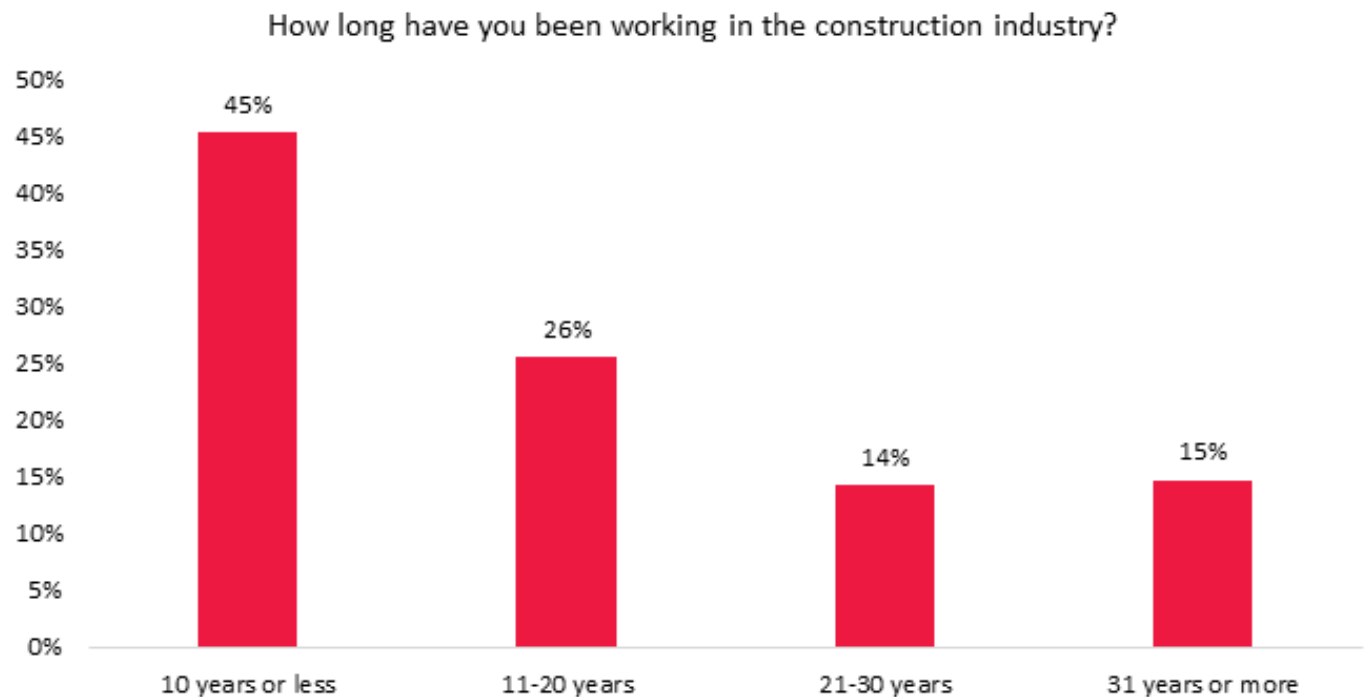
- Project manager, site foreman (16%)
- Builder (11%)
- Engineer – civil, structural, electrical (7%)
- Carpenter, joiner (5%)
- Surveyor, quantity surveyor (4%)

The three least common occupations (selected by less than 1% of the sample) are: bricklayer/stonemason, tiler, and glazier. Just under half (42%) selected 'other', this large proportion indicates the need for a more comprehensive list of occupations. Examples of occupations specified under 'other' include crane operator, director, health and safety advisor, manager, operator, steel fixer, and traffic control.



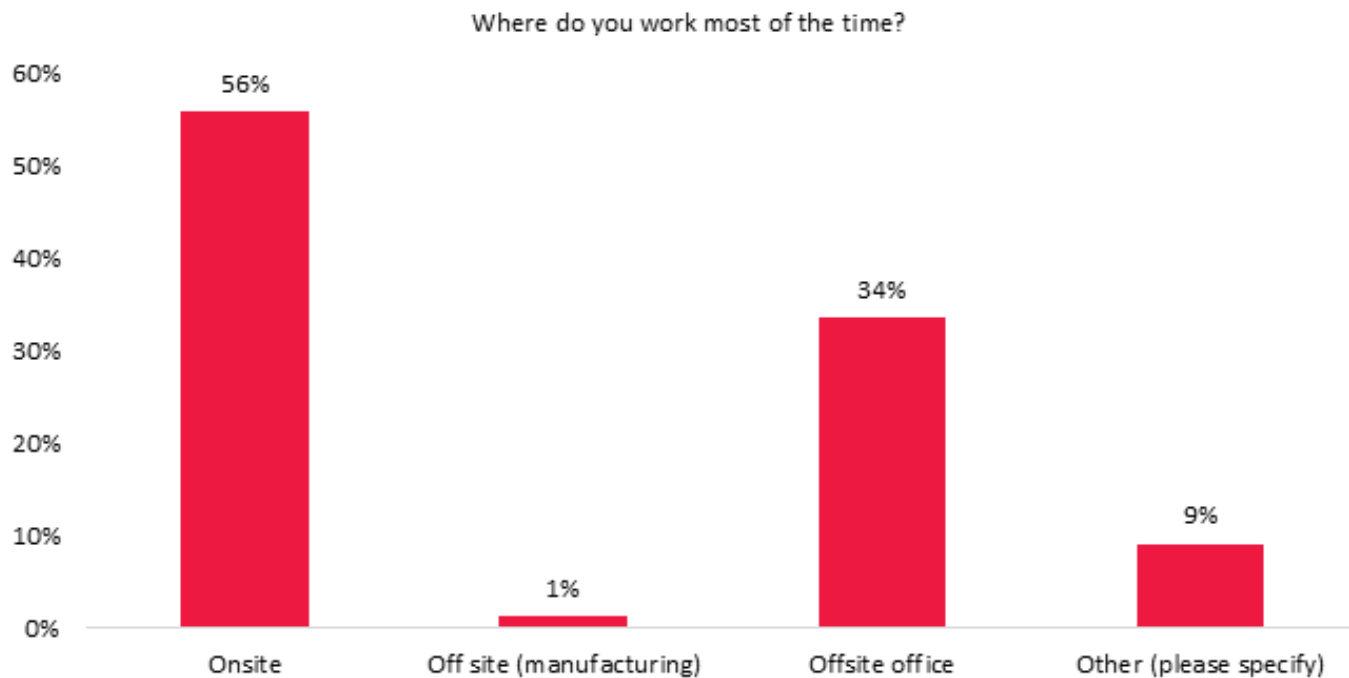
***How long have you been working in the construction industry?***

Almost three quarters of respondents (71%) have been working in the construction industry for 20 years or less. Just over a quarter (29%) have been working in the construction industry for 21 years or more.



### ***Where do you work most of the time?***

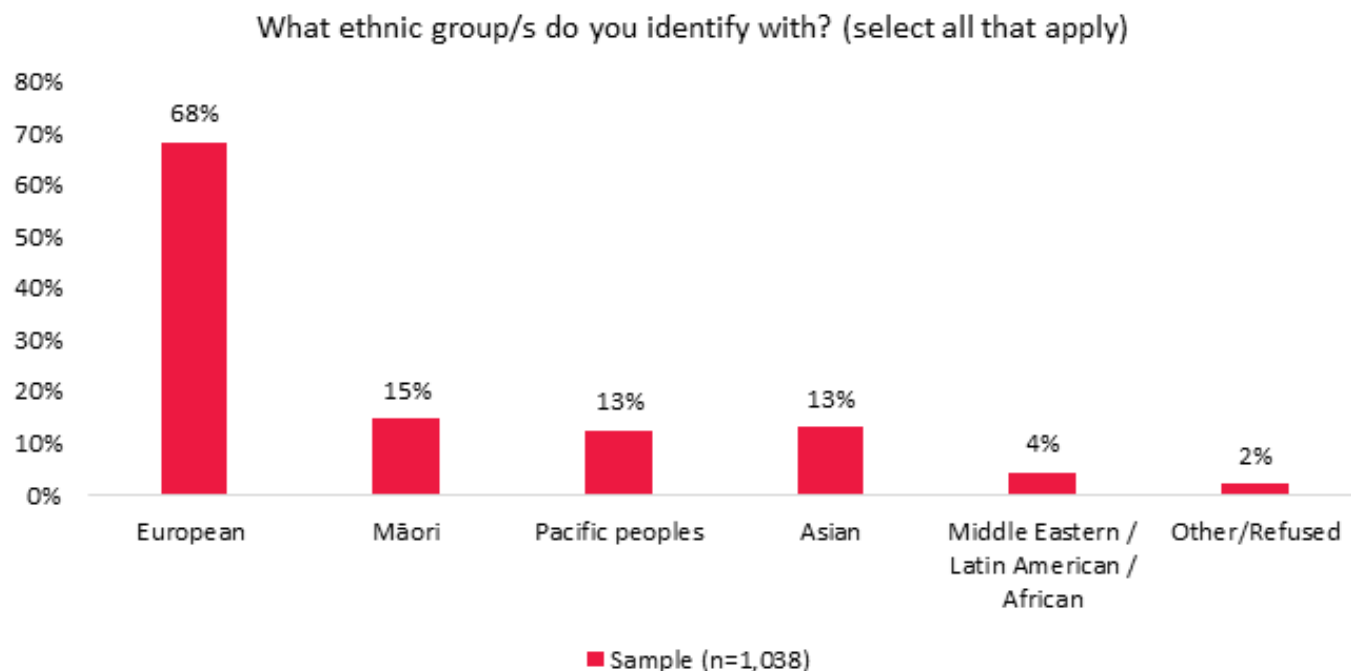
Just over half of respondents (56%) work onsite, with the remainder working offsite either in an office (34%), in manufacturing (1%), or elsewhere ('other', 9%).



## 9. DEMOGRAPHICS

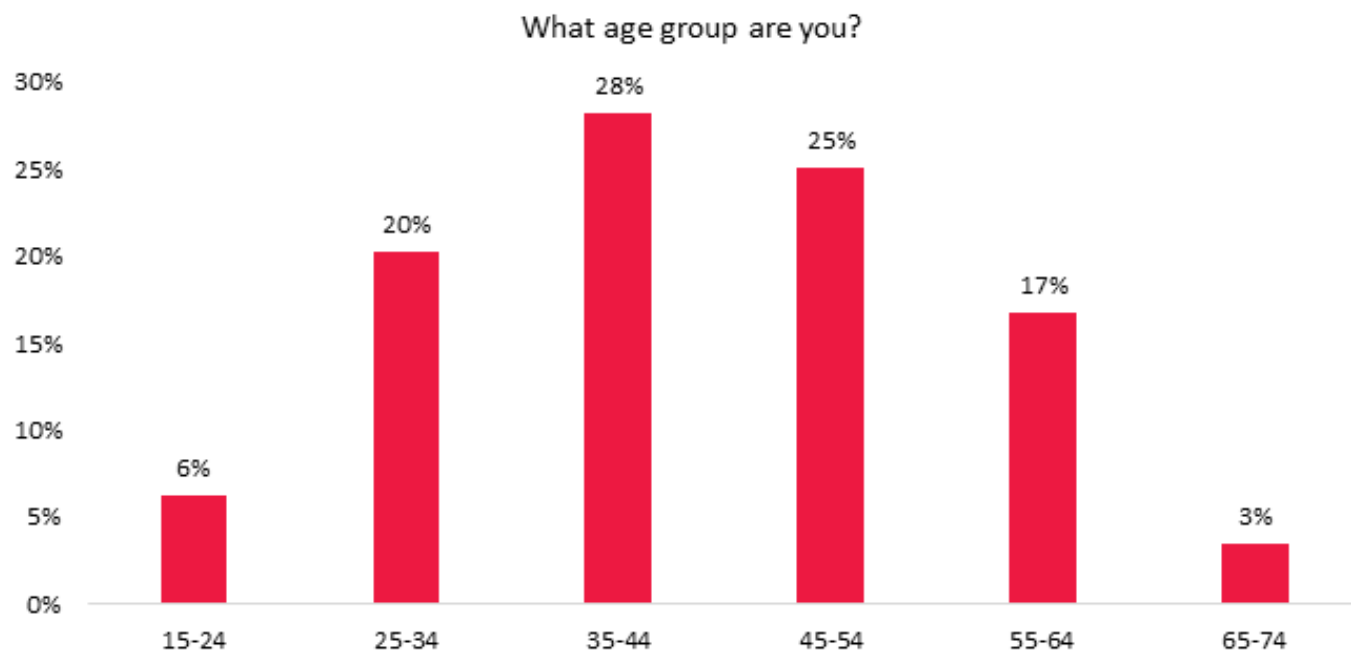
### 9.1. Ethnic groups<sup>1</sup>

At just over two thirds (68%) of participants identify as European. 15% identify as Māori, and 13% identify as each of Pacific Peoples and Asian. The smallest proportions identify as Middle Eastern/Latin American/African (4%), or other/refused (2%).



### 9.2. Age groups

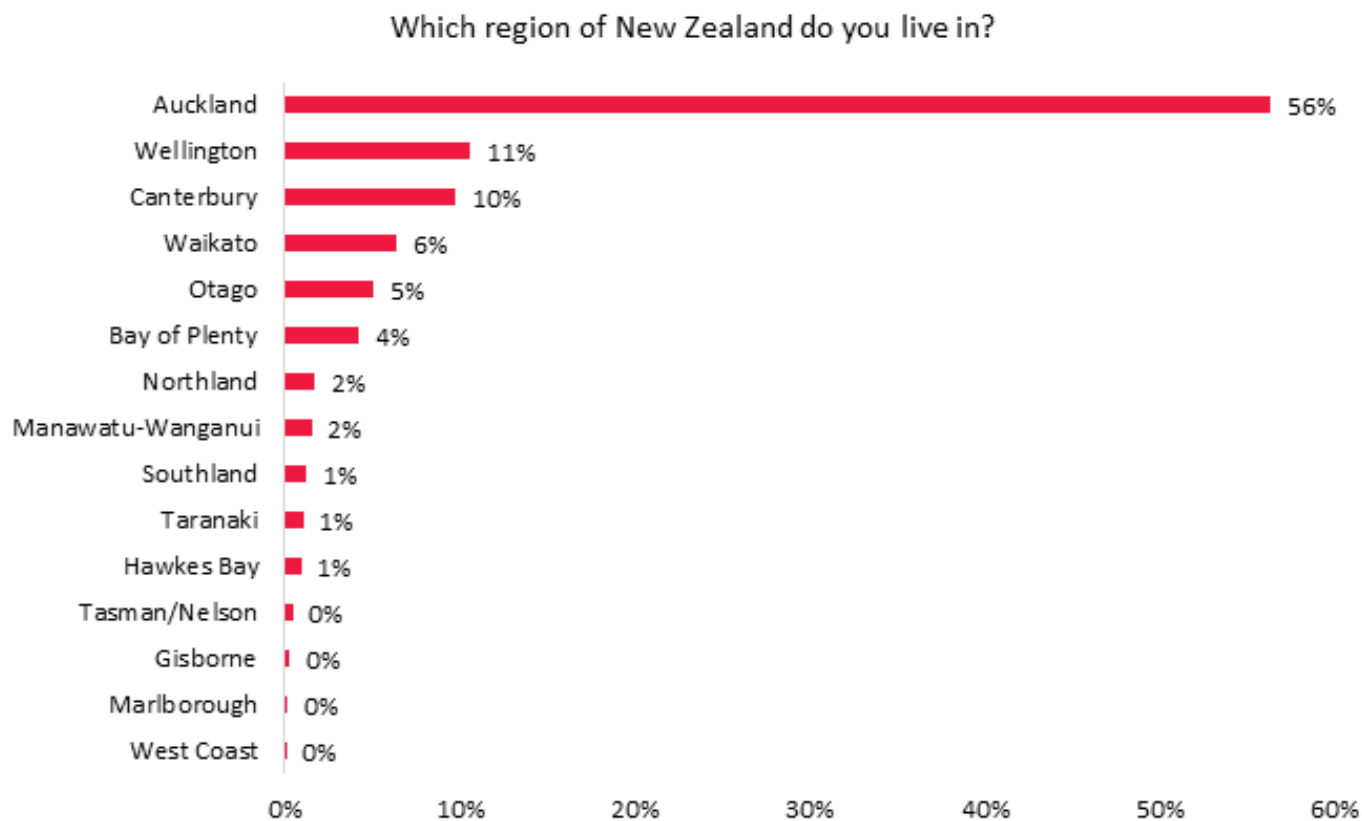
Just over half of participants are aged 44 or younger (55%), whilst just under half are aged 45 or older (45%).



<sup>1</sup>Total-response ethnicity involves each respondent being allocated to all ethnic groups that they have identified with. A respondent may fit into more than one ethnicity group. For example, a person who identifies as both Chinese and Māori will appear in both the Māori group and the Asian group. Consequently, the Māori and Asian groups should not be directly compared; Māori can only be compared with the non-Māori group and Asian can only be compared with non-Asian.

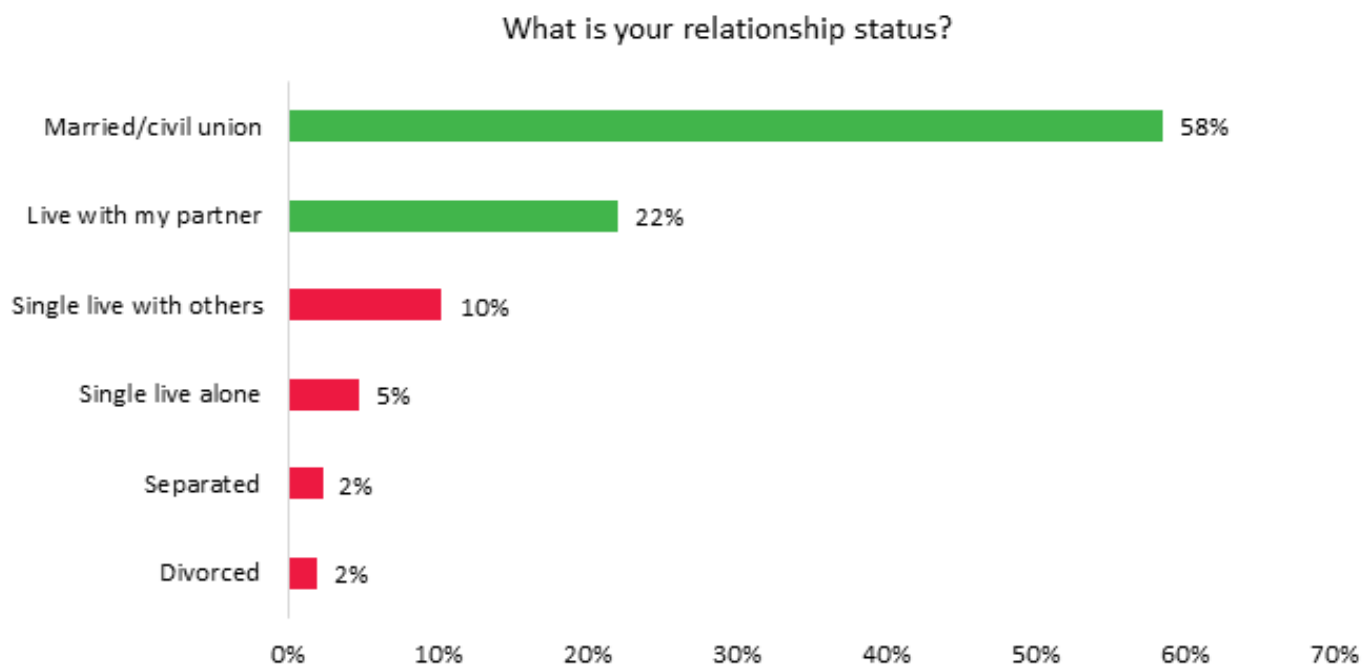
### 9.3. Region

Over half of respondents (56%) live in the Auckland region, with the next greatest number of participants living in Wellington (11%) and Canterbury (10%). The spread of responses to this question is likely to reflect the population size of each region, as well as the distribution of people who have engaged with MATES in Construction training and suicide prevention activities.



### 9.4. Relationship status

The majority of respondents (81%) have partners ('married/civil union' or 'live with my partner'). Whilst one in five (19%) are single ('divorced', 'separated', 'single live alone', or 'single live with others').



## 10. STRESS FACTORS

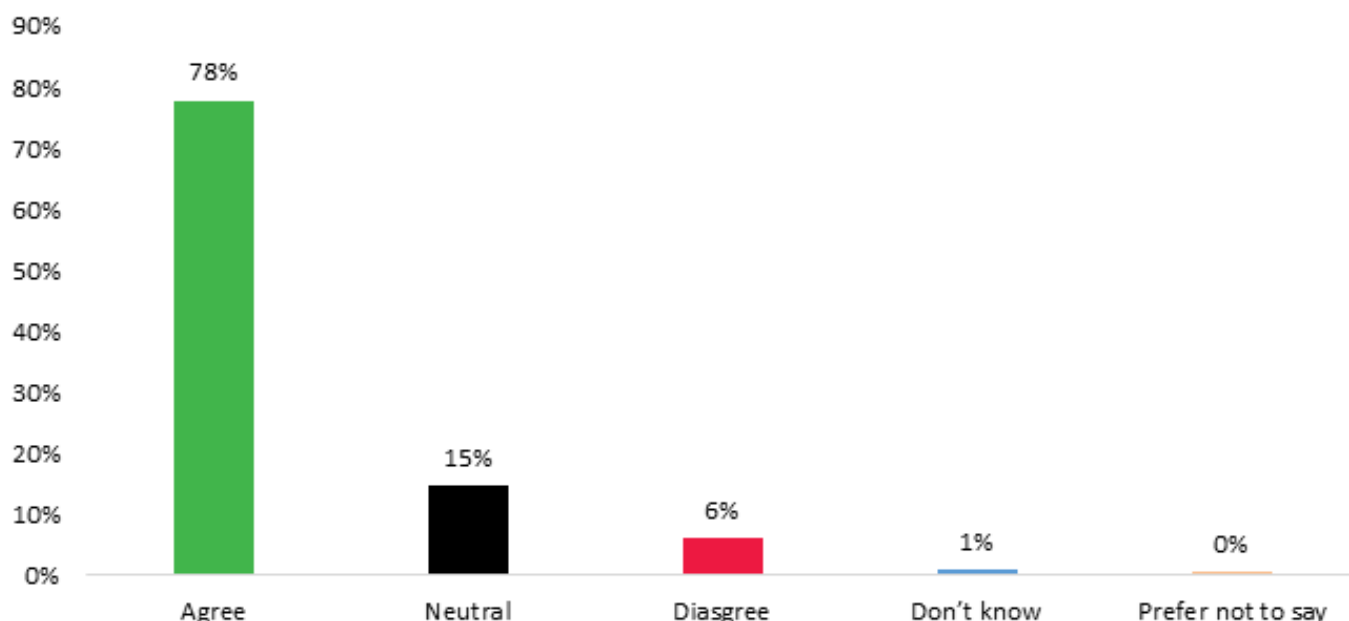
### 10.1. Stressors

#### *I am able to manage things that stress me out most of the time.*

Over three quarters of respondents (78%) agree or strongly agree that they are able to manage things that stress them out most of the time. While 15% are neutral and 6% disagree ('disagree' or 'strongly disagree').

The 22% who answered 'neither agree nor disagree', 'disagree', 'strongly disagree', and 'don't know' are more likely to be younger (aged 15-24, 45%), Māori and Pacific Peoples (both 25%), not in a relationship (26%), and working onsite (24%).

#### *I am able to manage things that stress me out most of the time.*



**Note:** Agree = 'Strongly Agree' + 'Agree', Disagree = 'Strongly Disagree' + 'Disagree'

Te Hīringa Hauora/Health Promotion Agency (HPA) conducted research on the Impact of COVID-19<sup>2</sup> in June 2020 (post-lockdown, Alert Level 1). When compared to the Industry Wellbeing Survey, the Impact of COVID-19 survey found that slightly less participants (69%) agreed ('agree' or 'strongly agree') that they can cope with everyday stresses. Accordingly, the Impact of COVID-19 survey found that slightly more participants were neutral (21%, 'neither agree nor disagree') and disagreed (10%, 'disagree' or 'strongly disagree').

**Note:** The Industry Wellbeing Survey worded the question as 'How do you feel about the following statement: I am able to manage things that stress me out most of the time' whereas the Impact of COVID-19 survey worded the question as 'How much do you agree or disagree with the following statement: I am able to cope with everyday stresses'. Additionally, the Industry Wellbeing Survey added the response options 'Don't know' and 'Prefer not to say'.

#### *In the last 4 months, have any of the following issues been a concern for you?*

8% report that they did not have any issues of concern.

Out of the people who report at least one issue, the five most common issues of concern are:

- Sleep (38%)
- Physical health (37%)
- Time for self-care (32%)
- Mental health (29%)

<sup>2</sup><https://www.hpa.org.nz/research-library/research-publications/post-lockdown-survey-the-impact-on-health-risk-behaviours>

- Relationships e.g., family/whānau members, partner (29%)

**Note:** participants could select all issues that apply.

Overall, Sleep is of slightly greater concern for participants who are younger (aged 15-24, 56%), Māori (42%), and not in a relationship (43%).

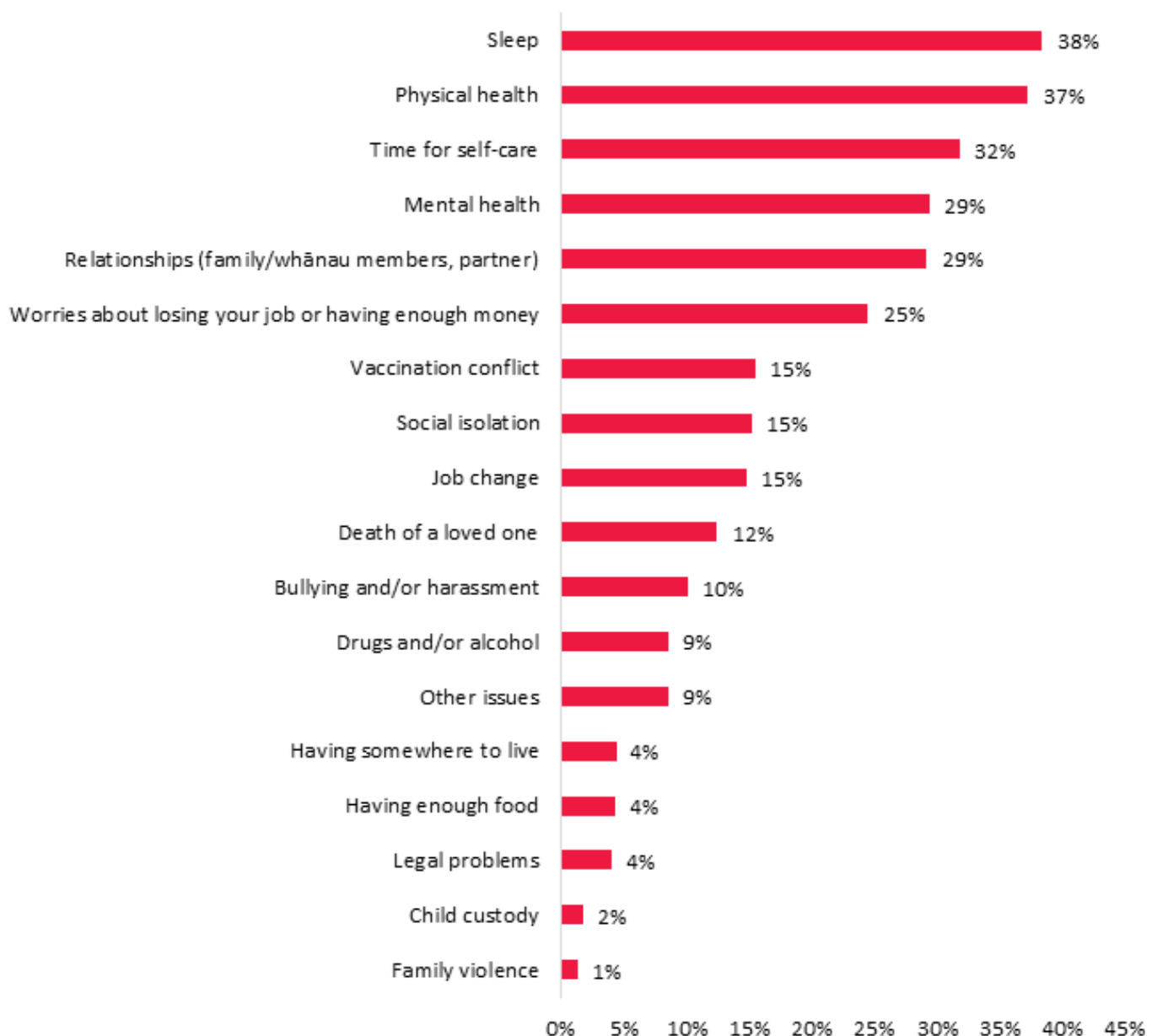
Physical health is of slightly greater concern for participants who are older (aged 55-64, 42%) and those aged 25-34 (40%), and Māori (45%).

Time for self-care is of slightly greater concern for participants who are younger (aged 15-24, 45%), and Māori (35%) and Pacific Peoples (36%).

Mental health is of slightly greater concern for participants who are younger (aged 15-24, 48%, and aged 25-34, 43%), Māori (37%), and not in a relationship (42%).

Relationships with family or whānau are of slightly greater concern for participants who are younger (aged 15-24, 40%, and aged 25-34, 40%), Māori (40%), and not in a relationship (38%).

**In the last 4 months, have any of the following issues been a concern for you?  
(select all that apply)**

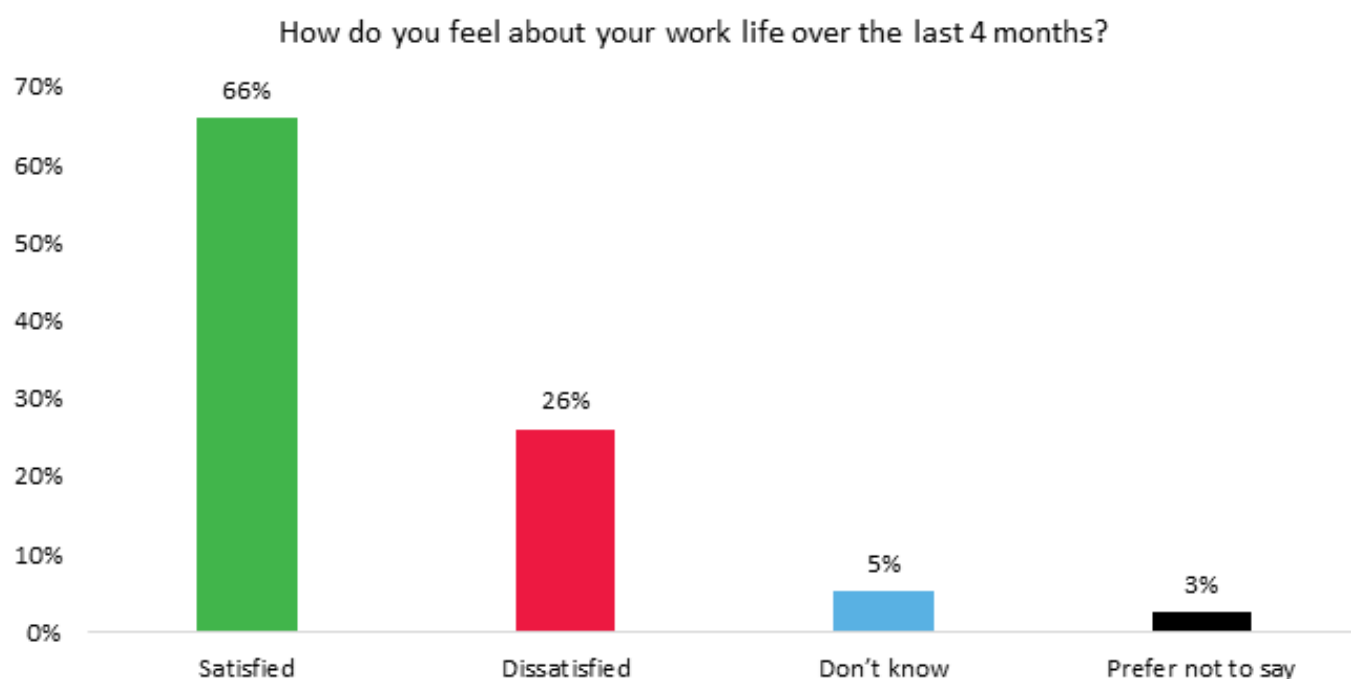


The National Tradie Wellbeing Survey conducted in October 2021 by the OzHelp Foundation<sup>3</sup> reported the following top five stressors: work pressures (62%), family and relationship pressures (44%), financial pressures (41%), mental health (38%), and COVID-19 restrictions (29%). The Industry Wellbeing Survey and the National Tradie Wellbeing Survey were conducted 2-3 months apart during the COVID-19 pandemic and – despite using different response options – found that mental health and relationships with family/whānau were among the highest stressors for participants.

## 10.2. Work life

### *How do you feel about your work life over the last 4 months?*

Two in three (66%) respondents report feeling satisfied ('satisfied' or 'very satisfied') with their work life over the last 4 months. One quarter (26%) report feeling dissatisfied ('dissatisfied' or 'very dissatisfied').



**Note:** Satisfied = 'Very Satisfied' + 'Satisfied', Dissatisfied = 'Very Dissatisfied' + 'Dissatisfied'

### *In the last 4 months, have any of the following issues been a concern for you in the workplace?*

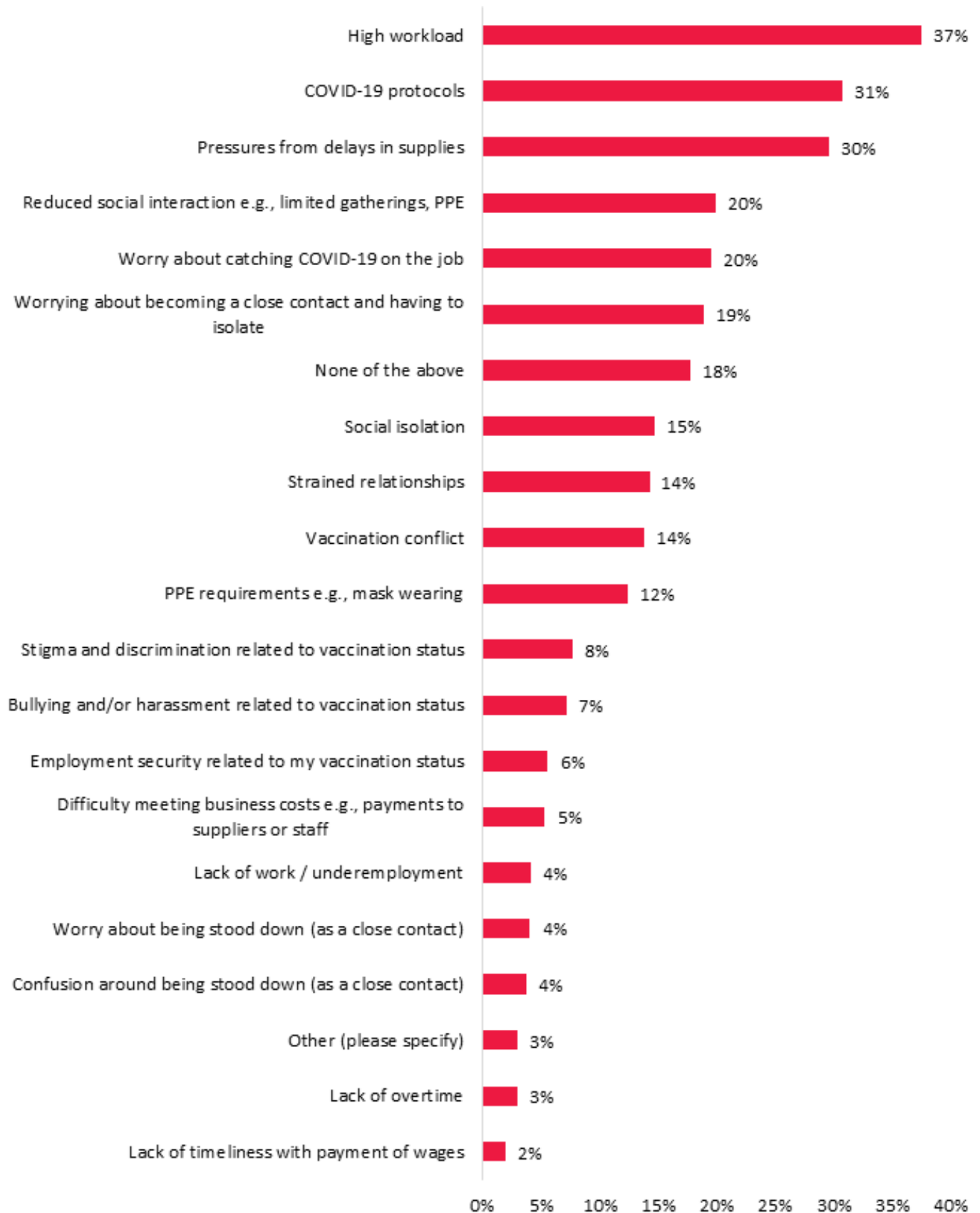
The five most common issues of concern are:

- High workload (37%)
- COVID-19 protocols (31%)
- Pressures from delays (30%)
- Reduced social interaction e.g., limited gatherings, PPE (20%)
- Worry about catching COVID-19 on the job (20%)

It is expected that these five concerns will remain – and potentially intensify – with the impending Omicron outbreak.

<sup>3</sup>OzHelp Foundation. National Tradie Wellbeing Survey Results. Canberra. January 2022.

In the last 4 months, have any of the following issues been a concern for you in the workplace? (select all that apply)

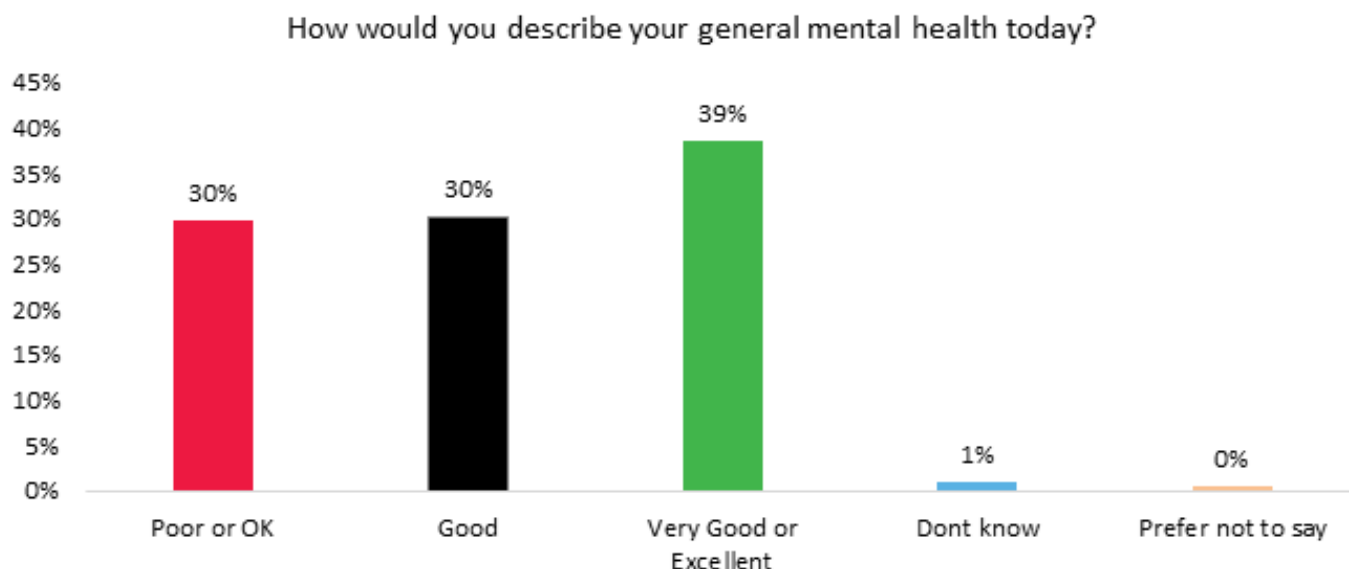


## 11. GENERAL MENTAL HEALTH

### 11.1. Overall mental health

*How would you describe your general mental health today?*

Just over two thirds of respondents (69%) described their general mental health as good or better ('good', 'very good', or 'excellent') at the time of their survey response. However, the remaining third described their general mental health as either OK (24%) or poor (6%).



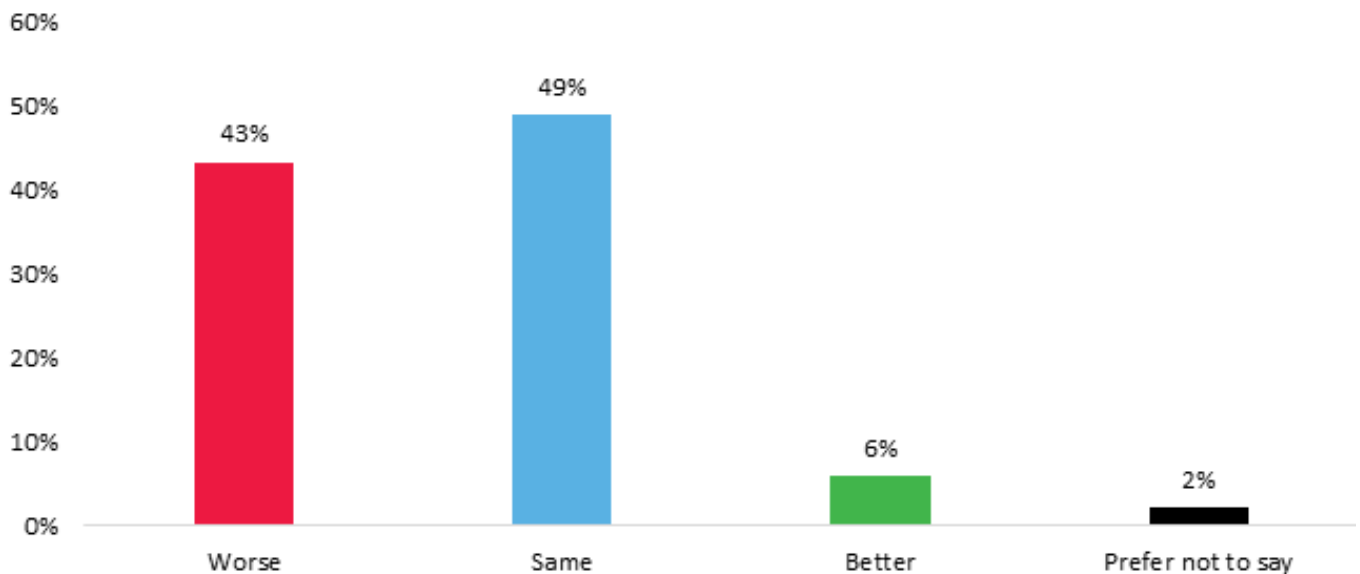
### 11.2. Change in mental health

***Since COVID-19 arrived in New Zealand, how is your mental health compared to usual?***

Half of respondents (49%) report that since COVID-19 arrived in New Zealand their mental health remains the same as usual. However, two in five (43%) report that their mental health is worse than usual ('much worse than usual' or 'worse than usual'). A very small group (6%) report that their mental health is better than usual ('much better than usual' or 'better than usual').

These figures are concerning and indicate a need for ongoing monitoring. Monitoring would likely be invaluable during the impending Omicron outbreak.

### Since COVID-19 arrived in New Zealand, how is your mental health compared to usual?



**Note:** Worse = 'Much worse than usual' + 'Worse than usual', Better = 'Much better than usual' + 'Better than usual'

When comparing the results of the Industry Wellbeing Survey with that of the COVID-19 Mental Health and Wellbeing Survey conducted by Otago University<sup>4</sup>, it is apparent that the two studies found a similar proportion who reported that their mental health was the same as usual. However, the Industry Wellbeing Survey found a greater proportion who reported worse mental health than usual and a smaller proportion who reported better mental health than usual.

Specifically, in a sample of those with a past history of mental illness, the COVID-19 Mental Health and Wellbeing Survey<sup>5</sup> found that just under half (46%) reported that their mental health was the same as usual, one in three (36%) reported that their mental health was worse than usual, and one in six (18%) reported that their mental health was better than usual.

These results show that participants of the Industry Wellbeing Survey reported somewhat more negative change in their mental health than participants of the COVID-19 Mental Health and Wellbeing Survey. Perhaps this is because the COVID-19 Mental Health and Wellbeing Survey figures came from a sample with a past history of mental illness and therefore mental health and fluctuations in mental health are a more familiar experience for this sample. Additionally, the COVID-19 Mental Health and Wellbeing Survey was conducted earlier in the COVID-19 pandemic than the Industry Wellbeing Survey, and this could have influenced the two sets of findings.

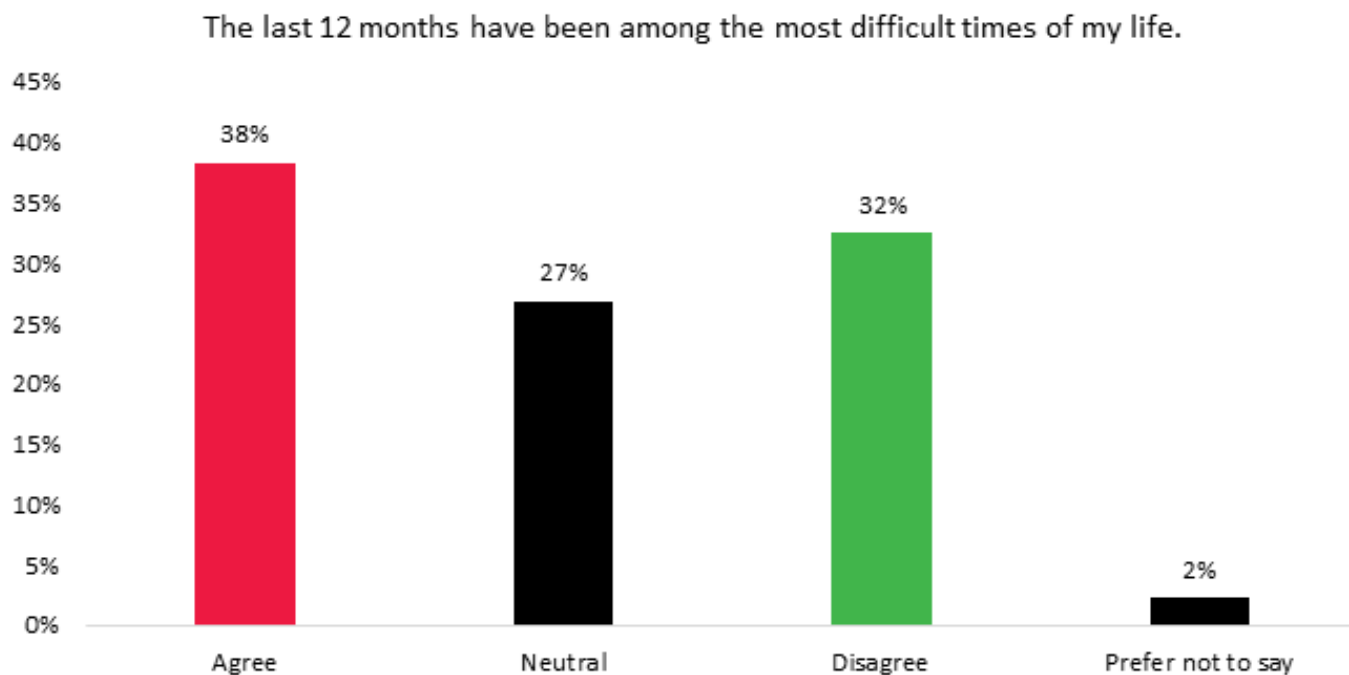
<sup>4</sup>Every-Palmer S, Jenkins M, Gendall P, Hoek J, Beaglehole B, Bell C, et al. (2020) Psychological distress, anxiety, family violence, suicidality, and wellbeing in New Zealand during the COVID-19 lockdown: A cross-sectional study. PLoS ONE 15(11): e0241658. <https://doi.org/10.1371/journal.pone.0241658>

<sup>5</sup>ibid

### ***The last 12 months have been among the most difficult times of my life.***

Just over a third (38%) agree ('agree' or 'strongly agree') that the last 12 months have been among the most difficult times of their lives.

Another third (27%) neither agree nor disagree, and the remaining third (32%) disagree ('disagree' or 'strongly disagree').



**Note:** Agree = 'Strongly Agree' + 'Agree', Disagree = 'Strongly Disagree' + 'Disagree'

## **12. MENTAL HEALTH CONDITIONS**

### **12.1. Anxiety and depression**

The **most** common three problems experienced at least weekly ('nearly everyday' or 'weekly') are:

- feeling tired or having little energy (42%)
- trouble falling or staying asleep, or sleeping too much (36%)
- poor appetite or overeating (30%)
- 

The **least** common two problems experienced at least weekly ('nearly everyday' or 'weekly') are:

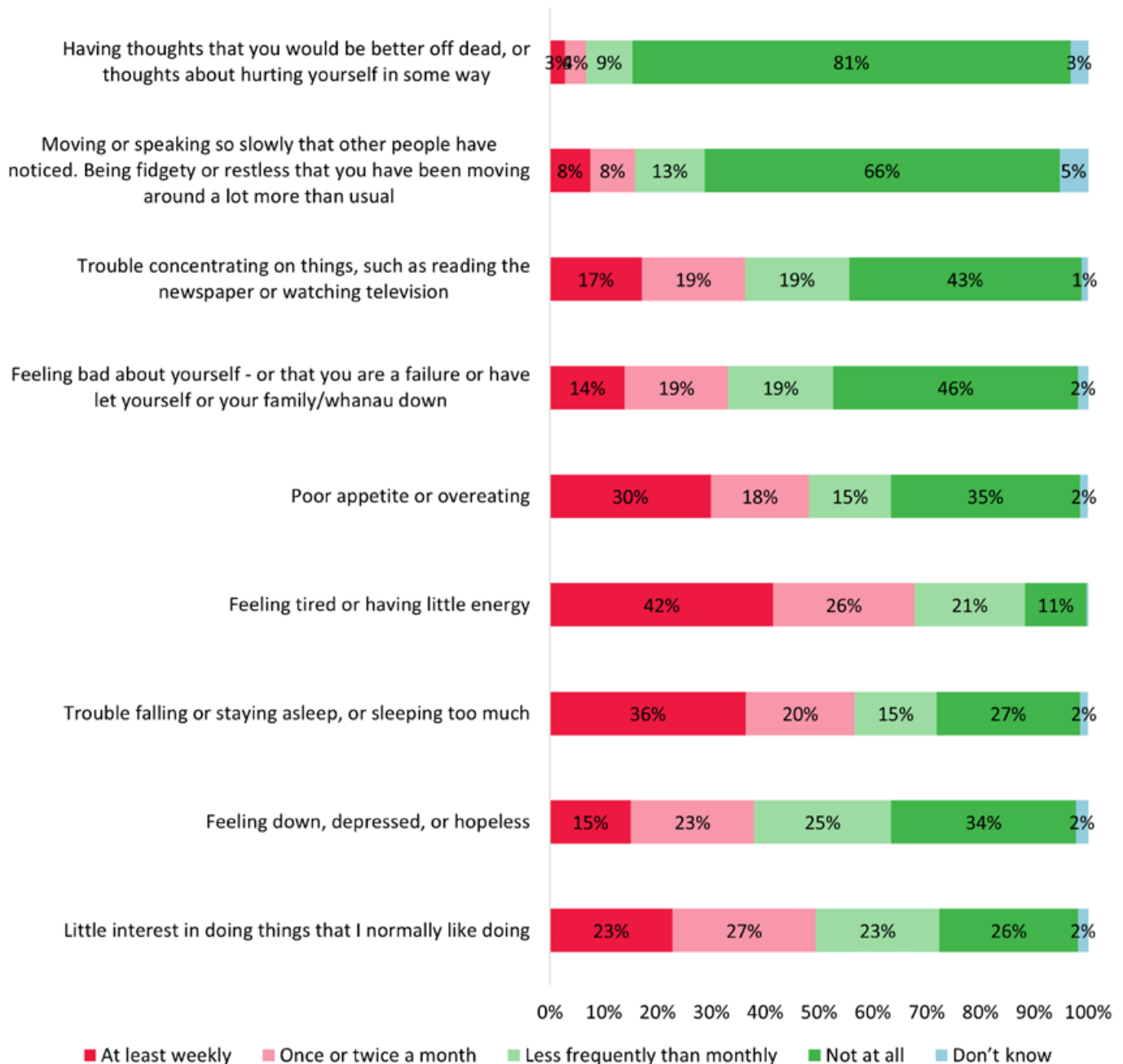
- moving or speaking so slowly that other people have noticed. Being fidgety or restless that you have been moving around a lot more than usual (8%)
- having thoughts that you would be better off dead, or thoughts about hurting yourself in some way (3%)

Feeling tired or having little energy is reported more frequently by participants who are younger (aged 15-24, 63%) and not in a relationship (47%). Feeling tired or having little energy is reported less frequently by participants who are Asian (23%).

Trouble falling asleep or staying asleep, or sleeping too much is reported more frequently by participants who are younger (aged 15-24, 58%), Māori (40%), European (40%), and not in a relationship (48%).

Poor appetite or overeating is reported more frequently by participants who are younger (aged 15-24, 45%, and 25-34, 35%), Māori (36%), Pacific Peoples (35%), and not in a relationship (39%).

In the last 4 months, how often have you experienced the following problems?



**Note:** At least weekly = 'Nearly everyday' + 'Weekly', Once or twice a month = 'Every other week' + 'Monthly'

**Note:** The Industry Wellbeing Survey worded the question as 'In the last 4 months, how often have you experienced the following problems?' whereas the standardised Patient Health Questionnaire 9 (PHQ-9) words the question as 'In the last 2 weeks, how often have you been bothered by the following problems?' Additionally, the Industry Wellbeing Survey used the response options 'Nearly everyday', 'Weekly', 'Every other week', 'Monthly', 'Less frequently than monthly', 'Not at all', and 'Don't know', whilst the PHQ-9 uses the response options 'Nearly every day', 'More than half the days', 'Several days', and 'Not at all'.

---

Whilst the Industry Wellbeing Survey used a modified version of the Patient Health Questionnaire 9 (PHQ-9) and the COVID-19 Mental Health and Wellbeing Survey<sup>6</sup> used the Kessler Psychological Distress Scale (K10), both studies found that similar groups of people are more (or less) likely to report symptoms of anxiety and depression. The more vulnerable groups of people are those who are younger (aged 18-24) and those living alone or not in a relationship. Both studies also found that those of Asian ethnicity reported better outcomes than those of other ethnicities.

Specifically, the COVID-19 Health and Wellbeing Survey<sup>7</sup> found that overall, just under one third (30%) of participants reported moderate to severe psychological distress. This study also found that almost half (47%) of young adults aged 18-24 reported high psychological distress, and that prevalence of distress decreased with age such that only one in ten adults aged 65 and older reported high psychological distress. Additionally, this study found that females and those who lived alone reported higher rates of psychological distress, whereas those of Asian ethnicity reported lower rates of psychological distress.

---

<sup>6</sup>Every-Palmer S, Jenkins M, Gendall P, Hoek J, Beaglehole B, Bell C, et al. (2020) Psychological distress, anxiety, family violence, suicidality, and wellbeing in New Zealand during the COVID-19 lockdown: A cross-sectional study. PLoS ONE 15(11): e0241658. <https://doi.org/10.1371/journal.pone.0241658>  
<sup>7</sup>ibid

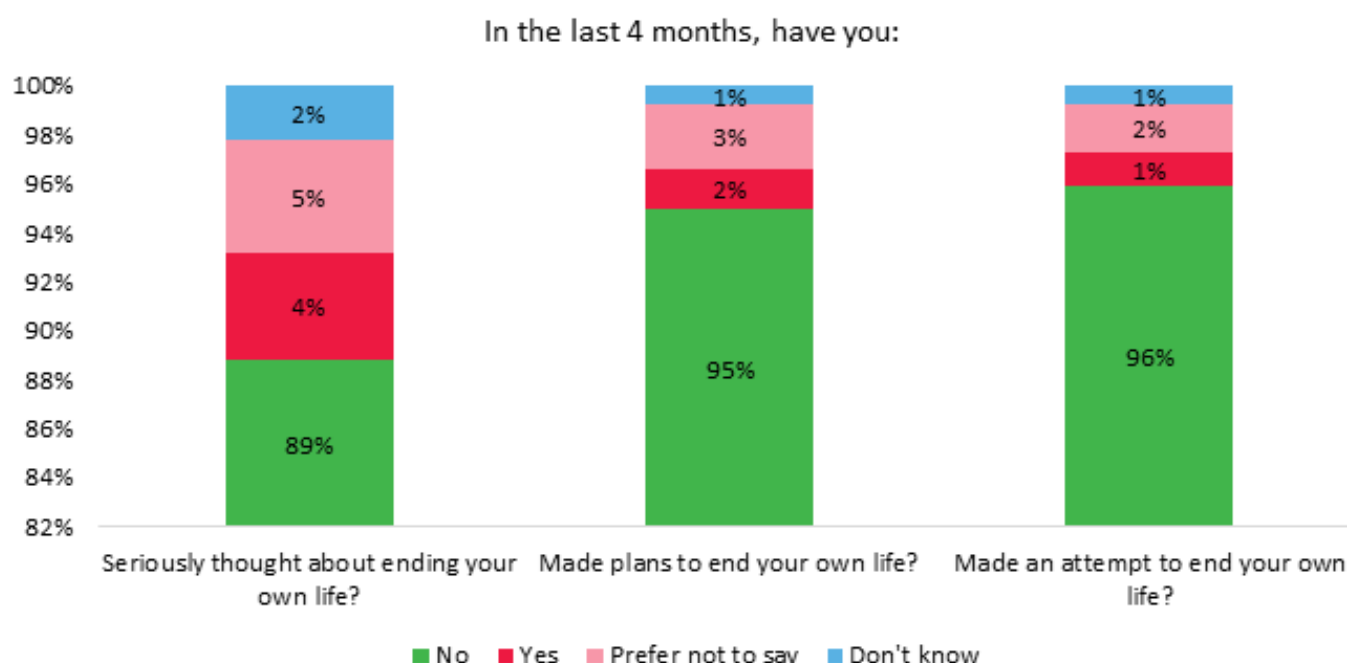
## 12.2. Suicide

The majority (between 89% and 96%) answered ‘no’ to the suicide thoughts, plans, and attempt questions. However, in the last 4 months 4.3% of respondents (n=45) have seriously thought about ending their life, 1.6% (n=17) have made plans to end their life, and 1.4% (n=14) have made an attempt to end their life.

Further, a small proportion (between 2% and 5%) answered ‘prefer not to say’ to each of these questions.

The suicidality figures found by the Industry Wellbeing Survey are slightly higher than that found by Te Rau Hinengaro in 2006, and slightly lower than that found by Otago University’s COVID-19 Mental Health and Wellbeing Survey in 2020. In 2006 Te Rau Hinengaro<sup>8</sup> found that when thinking about the last 12 months, 3.2% reported suicidal ideation, 1.0% reported making plans for suicide, and 0.4% reported a suicide attempt. More recently, in 2020 the COVID-19 Mental Health and Wellbeing Survey<sup>9</sup> found figures double that of Te Rau Hinengaro, specifically, when thinking about the recent lockdown 6.1% reported suicidal ideation, 2.1% reported making plans for suicide, and 2.1% reported a suicide attempt.

**Note:** The Industry Wellbeing Survey worded the question as ‘In the last 4 months, have you [...]?’ whereas the scale used in Te Rau Hinengaro and the COVID-19 Mental Health and Wellbeing Survey worded the question as ‘Recently, have you [...]?’ Additionally, the Industry Wellbeing Survey added the response option ‘Don’t know’.



Suicidal thoughts, plans, and attempts are reported more frequently by Industry Wellbeing Survey participants who are younger (aged 15-24, 18%) and older (65-74, 11%), Māori (8%) and Pacific Peoples (8%), not in a relationship (9%), and who have worked in the construction industry for 10 years or less (6%).

Similarly, the COVID-19 Mental Health and Wellbeing Survey<sup>10</sup> found that suicidality was highest in participants aged 18-34. Other demographic groups showing relatively higher suicidality were females, those with lower qualifications, lower household income, those living in urban areas, more deprived areas, and Māori and Pacific Peoples.

Further research investigating suicide prevalence (not suicidality) in the construction industry specifically – not during the COVID-19 pandemic – reported similar vulnerable groups of people. In 2021 Jenkins and Atkinson<sup>11</sup> examined suicide prevalence in the construction industry and found that males aged 20-24 should be prioritised for prevention measures. Other demographic groups showing relatively higher prevalence of suicide were those aged 45-49, Māori, lower socio-

<sup>8</sup>MA Oakley Browne, JE Wells, KM Scott (eds). 2006. Te Rau Hinengaro: The New Zealand Mental Health Survey. Wellington: Ministry of Health.

<sup>9</sup>Every-Palmer S, Jenkins M, Gendall P, Hoek J, Beaglehole B, Bell C, et al. (2020) Psychological distress, anxiety, family violence, suicidality, and wellbeing in New Zealand during the COVID-19 lockdown: A cross-sectional study. PLoS ONE 15(11): e0241658. <https://doi.org/10.1371/journal.pone.0241658>

<sup>10</sup>ibid

<sup>11</sup>Jenkin G, and Atkinson J, 2021. Construction Industry Suicides: numbers, characteristics and rates: report prepared for MATES in Construction NZ. Suicide and Mental Health Research Group, University of Otago Wellington, Wellington.

---

economic status, and some specific industry trades (builder's labourer, technician and trades workers, painting trades workers, carpenters, electricians, carpenters and joiners, plumbers).

Of the 45 participants who have seriously thought about ending their own life within the last 4 months, 29% describe their mental health on the day of completing the survey as 'poor', 49% say 'OK', 13% say 'good', and 8% say 'very good'.

Of the 17 participants who have made plans to end their own life within the last 4 months, 35% describe their mental health on the day of completing the survey as 'poor', 35% say 'OK', 24% say 'good', and 6% say 'very good'.

Of the 14 participants who have made an attempt to end their own life within the last 4 months, 21% describe their mental health on the day of completing the survey as 'poor', 57% say 'OK', 7% say 'good', 7% say 'very good', and 7% say 'don't know'.

## 13. HELP SEEKING AND SUPPORT

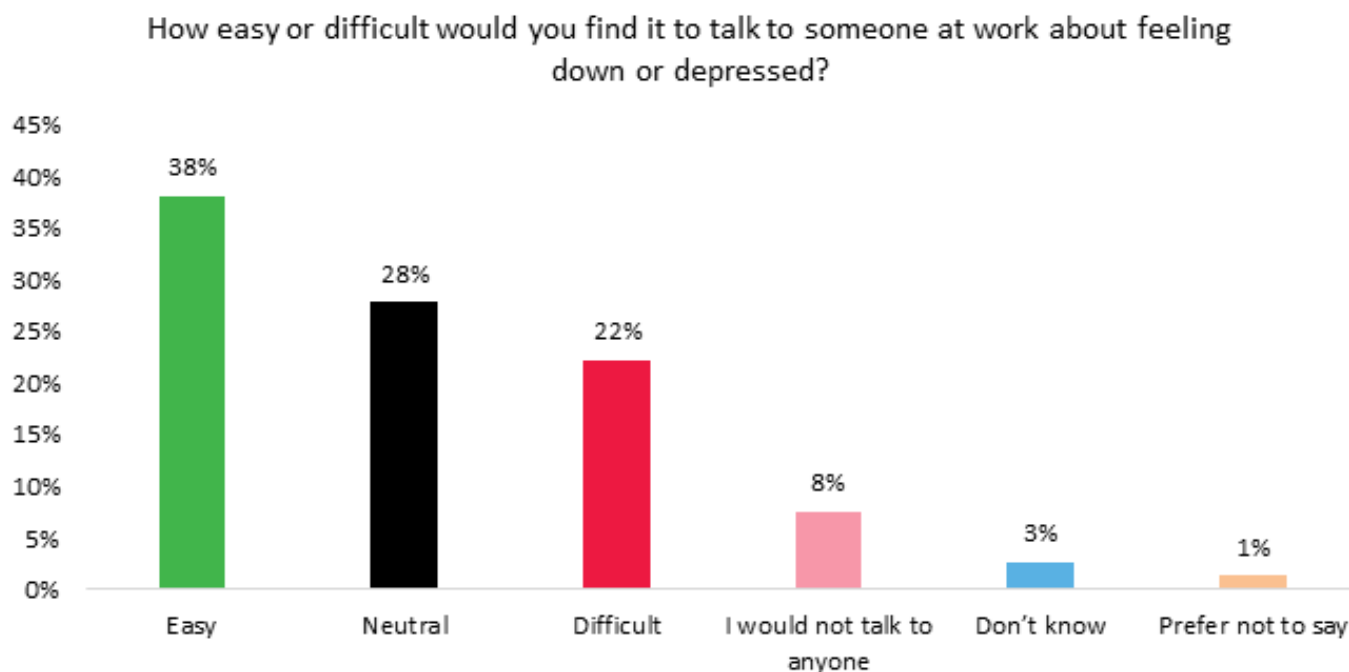
### 13.1. Help seeking

#### *How easy or difficult would you find it to talk to someone at work about feeling down or being depressed?*

One in five (22%) would find it difficult ('difficult' or 'very difficult') to talk to someone at work about feeling down or being depressed. The remainder would find it easy ('easy' or 'very easy', 38%) or neutral (28%). A small proportion (8%, n=79) would not talk to anyone.

Participants who would find it difficult ('very difficult' or 'difficult') to talk to someone at work about feeling down or depressed are more likely to be younger (aged 15-24, 28%, and 25-34, 28%) and aged 55-64 (25%), European (26%), and having worked in the construction industry for 10 years or less (25%) and 31 years or more (24%).

It is likely that men would find it easier to talk to similar age men, with similar tenure in the construction industry. We recommend that MATES in Construction consider developing a buddy system that focuses on matching similar age and tenure men in construction.



**Note:** Easy = 'Very Easy' + 'Easy', Difficult = 'Very Difficult' + 'Difficult'

The National Tradie Wellbeing Survey<sup>12</sup> asked participants how likely they would be to reach out for support from a workmate. Just under one third (29%) said 'very likely', just over one third (36%) said 'somewhat likely', and the remaining third (35%) said 'not likely'. This figure of 35% who are 'not likely' to reach out to a workmate for support is similar to the Industry Wellbeing Survey figure of 30% who would find it difficult (22%, 'difficult' or 'very difficult') or who would not talk to anyone (8%) at work about feeling down or depressed.

Interestingly, over half (58%) of National Tradie Wellbeing Survey<sup>13</sup> participants said they would feel confident about supporting a workmate in need.

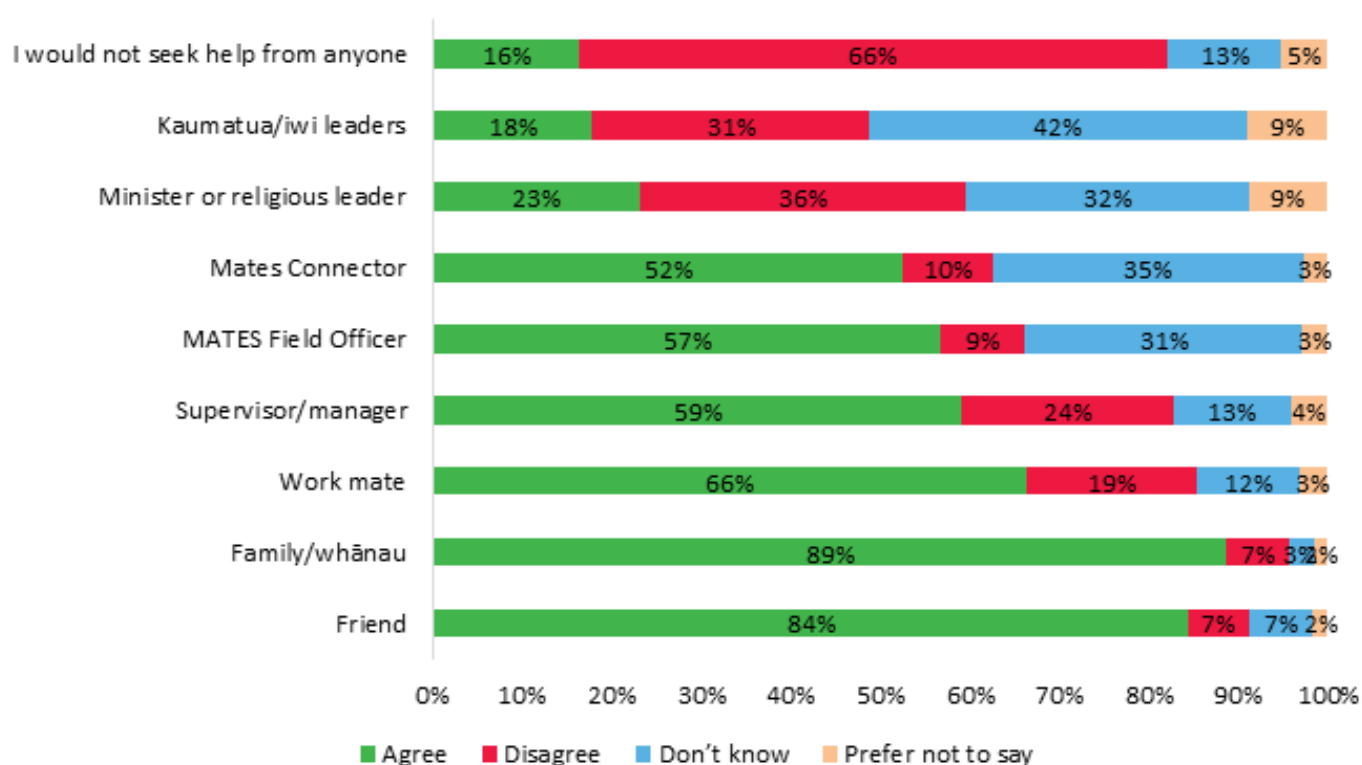
### ***I can always rely on one of the following for support if I need it.***

The majority can always rely on family/whānau (89%) or a friend (84%) for support if they need it.

Two in three can always rely on a workmate (66%). Only half can always rely on a supervisor/manager (59%), MATES Field Officer, or MATES Connector (52%).

Almost one in five (16%, n=170) would not seek help from anyone.

### **I can always rely on one of the following for support if i need it.**



**Note:** Agree = 'Strongly Agree' + 'Agree', Disagree = 'Strongly Disagree' + 'Disagree'

<sup>12</sup>OzHelp Foundation. National Tradie Wellbeing Survey Results. Canberra. January 2022.

<sup>13</sup>ibid

Relatedly, the National Tradie Wellbeing Survey<sup>14</sup> asked participants how likely they would be to seek support for their mental health and wellbeing. Two fifths (40%) said 'very likely', a further two fifths (43%) said 'somewhat likely', and 17% said 'not likely'.

The 17% from the National Tradie Survey who said that they are 'not likely' to seek support for their mental health and wellbeing is a very similar proportion to the 16% in the Industry Wellbeing Survey who reported that they would not seek help from anyone.

***If you thought you might have problems with your mental health or wellbeing, where would you go first for help?***

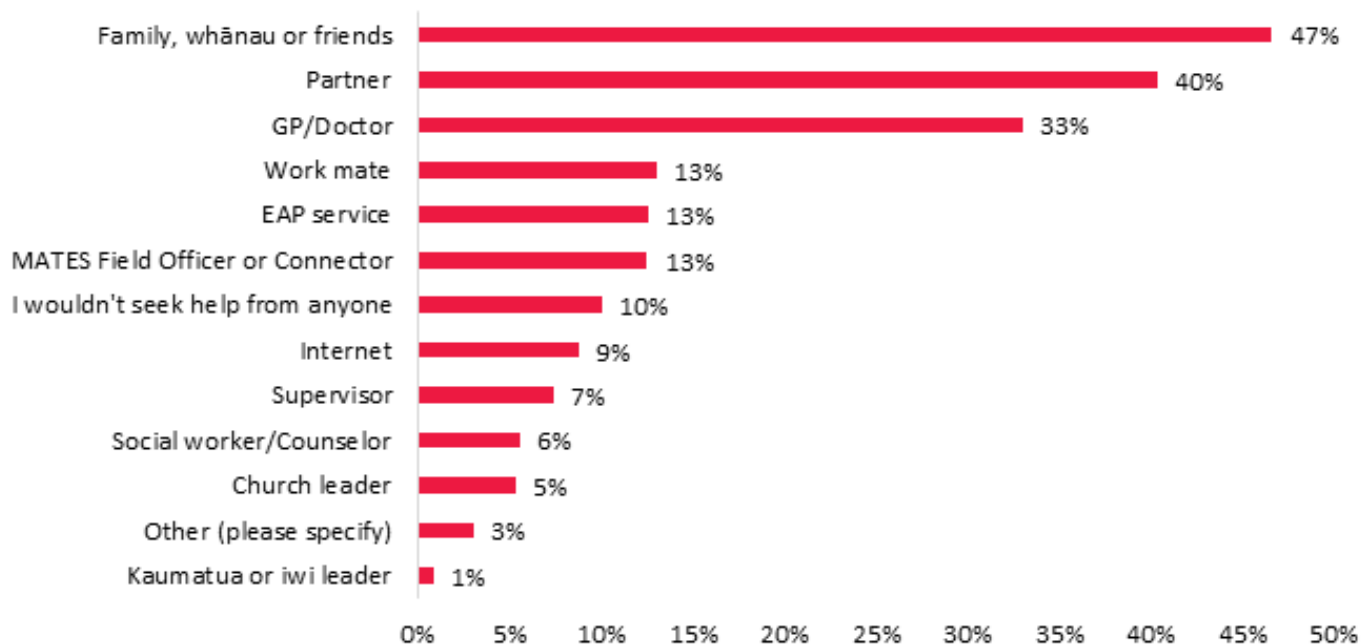
If participants have problems with their mental health or wellbeing they would be most likely to first seek help from (1) family, whānau or friends (47%), (2) their partner (40%), or (3) a GP/Doctor (33%).

These figures are informative, and we recommend that MATES in Construction develop resources for partners and family/whānau of men in construction, to better equip them to support a loved one experiencing problems with mental health or wellbeing.

One in ten (10%, n=104) would not seek help from anyone. A slightly larger proportion of participants would first go for help to a work mate (13%), EAP service (13%), or MATES Field Officer or Connector (13%), if they thought they might have problems with their mental health or wellbeing. This indicates problematic stigma around help seeking in the construction industry remains.

Participants would be least likely to first go for help to a Kaumatua or iwi leader (1%), church leader (5%), or social worker/counsellor (6%), if they thought they might have problems with their mental health or wellbeing.

**If you thought you might have problems with your mental health or wellbeing,  
where would you go first for help? (select all that apply)**



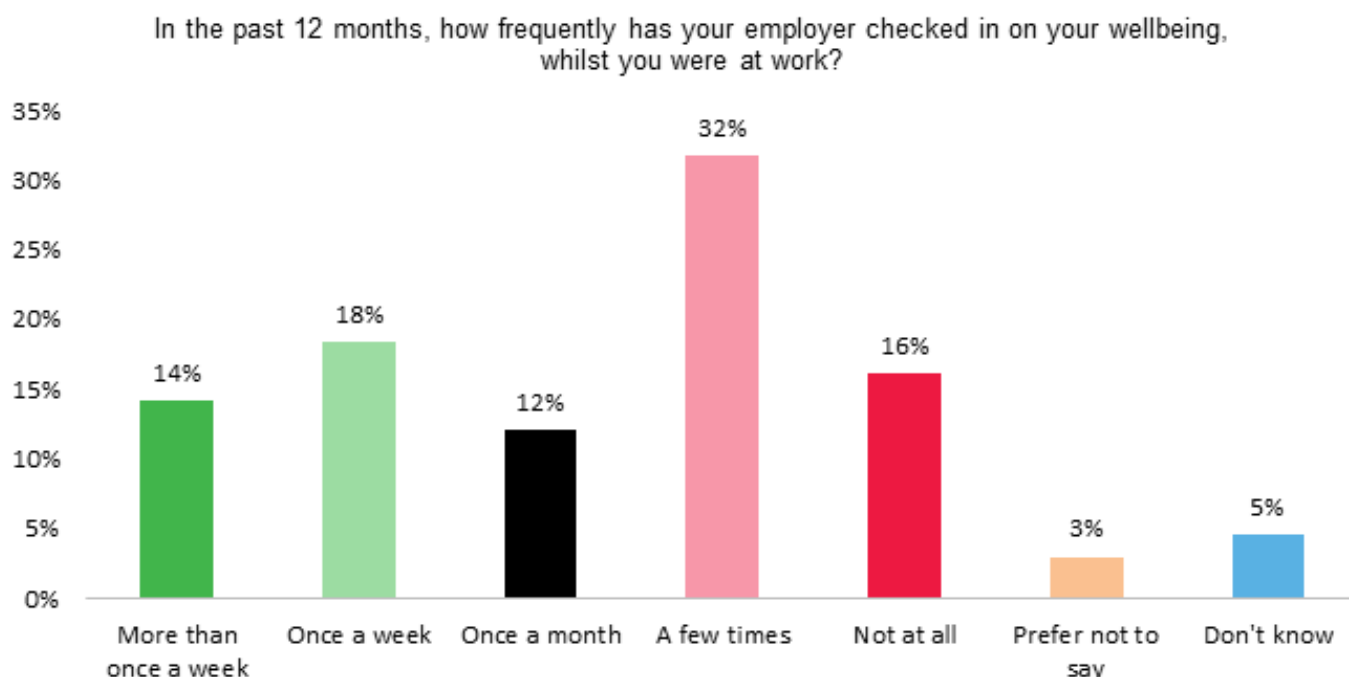
<sup>14</sup>OzHelp Foundation. National Tradie Wellbeing Survey Results. Canberra. January 2022.

## 13.2. Workplace support

### *In the past 12 months, how frequently has your employer checked in on your wellbeing, whilst you were at work?*

One third (33%) report that in the past 12 months their employer checked in on their wellbeing whilst at work at least once a week or more. A further 12% report that their employer checked in on their wellbeing once a month. Whilst another third (32%) report their employer checked in a few times across the year. Just under one fifth (16%) report that their employer did not check in on their wellbeing.

These figures indicate great room for improvement. We recommend that MATES in Construction develop guidelines for wellbeing checks by employers. These activities could be monitored on an ongoing basis to evaluate level of success.



### *Have you met MATES in construction on your site?*

Almost three quarters (70%) have met MATES in Construction on their site. Just under a third (28%) have not. A very small proportion (2%) were not sure.

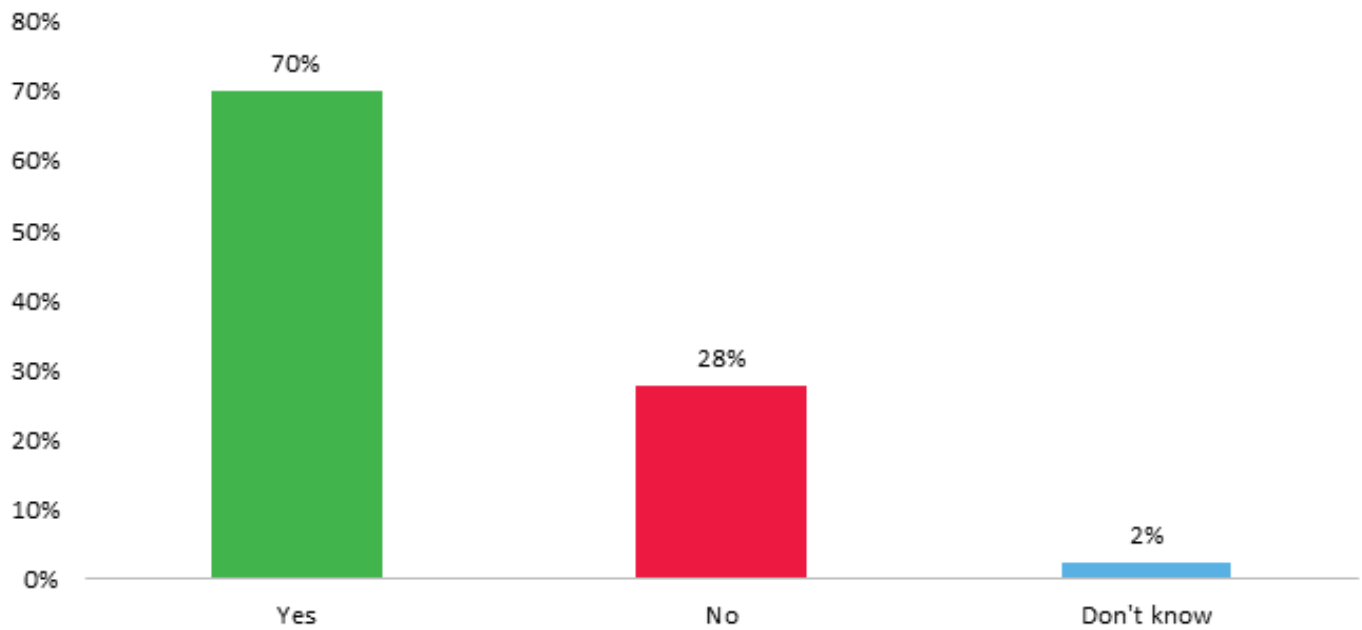
Participants who live in the Auckland region (81%) are more likely than participants who live outside of the Auckland region (56%) to report that they have met MATES in Construction on their site. This is likely due to greater presence of MATES in Construction in Auckland and indicates a need for expansion to other regions.

Participants who work onsite (75%) are slightly more likely than participants who work offsite (in the office, or in manufacturing) to report that they have met MATES in Construction on their site.

Participants who have worked in the construction industry for relatively less time (10 years or less, 72%, and 11-20 years, 74%) are slightly more likely to have met MATES in Construction onsite than participants who have worked in the construction industry for a longer time (21-30 years, 62%, and 31 years or more, 63%). It is possible that those who have worked in the Construction industry longer are more likely to be self-employed or working for smaller businesses, and therefore less likely to have met MATES in Construction onsite.

---

### Have you met MATES in Construction on your site?



## 14. COVID-19

### 14.1. 'Coronaphobia'

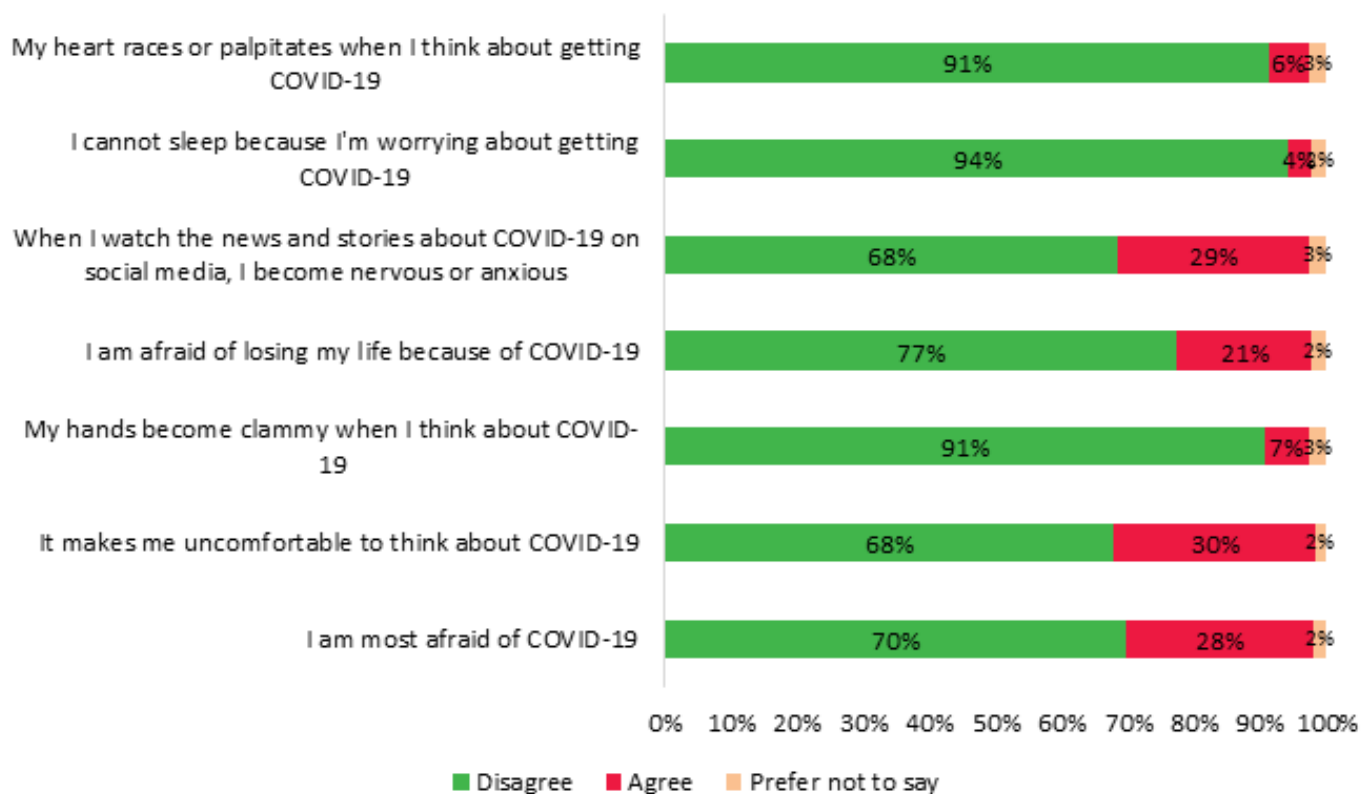
Approximately one in three report ('agree' or 'strongly agree') that:

- it makes them uncomfortable to think about COVID-19 (30%)
- watching news and stories about COVID-19 on social media makes them feel nervous or anxious (29%)
- they are most afraid of COVID-19 (28%)

A study conducted by Giordani, Zanoni da Silva, Muhl, and Giolo (2020)<sup>15</sup> used the Fear of COVID-19 Scale<sup>16</sup> in Brazil and reported that the two survey items with the highest mean scores were 'I am most afraid of the coronavirus' (mean score 3.59) and 'It makes me uncomfortable to think about coronavirus' (mean score 3.49). The Industry Wellbeing Survey also found these two items in the top three items of concern.

**Note:** The Industry Wellbeing Survey used the Fear of COVID-19 Scale but removed the 'Neutral' response option and added a new 'Prefer not to say' option. The Fear of COVID-19 Scale used by Giordani, Zanoni da Silva, Muhl, and Giolo (2020) used the term 'coronavirus' rather than 'COVID-19'.

Select the response that best reflects how you think, feel and act in relation to COVID-19:



The Industry Wellbeing Survey found that participants who agree ('strongly agree' or 'agree') that they are 'most afraid of COVID-19' are more likely to be younger (15-24, 17%) and older (65-74, 17%), Asian (53%) and Pacific Peoples (38%), living in the Auckland region (32%), and working onsite (34%).

Similarly, Giordani et al. (2020)<sup>17</sup> found that younger adults aged 18-29 reported higher levels of fear. Additionally, this study also found that females, those with lower education levels, and those practicing protective measures reported higher levels of fear.

<sup>15</sup>Giordani RCF, Zanoni da Silva M, Muhl C, Giolo SR. Fear of COVID-19 scale: Assessing fear of the coronavirus pandemic in Brazil. Journal of Health Psychology. December 2020. doi:10.1177/1359105320982035

<sup>16</sup>Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The Fear of COVID-19 Scale: Development and Initial Validation. International journal of mental health and addiction, 1–9. Advance online publication. <https://doi.org/10.1007/s11469-020-00270-8>

<sup>17</sup>Giordani RCF, Zanoni da Silva M, Muhl C, Giolo SR. Fear of COVID-19 scale: Assessing fear of the coronavirus pandemic in Brazil. Journal of Health Psychology. December 2020. doi:10.1177/1359105320982035

## 14.2. COVID-19 information

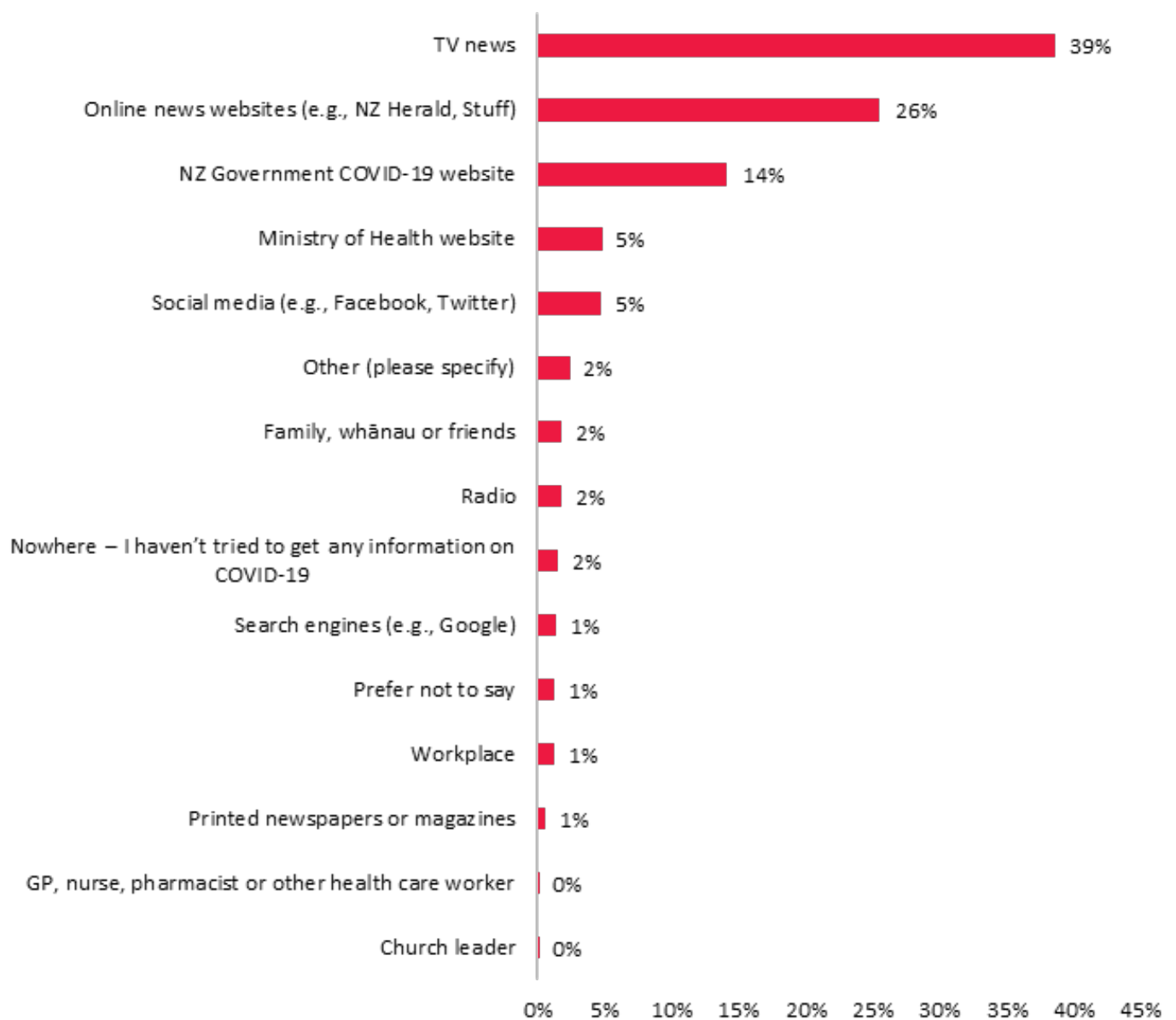
### *What has been your main source of information on COVID-19?*

The top three sources of information on COVID-19 are:

- TV news
- Online websites e.g., NZ Herald, Stuff (26%)
- NZ Government COVID-19 website e.g., [www.covid19.govt.nz](http://www.covid19.govt.nz) or [www.uniteforrecovery.govt.nz](http://www.uniteforrecovery.govt.nz) (14%)

A very small proportion (2%, n=16) report they haven't tried to get any information on COVID-19.

### What has been your main source of information on COVID-19?



Just over two thirds (68%) of Industry Wellbeing Survey participants report that their main source of information on COVID-19 is either TV news, printed newspapers or magazines, radio, or online news websites. The Ministry of Health conducted a COVID-19 related follow-up to the New Zealand Health Survey (NZHS) in 2020<sup>18</sup>. Similarly, to the Industry Wellbeing Survey, the NZHS found that just under two thirds (64%) of participants selected the aforementioned sources as their main source of COVID-19 information.

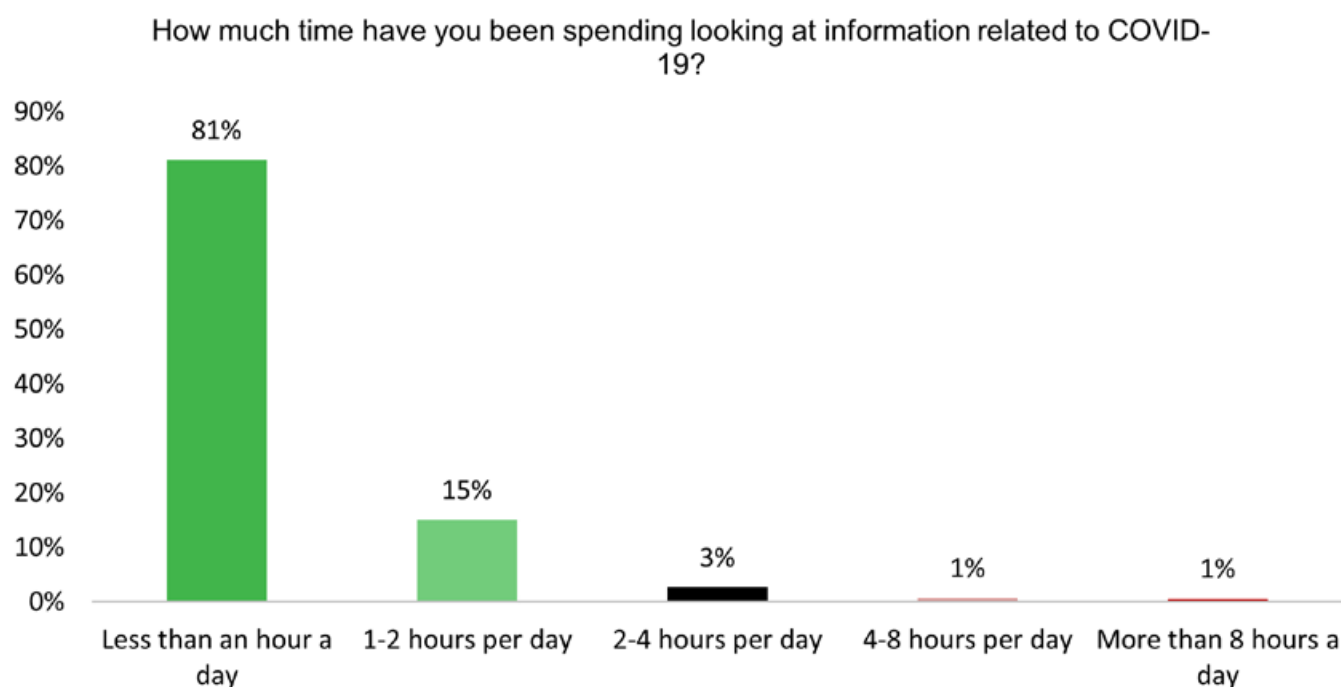
Further, Industry Wellbeing Survey participants (14%) were three times more likely than NZHS (5%) participants to report that NZ Government COVID-19 websites were their main source of information. Whereas the NZHS participants (16%) were three times more likely than Industry Wellbeing Survey participants (5%) to report that social media (e.g., Facebook, Twitter) was their main source of COVID-19 information.

**Note:** The Industry Wellbeing Survey worded the question as 'What has been your main source of information on COVID-19?', whereas the NZHS worded the question as 'In the past 7 days, what has been your main source of information on COVID-19?' Additionally, the Industry Wellbeing Survey added a response option 'Church leader'.

### **How much time have you been spending looking at information related to COVID-19?**

The majority (81%) report spending less than 1 hour per day looking at information related to COVID-19. An additional 15% report spending 1-2 hours per day. Only 1% report spending more than 8 hours per day looking at information related to COVID-19.

One fifth (19%) of Industry Wellbeing Survey participants report spending over an hour per day looking at information related to COVID-19. Whereas the COVID-19 Mental Health and Wellbeing Survey<sup>19</sup> found that more than double this figure (54%) reported spending over an hour per day looking at information related to COVID-19.

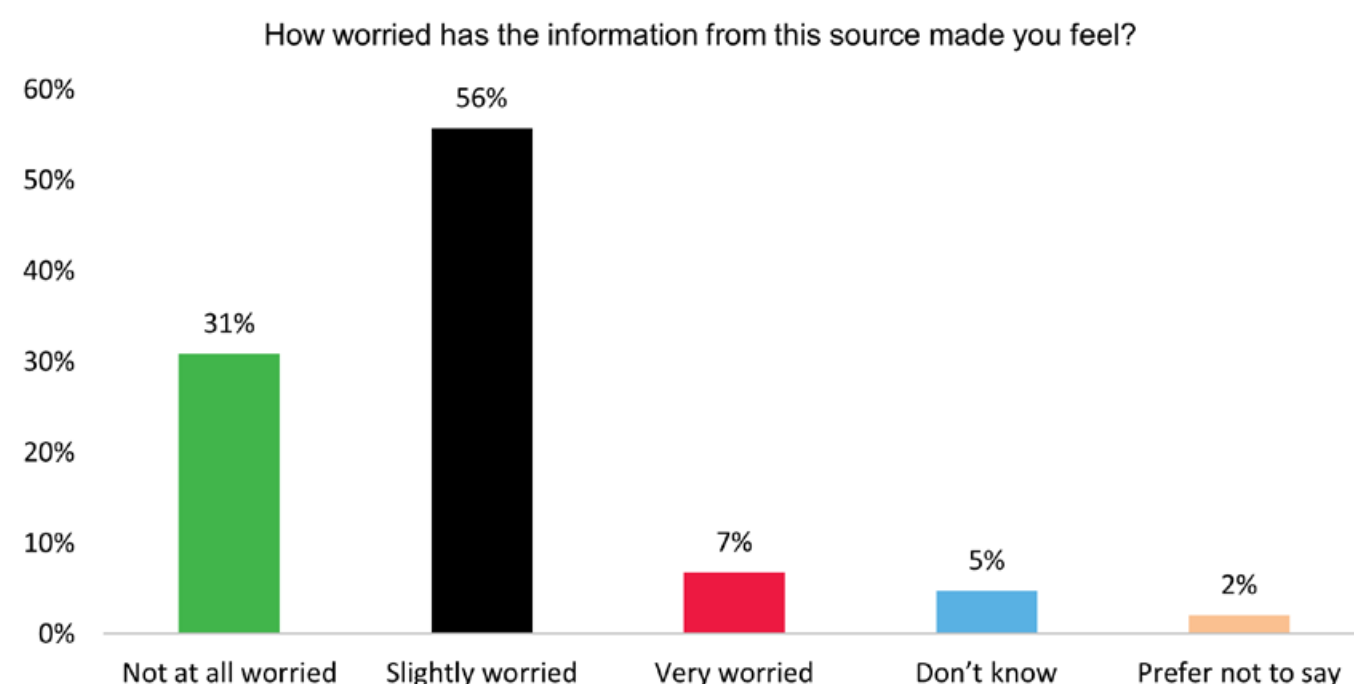


### **How worried has the information from this source made you feel?**

Slightly less than one third (31%) report that COVID-19 information does not make them feel at all worried. However, one in two (56%) report that they are slightly worried. Only 7% (n=70) report that the COVID-19 information makes them feel very worried.

<sup>18</sup><https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/new-zealand-health-survey/provisional-monthly-results-covid-19-impacts-2020-21-new-zealand-health-survey>

<sup>19</sup>Every-Palmer S, Jenkins M, Gendall P, Hoek J, Beaglehole B, Bell C, et al. (2020) Psychological distress, anxiety, family violence, suicidality, and wellbeing in New Zealand during the COVID-19 lockdown: A cross-sectional study. PLoS ONE 15(11): e0241658. <https://doi.org/10.1371/journal.pone.0241658>



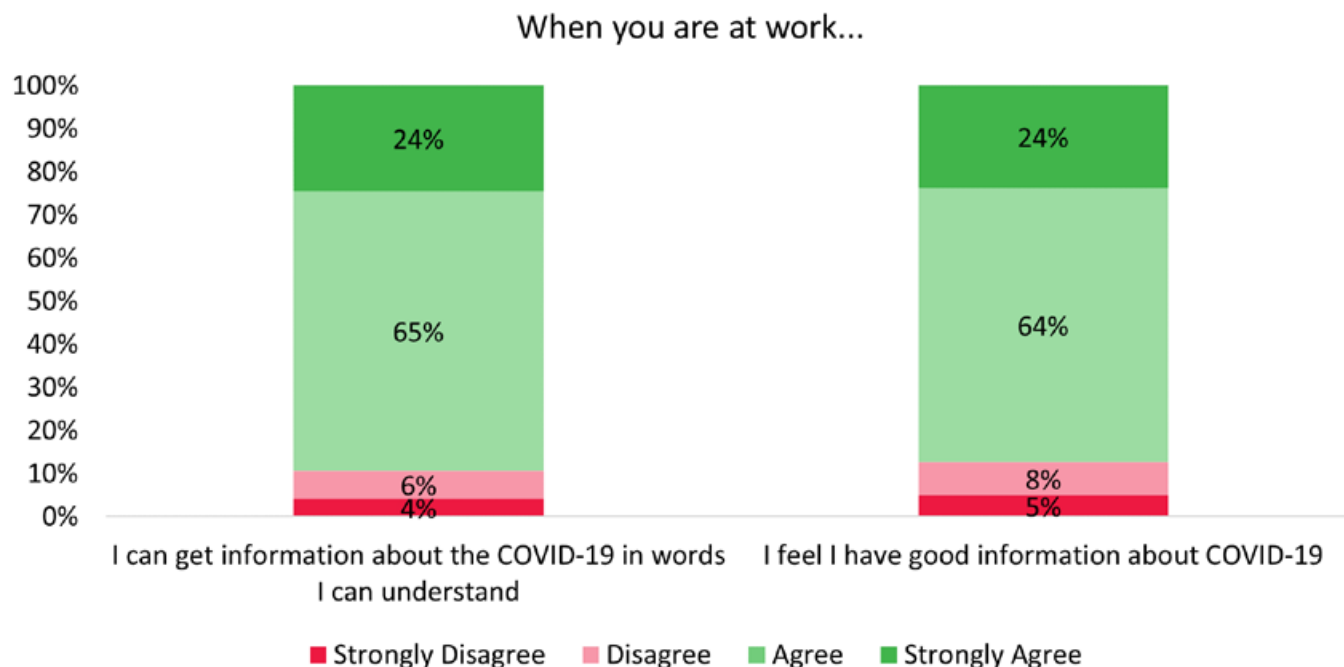
Industry Wellbeing Survey participants report feeling almost twice as worried (‘slightly worried’ or ‘very worried’) as NZHS participants. Specifically, almost two thirds of Industry Wellbeing Survey participants (63%) were either slightly or very worried by the information coming from their main source of COVID-19 information, whereas slightly more than one third (35%) of NZHS<sup>20</sup> participants were either slightly or very worried.

***When you are at work, can you get good information about COVID-19 and in words that you understand?***

The majority agree (‘agree’ or ‘strongly agree’) that that they can get information about COVID-19 in words that they understand (89%), and that they have good information about COVID-19 (87%). Approximately 10% disagree (‘disagree’ or ‘strongly disagree’) with each of these statements.

<sup>20</sup><https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/new-zealand-health-survey/provisional-monthly-results-covid-19-impacts-2020-21-new-zealand-health-survey>

The majority agree ('agree' or 'strongly agree') that that they can get information about COVID-19 in words that they understand (89%), and that they have good information about COVID-19 (87%). Approximately 10% disagree ('disagree' or 'strongly disagree') with each of these statements.



Participants from the Industry Wellbeing Survey are slightly less likely than NZHS participants to agree that they can get COVID-19 information they understand, and slightly more likely to agree that they have good COVID-19 information.

Specifically, the NZHS<sup>21</sup> found that 92% agreed (or strongly agreed) that they can get information about COVID-19 in words they understand, and 81% agreed (or strongly agreed) that they have good information about COVID-19.

The NZHS was conducted earlier in the COVID-19 pandemic than the Industry Wellbeing Survey, and this could have influenced the two sets of findings. It is possible that with increased duration of the pandemic there is increased accessibility, volume and complexity of COVID-19 information, as well as increased trust in such information.

**Note:** The Industry Wellbeing Survey worded the question as 'When you are at work, do you agree or disagree with the following statements:' whereas the NZHS worded the question as 'To what extent do you agree or disagree with the following statements:' Additionally, the Industry Wellbeing Survey removed the response options 'Neither disagree nor agree', 'Don't know', and 'Prefer not to say'.

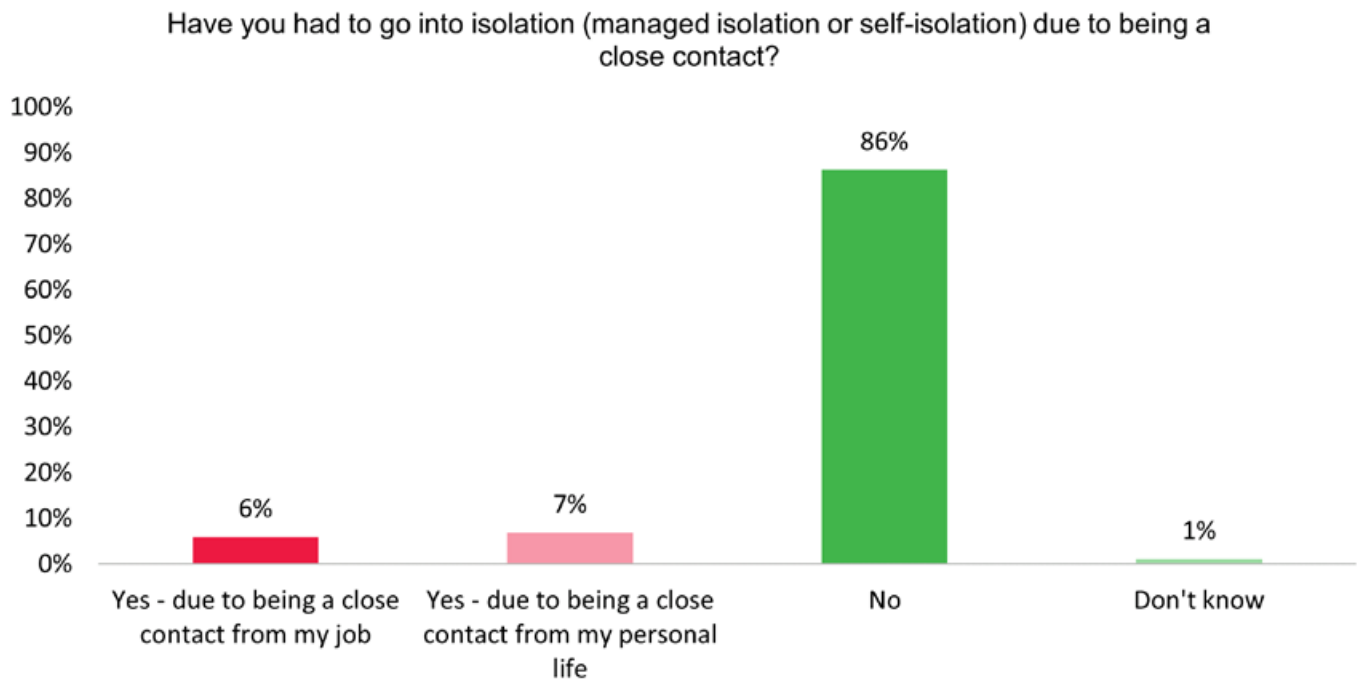
<sup>21</sup>ibid

### 14.3. Self-isolation

#### ***Have you had to go into isolation (managed isolation or self-isolation) due to being a close contact?***

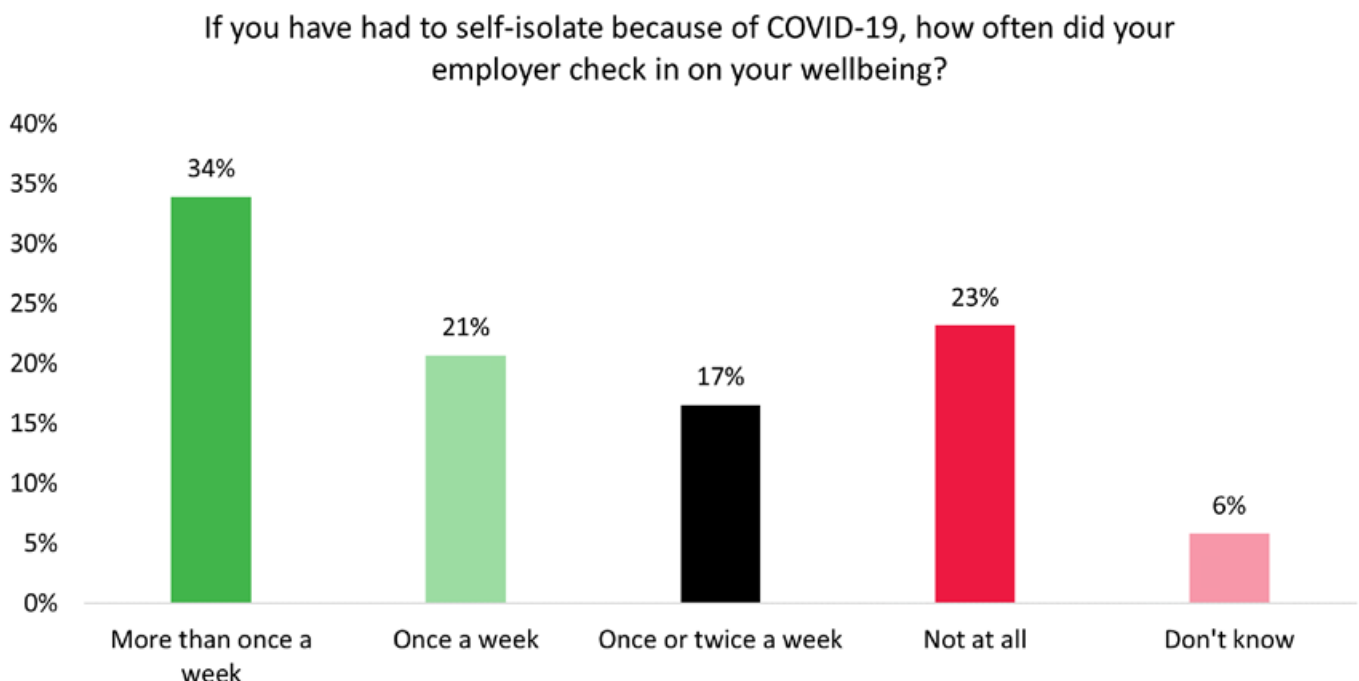
The vast majority (86%) have not had to go into isolation (managed isolation or self-isolation) due to being a close contact.

However, 13% (n=132) have had to go into isolation. Half of these people went into isolation due to being a close contact from their job (6%, n=61) and half went into isolation due to being a close contact from their personal life (7%, n=71).



#### ***If you have had to self-isolate because of COVID-19, how often did your employer check in on your wellbeing?***

Of those who have had to self-isolate because of COVID-19 half (51%) report that their employer checked in on their wellbeing more than once a week. A further 21% report that their employer checked in once a week. However, one in five (23%) report that their employer did not check in on their wellbeing at all.



## RECOMMENDATIONS TO PROMOTE MENTAL HEALTH

Drawing on insights from the environmental scan and the survey responses we have outlined suggestions for interventions to promote and protect better mental health amongst construction workers during COVID-19. Some of these can be organised quickly with little resource, others will require some resourcing, planning and collaboration.

Recommended Interventions	
Monitoring, research and data collection	<p>We recommend regular monitoring and collection of data on the mental health and wellbeing of the construction sector. To assist with this, we recommend the development of core agreed mental health Key Performance Indicators (KPIs). The KPIs should be informed by mental health research and evaluation expertise. To ensure comparability with other surveys and national data, measures should consist of key standard validated measures of suicidality, mental health, psycho-social stressors, and health behaviours including help seeking and help offering, and other risk-taking measures (alcohol and drug use, family violence).</p> <p>Additional measures including mental health literacy and awareness, stigma around mental health/illness help seeking and help offering, and measures of masculinity would be especially informative for this population.</p> <p>Accurate and regular reporting of such data will be critical for allocating scarce resources to priority groups and measuring the effectiveness of interventions. The data are also useful for raising awareness.</p> <p>Some industry bodies have suggested a live mental health dashboard of key KPIs for mental health and wellbeing: <a href="https://www.newcivilengineer.com/latest/industry-wide-mental-health-dashboard-demanded-13-08-2021/">https://www.newcivilengineer.com/latest/industry-wide-mental-health-dashboard-demanded-13-08-2021/</a></p> <p>It would also be useful to conduct a stocktake of existing and prioritised future research. Although there has been some construction industry survey research internationally, there is very little NZ qualitative research and only limited survey research of wellbeing in the NZ construction industry<sup>22 23</sup>.</p>

<sup>22</sup>Du Plessis D. & Simpson A. 2021. The mental health and wellbeing of small and medium-sized construction firms in New Zealand. BRANZ Study Report SR459. Judgeford, New Zealand: BRANZ Ltd.

<sup>23</sup>Walmsley A. 2021. The right tool for the job-an investigation into men's help seeking behaviours and attitudes in a sample of New Zealand construction workers. A thesis prepared in partial fulfilment of the requirements for the degree of Doctor of Clinical Psychology at Massey University, Wellington, New Zealand.

	There has also been some NZ based survey work (by HPA, DPMC and academics) on wellbeing during Covid, though not specific to the construction industry <sup>24 25</sup> .
MATES aftercare and follow-up	We suggest some targeted follow up of those who have sought help via MATES 0800 line as a promising avenue for intervention. This could take the form of sending out follow-up emails/ letters with some personalisation. There is good randomised controlled trial (RCT) evidence that personalised follow-up following mental health suicidal crises reduces suicides <sup>26</sup> .
MATES specific campaign tailored to the pandemic	<p>We found only one MATES or construction industry specific campaign. A specific campaign would be useful and would consist of a suite of interventions. These could include 'Downtools' day, flying the flag or lighting up cranes etc (for media coverage and awareness spreading), advertising of the 0800 MATES line for triage, and links to existing mental health campaigns. As well as asking men to seek help, offering help to mates should be promoted as a key strategy (check in with your mates).</p> <p>Generic advice on how to design and set up a campaign can be found here: <a href="https://healthy-workplaces.eu/en/tools-and-publications/campaign-toolkit/how-run-campaign/campaigning">https://healthy-workplaces.eu/en/tools-and-publications/campaign-toolkit/how-run-campaign/campaigning</a></p>
MATES outreach	Consideration should be given to a system of support during COVID-19 to check in on those isolating to ensure they have their needs met. A MATES volunteer army, similar to the student volunteer army, could be a helpful way to do this. This might be better coming from MATES peers but could also be supported by employers and unions or MATES case workers group.
MATES helping mates	According to the survey results many men prefer to seek help from mates/equals rather than their supervisors/managers. A buddy system where workers are linked in with their peers might be useful for follow-up support for those going into self-isolation.
MATES for young men	Consideration should be given to developing a buddy or mentoring system and/or special events to connect and support the younger or new members of the construction industry. This is important given that we know young men, especially in less skilled occupations, are at much greater risk of suicide, and that the stresses of the pandemic may exacerbate this.
MATES social connection - activities to build comradeship	To beat isolation, we recommend MATES initiate and develop activities that promote social connections between workers. Examples of this found in the environmental scan included Band of Builders & the Big Brew Campaign (coffee meetups) in the UK. The Oz survey also suggested that men prefer BBQs as a format for delivering health education and literacy. Tradie breakfasts are another option used in some countries and might work when organised with local catering/food businesses and/or construction sector NGOs or suppliers. Activities to reach small construction businesses could be located around suppliers – Placemakers/ Carters/Bunnings etc. Settings and activities that build social connections may also be ideal for mental health promotion and suicide prevention activities.

<sup>24</sup>Bell, C., Williman, J., Beaglehole, B., Stanley, J., Jenkins, M., Gendall, P., Rapsey, C., & Every-Palmer, S. (2021). Psychological distress, loneliness, alcohol use and suicidality in New Zealanders with mental illness during a strict COVID-19 lockdown. Australian & New Zealand Journal of Psychiatry. Advance online publication. doi: [10.1177/00048674211034317](https://doi.org/10.1177/00048674211034317)

<sup>25</sup>Bell, C., Williman, J., Beaglehole, B., Stanley, J., Jenkins, M., Gendall, P., Rapsey, C., & Every-Palmer, S. (2021). Challenges facing essential workers: A cross-sectional survey of the subjective mental health and well-being of New Zealand healthcare and 'other' essential workers during the COVID-19 lockdown. BMJ Open, 11(7), e048107. doi: [10.1136/bmjopen-2020-048107](https://doi.org/10.1136/bmjopen-2020-048107)

<sup>26</sup>Motto JA, Bostrom AG. A randomized controlled trial of postcrisis suicide prevention. Psychiatr Serv. 2001 Jun;52(6):828-33. doi: [10.1176/appi.ps.52.6.828](https://doi.org/10.1176/appi.ps.52.6.828). PMID: 11376235.

MATES Advocacy with other male dominated industries	<p>We recommend MATES works with other male dominated industries to advocate to obtain government support and funding for a number of actions:</p> <ol style="list-style-type: none"> <li>1. The establishment of <b>mental health hubs</b> (as has been done in Melbourne and now being extended to other territories in Australia). These link GP and other services with mental health services.</li> <li>2. Health and safety bodies and construction industry businesses need to work together to develop <b>mental health workplace guidelines</b> appropriate to male dominated industries. These guidelines need to provide options and advice for addressing poor mental health in the workplace and could include resources to destigmatise stigmatised groups and mental health conditions.</li> <li>3. Lobbying for better access to subsidised or low-cost GP care and mental health care onsite or after hours.</li> <li>4. Lobbying government for better government welfare support for redundancy, extensions to sick leave and sick pay, business support, support for the self-employed, income support and housing support for men in male dominated industries.</li> </ol>
MATES work with industry and safety bodies	We recommend that MATES set up a construction sector mental health under COVID Taskforce or Accord with roles, tasks and priorities for employers, managers, unions, EAP programmes, and health and safety organisations and bodies.
MATES work with businesses and employers	We recommend MATES work with businesses to encourage them to talk openly and honestly about the effects of the pandemic on the business. Consideration should be given to hosting Q&A sessions (for staff to ask questions of employers and raise concerns), discussing options for decreasing workloads, extending deadlines, and assisting with retraining.
MATES continue and extend its suite of interventions	<p>Should be continued and extended to other cities and regions.</p> <p>MATES interventions are based on the four pillars of awareness raising and training of gatekeepers, building strength and resilience into worksites by establishing peer support networks, connecting workers in need to appropriate help and support (via peer network and by 24/7 support line with case management), and research and data collection to evaluate the program and monitor interventions and mental health.</p> <p>Extension to cover additional stressors during COVID-19 should include additional gate keeper training, updated fact sheets on pandemic issues, employee health checks, and greater investment in mental health services and counselling including links to low cost or free tele-health services.</p>

# APPENDIX 1: SEARCH STRATEGY

## Scopus

272 document results

(TITLE-ABS-KEY ( covid ) AND TITLE-ABS-KEY ( construction ) AND TITLE-ABS-KEY ( mental OR stress OR anxiety OR psychosocial OR conflict OR support ) )

## Medline

#	Searches	Results	Type	Actions	Annotations
1	COVID-19ep, eh, s, pc, pr [Epidemiology, Ethnology, Legislation & Jurisprudence, Prevention & Control, Psychology]	28190	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
2	Mental Health/ed, pc, sn [Education, Prevention & Control, Statistics & Numerical Data]	4432	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
3	Occupational Stress/pc [Prevention & Control]	309	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
4	Psychosocial Support Systems/ or Psychosocial Intervention/	1259	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
5	Anxiety/pc [Prevention & Control]	5420	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
6	Social Support/ or Psychosocial Support Systems/	78300	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
7	2 or 3 or 4 or 5 or 6	85232	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
8	1 and 7	649	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	

#	Searches	Results	Type	Actions	Annotations
1	exp Coronavirus/ or exp Pandemics/ or exp Mental Health/ or exp Generalized Anxiety Disorder/	126160	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
2	covid19_m_bk	331	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
3	1 or 2	126195	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
4	Workplace/ or Work/ or Occupations/	10678	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
5	3 and 4	864	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	

## EMBASE

#	Searches	Results	Type	Actions	Annotations
1	COVID-19ep, eh, s, pc, pr [Epidemiology, Ethnology, Legislation & Jurisprudence, Prevention & Control, Psychology]	5303	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
2	Mental Health/ed, pc, sn [Education, Prevention & Control, Statistics & Numerical Data]	2	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
3	Occupational Stress/pc [Prevention & Control]	2	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
4	Psychosocial Support Systems/ or Psychosocial Intervention/	21210	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
5	Anxiety/pc [Prevention & Control]	1662	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
6	Social Support/ or Psychosocial Support Systems/	119729	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
7	2 or 3 or 4 or 5 or 6	121963	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
8	1 and 7	87	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	

## Psycinfo

#	Searches	Results	Type	Actions	Annotations
1	exp Coronavirus/ or exp Pandemics/ or exp Mental Health/ or exp Generalized Anxiety Disorder/	71474	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
2	exp Blue Collar Workers/	1902	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
3	covid19_m_bk	26	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
4	1 or 3	71483	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	
5	2 and 4	36	Advanced	<a href="#">Display Results</a> <a href="#">More ▾</a>	

## Pubmed

#11	***	>	Search: #8 and #7 Filters: from 2019 - 2021	10	15:32:28
#10	***	>	Search: #8 and #7 Filters: from 2013 - 2021	32	15:32:21
#9	***	>	Search: #8 and #7	51	15:32:09
#8	***	>	Search: (((("covid 19"[MeSH Major Topic]) AND ((("construction industry"[MeSH Major Topic])) OR ("manufacturing industry"[MeSH Major Topic])) )	58,732	15:31:36
#7	***	>	Search: (((((mental health[MeSH Major Topic]) OR (psychological distress[MeSH Major Topic])) OR ("anxiety"[MeSH Major Topic])) OR (psychosocial functioning[MeSH Major Topic]))	80,104	15:30:56

## Cochrane

### 63 Cochrane Reviews matching Covid in Title Abstract Keyword

Cochrane Database of Systematic Reviews

Issue 11 of 12, November 2021

## Web of science

12

TS=COVID-19 AND (TI=work\* OR TI=occupation OR TI=employ\* OR TI=construction OR IS=building industry) And  
(TS=mental health OR TS=psychosocial OR TS=anxiety OR TS=psychological health) NOT (TI=healthcare workers OR  
TI=health-care worker OR TI=nurs\* OR TI=doctor OR TI=clinic\* OR TI=physician OR TI=dentist OR TI=professional OR  
TI=hospital OR TI=student OR TI=health workers)

Edit

Add to Search

533

## APPENDIX 2: FINAL ACADEMIC PAPERS

	Country/ Study design	Author & title	Relevant results
1	World Review	Pamidimukkala A, Kermanshachi S, 2021. Impact of Covid-19 on field and office workforce in construction industry. Project Leadership and Society 2 (2021) 100018.	The objectives of this study were to identify the health and safety issues that construction workers have encountered during the pandemic and to recommend management strategies to combat them. A thorough literature search on recently published literature, industry experiences, reports, and other related documents was performed to collect and categorize the required data. Seventeen COVID-19 challenges were identified and classified into five categories, and the results revealed that the lack of a safe environment in the workplace, heavy workloads, home situations, and concerns about job stability often contribute to anxiety, depression, and even suicide. Has a good table on 'Factors affecting the health and safety of the workforce during COVID-19' broken down into organisational factors, economic factors, psychological factors, individual factors, and moderating factors. Provides more detail from the literature on: social isolation due to teleworking, stress and burnout, responsibility for personal and family needs when working, learning various communication tools and overcoming technical difficulties, feelings of not contributing enough to work, adjusting to new work schedules, and for moderating factors, effect of COVID -19 on vulnerable groups (age), gender-based impacts, Impacts on migrant workforce. Then lists 11 effective mitigation strategies but these are focused on physical environment not promoting and protecting mental health.
2	World Review	King TL, Lamontagne AD. 2021. COVID-19 and suicide risk in the construction sector: preparing for a perfect storm. Scandinavian Journal of Public Health, 49, 774-8. <a href="https://doi.org/10.1177/1403494821993707">https://doi.org/10.1177/1403494821993707</a>	Construction workers are at elevated risk of suicide and the COVID-19 pandemic has led to a convergence of factors that may significantly exacerbate suicide risk among in this group, particularly among those with lower skills. This narrative review examines the extent to which construction workers may be differentially exposed to the economic effects of COVID-19. Highlights a number of areas to support construction workers mental health including investing in blue collar men's mental health support – and the related opportunity for telehealth (as removes some of the stigma) and prevention and control in the workplace (suicide prevention like MATES) as effective for improving suicide prevention literacy and intentions to seek or offer help and general community. Notes that employers in most countries are obliged to ensure psychologically and well as physically safe working conditions in most countries, EAP via employer or union can provide EAP or redundancy funds or other services. Government has a critical role via unemployment and training programmes and incentivising sustainable business and jobs. Measure to strengthen housing stability as important. Notes inequalities in the constructions sector - intersectionality - some groups at greater risk than others such as labourers (exposed to poorer working conditions and more vulnerable to job loss and more socially disadvantage – limiting ability to buffer the poor conditions and migrant workers more likely to lose their jobs, suffer discrimination etc. All these vulnerabilities converge to make them more at risk of poor mental health and suicide. Concludes that to protect construction workers, mental health interventions need to focus on the social determinants of health.

	Country/ Study design	Author & title	Relevant results
3	World  Review	Ayat M, Malukah, Kang CW. 2021. Effects of the COVID-19 pandemic on the construction sector: a systemized review. <i>Engineering, Construction and Architectural Management</i> , 7. ID: covidwho-1501256	A systemized review was performed with bibliometric and content analyses of articles related to the impact of COVID-19 on the construction sector. Includes research with mitigation strategy of safety measures, process, government intervention, psychological support, and technology adoption. Psychological support mitigation in the literature included industry-based suicide prevention, investment in mental health services, and regular counselling sessions for workers. Government level mitigation included Covid taskforce for the industry, site inspection to ensure compliance, funds, subsidies to reduce risk of default, and programmes to reduce unemployment.
4	Australia  Survey	Pirzadeh P, Lingard H. 2021. <b>Working from Home during the COVID-19 Pandemic: Health and Well-Being of Project-Based Construction Workers.</b> <i>Journal of Construction Engineering and Management</i> , 147 (6). doi/pdf/10.1061/%28ASCE%29CO.1943-7862.0002102pdf/10.1061/%28ASCE%29CO.1943-7862.0002102	<p>Explored Australian commercial sector construction employees' (professional and managerial) experiences of working from home on alternate weeks during the COVID-19 pandemic. Multiple waves of data were collected, resulting in 548 survey responses and more than 100 qualitative insights. Findings revealed significant associations between various aspects of employees' work and life and their mental wellbeing. Participants' experiences of working from home during the pandemic were mixed. The findings can help construction organisations and advocates to make informed decisions to maximise the mental wellbeing benefits associated with flexible working, while also reducing the health risks associated with working from home during (and potentially beyond) the COVID-19 pandemic situation.</p> <p>Although working from home may not be especially relevant to blue collar construction workers this paper is useful for its survey questions covering wellbeing broadly defined, asking about the past week: questions on diet, physical activity, sleep quality, perception of work–life balance, productivity, work pressure, work engagement, time pressure, work interface with social life, work–family conflict, sleep quality and a 12 item measure of mental well-being (which was a composite measure combining some items from two well regarded measure of mental health (the SF36 and five from the K10.)</p> <p>The analysis of participants' responses across the survey waves revealed positive and significant relationships between mental well-being and their quality of sleep, frequency of physical activity, the extent of their work–life satisfaction, and their perceived engagement in work. Moreover, work hours, the degree of work interference with social life, and feeling pressure for time were negatively associated with mental well-being. Importantly, these effects were mediated through work–life satisfaction.</p> <p>The study found a gradual and steady decline in participants' mental well-being over the period of data collection. However, importantly, there was no significant difference in mental well-being scores between participants who indicated they were working at home or in the office at the time at which they completed the survey, suggesting that work location is not the primary driver of mental well-being, and that other factors are at play. No specific interventions are offered.</p>

	Country/ Study design	Author & title	Relevant results
5	US  Complaints analysis	Bou Hatoum M, Faisal A, Nassereddine H, Sarvari H. 2021. Analysis of COVID-19 Concerns Raised by the Construction Workforce and Development of Mitigation Practices. <i>Frontiers in Built Environment</i> ; 7, 2021. ID: covidwho-1247841	Analysis of the complaints data identified major safety and health concerns for US construction workers and compiled a list of 100 best practices that construction employers can adopt to mitigate the concerns of the workforce. Employers need to understand that a pandemic can add work and home related stress due to different factors. CDC lists the following as potential sources of added pressure on the employees: “concerns about being exposed to the virus at work”, “lack of access to the tools and equipment needed to perform the job”, “conflicts at home”, “failure to take time to relax”, “feelings that you are not contributing enough to work”, “feeling guilty about not being on the frontline”, “uncertainty about the future of your workplace and/or employment”, and “adapting to a different workspace and/or work schedule”. Additionally, other factors like finances and worrying about vulnerable family members can aggravate the situation. Relevant to mental health and physical were 9 recommended practices, specifically; anticipate and monitor behaviour changes in employees, avoid discrimination on race or country of origin, build resilience and capacity to manage job stress, decrease workloads and extend deadlines where possible, Host Q&A sessions with managers regularly so employees can discuss concerns and ask questions make, sick leave policies more flexible, maintain privacy when screening employees, provide guidance and tips for working in healthy manner whether at home in offices or on sites, guidance on fatigue management, provide resources for dealing with stress and anxiety related to the pandemic, talk openly and honestly about the effects of the pandemic on the company.
6	US  Interviews (34)	Alsharef A, Banerjee S, Uddin S, Albert A, Jaselskis E. 2021. Early impacts of the COVID-19 pandemic on the United States construction industry. <i>Int. J. Environ. Res. Public Health</i> 2021, 18(4), 1559; <a href="https://doi.org/10.3390/ijerph18041559">https://doi.org/10.3390/ijerph18041559</a>	This study focused on investigating the early impacts of the COVID-19 pandemic on the U.S. construction industry through 34 telephone interviews with project managers, engineers, designers, and superintendents. The interviewees offered information on their experience with the pandemic, including the general and adverse effects experienced, new opportunities created, and risk management efforts being undertaken. Identified a number of challenges including mental health. Mental health challenges included worry about being laid off especially with family to care for and housing costs, others anxious they might be exposed to the virus in the workplace as many safety measures not realistic to adopt or are not sufficiently enforced, workers unable to report to work due to childcare unavailability, closure of schools and caretaking responsibilities for sick family members. Social distancing requirement at work also reduced interactions among crew members - thus a need to have efforts to build comradeship between workers during this time. Notes that a significant number of the workforce could transition to working from home. Problems working from home also identified, such as software and IT issues, more distractions at home - more home duties and childcare interfering with work.

## APPENDIX 3: PRIORITY GREY LITERATURE RESULTS

Organisation	URL	Title	File	Detail	Type	Useful?
Queensland Building and construction commission	<a href="https://www.qbcc.qld.gov.au/blog/tradie-talk/mates-construction-suicide-awareness">https://www.qbcc.qld.gov.au/blog/tradie-talk/mates-construction-suicide-awareness</a>	Blog: Mates in construction - suicide awareness (2020)	Aust48	Notes suicide stats among construction workers in Queensland and lists helpline and mates website - refers to Mates helpline	News item/online article/blog	Similar to Mates NZ
Mates in construction (Australia)	<a href="https://mates.org.au/">https://mates.org.au/</a>	Coping with stress during covid19	Aust29	1-page summaries of research into suicide/mental health stats	Factsheet	Similar to Mates NZ
Mates in construction - Australia	<a href="chrome-extension://efaidnbmnnnibpcajpcgclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fmates.org.au%2Fmedia%2Fdocuments%2FMICAUS-Covid-19-Poster-%25C6%2592-Construction.pdf&amp;clen=90493&amp;chunk=true">chrome-extension://efaidnbmnnnibpcajpcgclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fmates.org.au%2Fmedia%2Fdocuments%2FMICAUS-Covid-19-Poster-%25C6%2592-Construction.pdf&amp;clen=90493&amp;chunk=true</a>	Coping with stress during COVID-19	Aust42	Coping with stress during COVID-19 fact sheet	Factsheet	Similar to Mates NZ
ABC News	<a href="https://www.abc.net.au/news/2021-08-09/tradies-suffering-under-stress-of-pandemic/100358550">https://www.abc.net.au/news/2021-08-09/tradies-suffering-under-stress-of-pandemic/100358550</a>	COVID-19 pandemic taking a crushing toll on mental health of tradies	Aust8	blog post describing covid impacts mental health in construction - no link to help sources	News item/online article/blog	Maybe
Icare	<a href="https://www.icare.nsw.gov.au/employers/industry-and-partners/industry-hub/your-industry/construction/covid-19-strategies-for-managing-stress-for-construction-workers#gref">https://www.icare.nsw.gov.au/employers/industry-and-partners/industry-hub/your-industry/construction/covid-19-strategies-for-managing-stress-for-construction-workers#gref</a>	COVID-19 strategies for managing stress for construction workers	Aust27	COVID-19 strategies for managing stress - resource links at the bottom	Advice/info/promo and links/resources	Yes
Mates in construction - Australia	<a href="https://mates.org.au/coronavirus-advice">https://mates.org.au/coronavirus-advice</a>	COVID-19 support fact sheet (2020)	Aust43	Fact sheet with <b>clickable scan-able links to financial, mental health and govt</b> resources	Factsheet	Yes
Mates in construction (Australia)	<a href="https://mates.org.au/">https://mates.org.au/</a>	Covid-19 support fact sheet	Aust30	<b>Fact sheet with clickable scan links to</b> financial, mental health and govt resources	Factsheet	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Smart Company	<a href="https://www.smartcompany.com.au/industries/construction-engineering/tradie-support-mental-health-wellbeing-worksite/">https://www.smartcompany.com.au/industries/construction-engineering/tradie-support-mental-health-wellbeing-worksite/</a>	From one tradie to another: How to support mental wellbeing on the worksite (2021)	Aust59	blog - tips on how to deal with mental health during covid - links to resources.	News item/online article/blog	Maybe
PHN North Western Melbourne	<a href="https://nwmpnhn.org.au/for-community/campaigns/better-mental-health-tradies/">https://nwmpnhn.org.au/for-community/campaigns/better-mental-health-tradies/</a>	Lighten the load - specific mental health campaign for tradies	Aust66	Actual campaign link with videos	Links to support services and videos	Yes
ABC news	<a href="https://www.abc.net.au/news/2021-07-01/master-builders-act-calls-for-mental-health-training-for-tradies/13427060">https://www.abc.net.au/news/2021-07-01/master-builders-act-calls-for-mental-health-training-for-tradies/13427060</a>	Master builders ACT calls for mental health training for tradies (2021)	Aust58	Videos for tradies	Links to support services and videos	Yes
OZHELP - health and wellbeing at work	<a href="https://ozhelp.org.au/act-building-and-construction-industry-findings/">https://ozhelp.org.au/act-building-and-construction-industry-findings/</a>	Master Plumbers ACT - online mental health training	Aust67	Links to reports on mental health in construction	Advice/info/promo and links/resources	Yes
Mates in construction - Australia		Mates stronger together - coping with COVID19	Aust44	Mates Fact sheet	Factsheet	Similar to Mates NZ
Mates in construction (Australia)	<a href="https://mates.org.au/">https://mates.org.au/</a>	Mates stronger together - coping with COVID19	Aust31	Mates Fact sheet	Factsheet	Similar to Mates NZ
Building connection	<a href="https://buildingconnection.com.au/2021/08/17/mental-health-an-important-building-block-in-construction/">https://buildingconnection.com.au/2021/08/17/mental-health-an-important-building-block-in-construction/</a>	Mental health: an important building block in construction (2021)	Aust62	News item/blog on lockdowns and construction and mental health - refers to SHAPE Australia	News item/online article/blog	Yes
Trade Trak	<a href="https://www.tradetrak.com.au/tradies-mental-health/">https://www.tradetrak.com.au/tradies-mental-health/</a>	Mental health and tradies (2020)	Aust60	Has some good, targeted resources - TIACS, WORKWELL mates, links to good mental health resources	Advice/info/promo and links/resources	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Roads and infrastructure	<a href="https://roadsonline.com.au/ozhelp-launches-national-tradie-wellbeing-survey/">https://roadsonline.com.au/ozhelp-launches-national-tradie-wellbeing-survey/</a>	Ozhelp launches national tradie wellbeing survey (2021)	Aust70	Links to OzHelp	Advice/info/promo and links/resources	Yes
The Construction Industry Alliance for Suicide Prevention and LivingWorks	<a href="https://www.livingworks.net/blog/podcast-episode-1-building-networks-of-safety">https://www.livingworks.net/blog/podcast-episode-1-building-networks-of-safety</a>	Podcast Episode 1: "Building networks of safety" (doesn't mention covid but dated 2020)	Aust34	Podcast link	Podcast	Yes
Transport for NSW	<a href="https://www.transport.nsw.gov.au/news-and-events/media-releases/stronger-together-new-mental-health-initiative-to-help-construction">https://www.transport.nsw.gov.au/news-and-events/media-releases/stronger-together-new-mental-health-initiative-to-help-construction</a>	Stronger together: New mental health initiative to help construction workers (2020)	Aust55	News item	News item/online article/blog	Maybe
Man monthly	<a href="https://www.manmonthly.com.au/features/impact-covid-19-unemployment-tradies-mental-health-ok-not-ok/">https://www.manmonthly.com.au/features/impact-covid-19-unemployment-tradies-mental-health-ok-not-ok/</a>	The impact of COVID-19 unemployment on tradies' mental health – It's OK not to be OK (2020)	Aust64	News item about mental health under covid for tradies - calls to check on your colleagues and general links	News item/online article/blog	Maybe
ConsultANZ	<a href="https://www.consultanz.com.au/trademutt-tackling-mens-mental-health-one-shirt-at-a-time/">https://www.consultanz.com.au/trademutt-tackling-mens-mental-health-one-shirt-at-a-time/</a>	TradeMutt-how standing out can start a life-saving conversation (2021)	Aust69	Trademutt - set up by 2 guys to start the conversation	Advice/info/promo and links/resources	Yes
Building connection	<a href="https://buildingconnection.com.au/2021/11/16/tradies-mental-health-crisis-sparks-increase-in-targeted-support-for-workforce/">https://buildingconnection.com.au/2021/11/16/tradies-mental-health-crisis-sparks-increase-in-targeted-support-for-workforce/</a>	Tradies' mental health crisis sparks increase in targeted support for workforce (2021)	Aust63	Teaming up with Gotcha4Life, to deliver tailored programs to encourage social connection	News item/online article/blog	Yes
Bunnings	<a href="https://trade.bunnings.com.au/campaign/tradie-health-month">https://trade.bunnings.com.au/campaign/tradie-health-month</a>	Tradies National Health Month (includes mental health)	Aust68	Run by Australian Physiotherapy Association (APA)	Mental health month/day	Maybe
University of South Australia	<a href="https://www.unisa.edu.au/media-centre/Releases/2021/mates-suicide-prevention/">https://www.unisa.edu.au/media-centre/Releases/2021/mates-suicide-prevention/</a>	UniSA digs deep to prevent construction worker suicides (2021)	Aust54	About suicides - research identified 26 potential drivers of suicide for construction workers. He says while many motivators are known, others have received little attention.	Link to research/report/guidelines/courses	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Queensland centre for Mental Health Research	chrome-extension://efaid-nbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fmates.org.au%2Fmedia%2Fdocuments%2FMATES-summary_report_what-is-distress_FINAL.pdf&clen=207602&chunk=true	What is distress? Summary of a construction industry consultation breakfast (2021)	Aust51	Industry breakfast and consultation - developed definition of distress - 7-page report	News item/online article/blog	Yes
Simply business	https://www.simply-business.co.uk/knowledge/articles/2021/02/three-quarters-tradespeople-mental-health-impacted-during-pandemic/	76% of tradespeople say Covid-19 impacted their mental health	UK40	News - item and links for self-employed and small businesses around covid questions - can I get sick pay etc? Survey 200 tradespeople	Link to research/report/guidelines/courses	Yes
CITB (Chartered Institute of Personnel and Development)	https://www.citbni.org.uk/News/Mental---Physical-conditions-can-keep-construction.aspx	Blog: Mental & Physical health conditions can keep construction workers out of work. CMP might help (2020)	UK19	Pilot of a programme CMP work related mental health counselling support	Counselling services	Yes
Health in construction leadership group	chrome-extension://efaid-nbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.constructionleadershipcouncil.co.uk%2Fwp-content%2Fuploads%2F2021%2F05%2FCLC-Press-Release-5-May-CLC-and-HSE-its-time-for-us-all-to-talk-about-work-related-stress.pdf&clen=111061&chunk=true	CLC & HSE - It's time for us all to talk about work-related stress (2021)	UK73	Published a talking toolkit - how to prevent work related stress in construction - guide for managers about how to have different conversations https://www.hse.gov.uk/stress/assets/docs/talkingtoolkit-construction.pdf	Talking toolkit	Yes
Simian - The Scaffolding safety and traing experts (UK)	https://simian-risk.com/construction-leadership-council-backs-initiative-to-address-mental-health/	Construction Leadership Council Backs Initiative to Address Mental Health (2021)	UK29	Encouraging businesses to down tools for one hour as part of its 'Stop. Make a Change' campaign, in an effort to address mental health and physical health problems	<b>Down tools</b>	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Marsh	<a href="https://www.marsh.com/uk/risks/pandemic/insights/how-to-support-construction-workers-mental-health-covid-19.html">https://www.marsh.com/uk/risks/pandemic/insights/how-to-support-construction-workers-mental-health-covid-19.html</a>	COVID-19 - How to support construction workers' mental health	uk1	Talks about industry corona virus survey on anxiety related to shutdowns in industry - ref guidelines on mental health assessment	Link to research/report/guidelines/courses	Yes
Health in construction leadership group	<a href="https://www.healthinconstruction.co.uk/covid-19">https://www.healthinconstruction.co.uk/covid-19</a>	COVID19 (includes mental health)	UK14	guidelines and video on <b>why have the vaccine</b>	Links to support services and videos	Maybe
Designing buildings - the construction wiki	<a href="https://www.designingbuildings.co.uk/wiki/COVID-19_and_mental_health_within_construction_firms">https://www.designingbuildings.co.uk/wiki/COVID-19_and_mental_health_within_construction_firms</a>	COVID-19 and mental health within construction firms	UK10	Survey results showing 9 of 10 construction workers suffered poor mental health due to business pressures - talks about mental health first aider course	News item/online article/blog	Yes
Worktribe	<a href="https://rgu-repository.worktribe.com/output/1000407/covid-19-pandemic-the-effects-and-prospects-in-the-construction-industry">https://rgu-repository.worktribe.com/output/1000407/covid-19-pandemic-the-effects-and-prospects-in-the-construction-industry</a>	COVID-19 pandemic: the effects and prospects in the construction industry. repository. worktribe.com/output/1000407/covid-19-pandemic-the-effects-and-prospects-in-the-construction-industry	UK7	Academic article reporting on survey	Link to research/report/guidelines/courses	Maybe
Construction News UK	<a href="https://www.constructionnews.co.uk/health-and-safety/covid-19-cn-lifts-the-lid-on-constructions-pressure-cooker">https://www.constructionnews.co.uk/health-and-safety/covid-19-cn-lifts-the-lid-on-constructions-pressure-cooker</a>	COVID-19: CN lifts the lid on construction's pressure cooker	UK68	News item - 3 pages reporting on Survey in Construction = 1043 - lots of confusion - news item also <b>talks of public anger towards construction workers heading off to work</b>	News item/online article/blog	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Building mental health	<a href="https://www.buildingmentalhealth.net/">https://www.buildingmentalhealth.net/</a>	Creating a freely available, <b>industry-wide framework and charter</b> to tackle the mental health crisis in the construction industry (does not mention covid)	UK74	sign charter, view resources mental health first aid courses		Yes
CITB (Chartered Institute of Personnel and Development)	<a href="https://www.citb.co.uk/about-citb/news-events-and-blogs/essential-mental-health-and-wellbeing-for-construction-during-covid-19/">https://www.citb.co.uk/about-citb/news-events-and-blogs/essential-mental-health-and-wellbeing-for-construction-during-covid-19/</a>	Essential mental health and wellbeing for construction during COVID-19	UK78	Health and safety advice and advice on furloughing and mental health and links to help	Advice/info/promo and links/resources	Maybe
Professional builder	<a href="https://probuildermag.co.uk/features/essential-mental-health-resources-for-construction-during-coronavirus-outbreak">https://probuildermag.co.uk/features/essential-mental-health-resources-for-construction-during-coronavirus-outbreak</a>	Essential mental health resources for construction during coronavirus outbreak	UK69	<b>Health and safety advice and advice on furloughing</b> and mental health and links to mental health first aid, Fairness, Inclusion and Respect programme to help improve industry culture notes the Lighthouse Club	Advice/info/promo and links/resources	Yes
Mates in mind (UK)	<a href="https://www.matesinmind.org/">https://www.matesinmind.org/</a>	General mental health resources - has some links specifically for COVID	UK39	links to tools info and resources	Advice/info/promo and links/resources	Yes
Professional builder	<a href="https://probuildermag.co.uk/features/hudson-contract-highlights-help-for-tradespeople-during-pandemic">https://probuildermag.co.uk/features/hudson-contract-highlights-help-for-tradespeople-during-pandemic</a>	Hudson Contract highlights help for tradespeople during pandemic	UK70	Industry's biggest payer of subcontractors, highlighting the help and support available to tradespeople and their families during the pandemic... working with the Lighthouse Construction Industry Charity	Advice/info/promo and links/resources	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Building	<a href="https://www.building.co.uk/news/industry-warned-of-covid-mental-health-crisis/5111743.article">https://www.building.co.uk/news/industry-warned-of-covid-mental-health-crisis/5111743.article</a>	Industry warned of covid mental health crisis (2021)	UK66	Blog noting recent research from the Industry Training Board Covid was a big concern. Brick firm Forterra has recently <b>appointed 60 volunteer mental health first aiders</b> from within its workforce to become mental health advocates and points of contact for colleagues in need of support. . .	News item/online article/blog	<b>Yes</b>
CITB (Chartered Institute of Personnel and Development)	<a href="https://www.citb.co.uk/about-citb/construction-industry-research-reports/search-our-construction-industry-research-reports/mental-health-and-wellbeing-research/">https://www.citb.co.uk/about-citb/construction-industry-research-reports/search-our-construction-industry-research-reports/mental-health-and-wellbeing-research/</a>	Mental health and construction: A co-ordinated approach (2021)	UK55	Report on mental health and construction 17 pages - <b>advocates for a mental health indicator dashboard</b>	Link to research/report/guidelines/courses	Yes
Institute of Government and Public policy	<a href="https://igpp.org.uk/event/Mental-Health-in-Construction">https://igpp.org.uk/event/Mental-Health-in-Construction</a>	Mental health in construction - part of the 2021 construction series (doesn't specifically mention covid but with 2021 they couldn't avoid it)	UK5	Notice of an online event framed around suicide in construction - Keynote sessions: Special Keynote: In The Eye Of The Storm: Mental Health In Construction Pre And Post-Pandemic	Online conference/webinar/Power-Point	Maybe
Professional builder	<a href="https://probuildermag.co.uk/features/merchant-sector-praised-for-leading-the-fight-to-tackle-mental-health-crisis-in-construction">https://probuildermag.co.uk/features/merchant-sector-praised-for-leading-the-fight-to-tackle-mental-health-crisis-in-construction</a>	Merchant sector praised for leading fight to tackle mental health crisis in construction (Dec 2021). Big brew funds dedicated industry support phonelines, counselling support to members of UK construction industry and volunteers, 300 mental health awareness course places.	UK71	National construction charity Band of Builders (BoB) has been overwhelmed by the level of support from merchants who have thrown their weight behind its <b>Big Brew campaign</b> to highlight the issue. The campaign encourages workers from across the construction industry to come together and discuss mental health in general and their experiences over a cuppa.	News item/online article/blog	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Government UK	<a href="https://www.gov.uk/government/publications/covid-19-mental-health-and-wellbeing-recovery-action-plan/covid-19-mental-health-and-wellbeing-recovery-action-plan">https://www.gov.uk/government/publications/covid-19-mental-health-and-wellbeing-recovery-action-plan/covid-19-mental-health-and-wellbeing-recovery-action-plan</a>	Policy paper: COVID-19 mental health and wellbeing recovery action plan - specifically mentions targeting construction workers	UK33	32 pages not much specific to construction but suggests monitoring of trends in self-reported mental health and wellbeing outcomes, life satisfaction, loneliness, major stress, depression and anxiety. Good link to <a href="https://www.gov.uk/government/publications/covid-19-mental-health-and-wellbeing-surveillance-report">https://www.gov.uk/government/publications/covid-19-mental-health-and-wellbeing-surveillance-report</a>	Link to research/report/guidelines/courses	Yes
committees.parliament.uk	<a href="https://committees.parliament.uk/writtenevidence/5656/pdf/">https://committees.parliament.uk/writtenevidence/5656/pdf/</a>	The impact of Covid-19 on the UK construction industry	UK17	Reports on interview study (N=13) with construction workers in UK - Looks like a submission	Link to research/report/guidelines/courses	Maybe
NFRC - leading roofing excellence	<a href="chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.nfrc.co.uk%2Fdocs%2Fdefault-source%2Fcoronavirus-assets%2Fmrk140-tbt-coping-with-workplace-stress-and-fatigue.pdf%3Fsfvrsn%3D4a002248_6&amp;clen=124798">chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.nfrc.co.uk%2Fdocs%2Fdefault-source%2Fcoronavirus-assets%2Fmrk140-tbt-coping-with-workplace-stress-and-fatigue.pdf%3Fsfvrsn%3D4a002248_6&amp;clen=124798</a>	Toolbox talk: Coping with workplace stress and fatigue (talks about covid)	UK58	Toolbox talk: Coping with workplace <b>stress and fatigue</b> (talks about covid) - link to <b>The Lighthouse Construction Industry Charity</b> for further support	Factsheet	Maybe
Associated General Contractors of America	<a href="https://www.agc.org/news/2020/10/22/agc-provides-input-coronavirus-mental-health-working-group">https://www.agc.org/news/2020/10/22/agc-provides-input-coronavirus-mental-health-working-group</a>	AGC Provides Input to Coronavirus Mental Health Working Group	US33	Blog - link to a Factsheet - Maintaining a Culture of CARE During COVID-19 <a href="https://buildculture.org/wp-content/uploads/2020/04/Maintain-Culture-of-CARE-During-COVID-19-Tip-Sheet_Final.pdf">https://buildculture.org/wp-content/uploads/2020/04/Maintain-Culture-of-CARE-During-COVID-19-Tip-Sheet_Final.pdf</a>	Factsheet	Maybe

Organisation	URL	Title	File	Detail	Type	Useful?
Frontiers in built environment - construction management	<a href="https://www.frontiersin.org/articles/688495">https://www.frontiersin.org/articles/688495</a>	Analysis of COVID-19 Concerns Raised by the Construction Workforce and Development of Mitigation Practices	US22	Blog refers to abstract (academic paper by Bou 2021- in academic literature)	Factsheet	Maybe
Laborers' health and safety fund of North America	<a href="https://www.lhsfna.org/coronavirus-and-its-impact-on-our-mental-health/">https://www.lhsfna.org/coronavirus-and-its-impact-on-our-mental-health/</a>	Corona virus and its impact on our mental health	US4	Online advice on signs of stress and stress management	News item/online article/blog	Yes
Construction Industry Alliance for Suicide Prevention	<a href="https://preventconstruction-suicide.com/COVID_19_Resources">https://preventconstruction-suicide.com/COVID_19_Resources</a>	COVID-19 resources (have gone through)	US2	Huge number of quick links to Covid-19 resources	Advice/info/promo and links/resources	Yes
Laborers' health and safety fund of north america	<a href="https://www.lhsfna.org/covid-19-resources/">https://www.lhsfna.org/covid-19-resources/</a>	Employer strategies to support worker well-being during a pandemic	US10	Online resource - suggests employers provide information and education related to mental and emotional well-being and include it in performance management and other suggestions for employers to consider	News item/online article/blog	Yes
Construction business owner	<a href="https://www.constructionbusinessowner.com/popular-now/how-help-your-employees-cope-stress-covid-19">https://www.constructionbusinessowner.com/popular-now/how-help-your-employees-cope-stress-covid-19</a>	How to help your employees cope with the stress of COVID19	US5	Communication strategies to promote mental well-being in your workforce during & after the coronavirus pandemic	News item/online article/blog	Yes
International Conference on Transportation and Development 2021	<a href="https://ascelibrary.org/doi/pdf/10.1061/9780784483541.039">https://ascelibrary.org/doi/pdf/10.1061/9780784483541.039</a>	Impacts of COVID-19 on Health and Safety of Workforce in Construction Industry (2021)	US47	Link to abstract for conference paper by Pamidimukkala 2021 (in the final relevant academic papers)	Link to research/report/guidelines/courses	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Laborers' health and safety fund of North America	chrome-extension://efaidnbnmnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.lhsfna.org%2FLHSFNA%2Fassets%2FFile%2FImproving%2520Worker%2520Well%2520Being%2520During%2520COVID%252019.pdf&clen=204960&chunk=true	Improving worker well-being during cOVID-19: creating a positive and supportive workplace for employees	US8	Online advice providing 'Elements of a Comprehensive Worker Well-Being Program'	News item/online article/blog	Yes
The Construction Association	https://www.agc.org/news/2021/03/02/mental-health-suicide-prevention-construction-how-build-wellness-programs-impact	Mental Health & Suicide Prevention in Construction - How to Build Wellness Programs with Impact (2021)	US18	53-minute video - how to spot warning signs and help refers to a useful metric the mental health index	Links to support services and videos	Yes
Centres for Disease Control	chrome-extension://efaidnbnmnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.cdc.gov%2Fwp-content%2Fuploads%2FMental-Health-During-the-COVID-19-Pandemic-8-27-20.pdf&clen=2165853&chunk=true	Mental health during the COVID 19 pandemic - specifically construction	US35	35 power point slides - some useful content	Online conference/webinar/Power-Point	Yes
CSNZ	chrome-extension://efaidnbnmnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fpreventconstruction suicide.starchapter.com%2Fimages%2Fdownloads%2FToolbox_Talk_Templates_for_Download%2Ftoolbox_talk__risk_of_relapse_of_alcohol_and_substance_use_disorders_during_and_after_covid_19.pdf	Mental wellbeing during Coronavirus/ covid-19 - toolbox talk: risk of alcohol or substance abuse relapse rising with covid-19	US6	Helping Employees and Family Members Find Online Recovery Meetings - 2 page online noting online alcohol and drug recovery meetings	Advice/info/promo and links/resources	Maybe
New civil engineer (so not blue collar in construction)	https://www.newcivilengineer.com/latest/podcast-covids-impact-on-mental-health-in-construction-24-03-2021/	PODCAST COVID's impact on mental health in construction	US1	Link to podcast COVID's impact on mental health in construction	Podcast	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Construction executive	<a href="https://www.constructionexec.com/article/post-covid-19-strategies-to-promote-mental-wellbeing-and-suicide-prevention">https://www.constructionexec.com/article/post-covid-19-strategies-to-promote-mental-wellbeing-and-suicide-prevention</a>	Post-COVID-19 strategies to promote mental well-being and suicide prevention	US7	Online caring messages for inspiration and ways to deliver them	News item/online article/blog	Maybe
Construction industry council	<a href="https://www.cic.org.uk/">https://www.cic.org.uk/</a>	Webinars - covid - includes one on mental health	US37	Webinars - covid - includes one on mental health	Online conference/webinar/Power-Point	Yes
McLean and Armstrong	<a href="https://mcleanarmstrong.com/wp-content/uploads/2021/06/Construction-Law-Advisory-Productivity-Impacts-of-COVID-19-June-2021_compressed.pdf">https://mcleanarmstrong.com/wp-content/uploads/2021/06/Construction-Law-Advisory-Productivity-Impacts-of-COVID-19-June-2021_compressed.pdf</a>	Impacts of COVID-19 on productivity in construction projects (mentions mental health)	Canada3	Stats on high levels of anxiety and depression during Covid-19 and impacts of this on productivity - a construction law advisory note	Link to research/report/guidelines/courses	Yes
Site safe	<a href="https://www.sitesafe.org.nz/">https://www.sitesafe.org.nz/</a>	Mental health first aid in constructions (not covid specific)	NZ15	Notice advertising a one-day mental health first aid in construction	News item/online article/blog	Yes
Mates in Construction NZ	<a href="https://mates.net.nz">https://mates.net.nz</a>	MATES in construction - Mental health toolbox guide. Working during COVID-19	NZ6			
Mates in Construction NZ	<a href="https://mates.net.nz">https://mates.net.nz</a>	Working during covid19 resources	NZ8			
Associated General Contractors of America	<a href="https://www.agc.org/news/2021/03/02/mental-health-suicide-prevention-construction-how-build-wellness-programs-impact">https://www.agc.org/news/2021/03/02/mental-health-suicide-prevention-construction-how-build-wellness-programs-impact</a>	Mental Health & Suicide Prevention in Construction - How to Build Wellness Programs with Impact	US31		Link to research/report/guidelines/courses	Yes
Australian Building and construction industry	<a href="https://www.construction-blueprint.com.au/">https://www.construction-blueprint.com.au/</a>	Blueprint for better mental health and suicide prevention (2018-2022)	Aust45	17 pages on problem of suicide and target areas	Link to research/report/guidelines/courses	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Chartered Institute of Building Academy		Mental Health in Construction (date relevant)	UK65	Course on future learn covering mental health in construction	Advice/info/promo and links/resources	Maybe
CIOB Chartered institute of building	<a href="https://www.ciob.org/">https://www.ciob.org/</a>	CIOB responds to CITB Mental Health and Wellbeing report (dated 2021)	UK44	Course and resources	Link to research/report/guidelines/courses	Yes
CIOB Chartered institute of building	<a href="https://www.ciob.org/">https://www.ciob.org/</a>	Understanding mental health in the built environment (2020)	UK57	Course and resources	Link to research/report/guidelines/courses	Yes
CIOB Chartered institute of building	<a href="https://www.ciob.org/blog/building-towards-better-mental-health-construction-industry">https://www.ciob.org/blog/building-towards-better-mental-health-construction-industry</a>	Blog: Building towards better mental health in the construction industry (2020)	UK48	Course and resources	Link to research/report/guidelines/courses	Yes
CIOB Chartered institute of building	<a href="https://www.ciob.org/blog/mates-mind-stress-awareness-month">https://www.ciob.org/blog/mates-mind-stress-awareness-month</a>	BLOG: Mates in mind - stress awareness month (2021)	UK50	Course and resources	Link to research/report/guidelines/courses	Yes
CIOB Chartered institute of building	<a href="https://www.ciob.org/industry/policy-research/policy-positions/mental-health-wellbeing">https://www.ciob.org/industry/policy-research/policy-positions/mental-health-wellbeing</a>	Mental Health and Wellbeing (dated during pandemic)	UK45	Course and resources	Link to research/report/guidelines/courses	Yes
CIOB Chartered institute of building	<a href="https://www.ciob.org/industry/politics-government/campaigns/mental-health-construction">https://www.ciob.org/industry/politics-government/campaigns/mental-health-construction</a>	Mental Health in Construction (2020)	UK46	Course and resources	Link to research/report/guidelines/courses	Yes
CIOB Chartered institute of building	<a href="https://www.ciob.org/media-centre/news/ciob-launches-new-mental-health-construction-course">https://www.ciob.org/media-centre/news/ciob-launches-new-mental-health-construction-course</a>	CIOB launches new mental health in construction course (2020)	UK47	Course and resources	Link to research/report/guidelines/courses	Yes
CIOB Chartered institute of building	<a href="https://www.ciob.org/media-centre/news/one-four-construction-workers-consider-suicide-finds-ciob-report">https://www.ciob.org/media-centre/news/one-four-construction-workers-consider-suicide-finds-ciob-report</a>	One in four construction workers consider suicide finds CIOB report (2020)	UK49	Course and resources	Link to research/report/guidelines/courses	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Considerate Constructors Scheme - Best practice hum	<a href="https://ccsbestpractice.org.uk/spotlight-on/mental-health/#the_campaign">https://ccsbestpractice.org.uk/spotlight-on/mental-health/#the_campaign</a>	Spotlight on mental health (is construction but doesn't mention mental health) was last updated 2020	UK43	Course and resources	Link to research/report/guidelines/courses	Yes
Construction business owner	<a href="https://www.construction-businessowner.com/workforce-management/exploring-psychological-safety">https://www.construction-businessowner.com/workforce-management/exploring-psychological-safety</a>	Exploring Psychological Safety (includes blue collar)	US20	Blog with link to report on mental health in construction	Link to research/report/guidelines/courses	Yes
Construction Drive	<a href="https://www.constructiondrive.com/news/cdc-updates-mental-health-guidelines-for-contractors/595731/">https://www.constructiondrive.com/news/cdc-updates-mental-health-guidelines-for-contractors/595731/</a>	CDC updates mental health guidelines for contractors	US13		Link to research/report/guidelines/courses	Yes
Construction Industry Alliance for Suicide Prevention	<a href="chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fpreventconstructionsuicide.starchapter.com%2Fimages%2Fdownloads%2FToolbox_Talk_Templates_for_Download%2Ftoolboxtalk_covid_19.pdf">chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fpreventconstructionsuicide.starchapter.com%2Fimages%2Fdownloads%2FToolbox_Talk_Templates_for_Download%2Ftoolboxtalk_covid_19.pdf</a>	Construction Industry Alliance for Suicide Prevention Toolbox Talk Safety Meeting	US3		Link to research/report/guidelines/courses	Yes
Crown commercial service (UK)	<a href="https://www.crowncommercial.gov.uk/news/minds-matter-using-social-value-to-tackle-mental-health-in-construction">https://www.crowncommercial.gov.uk/news/minds-matter-using-social-value-to-tackle-mental-health-in-construction</a>	Minds matter - using social value to tackle mental health in construction (2021)	UK63	Minds matter - using social value to tackle mental health in construction (2021) refers to survey of industry	Link to research/report/guidelines/courses	Yes
CTV News	<a href="https://vancouverisland.ctvnews.ca/b-c-construction-industry-launches-mental-health-support-program-for-workers-1.5404120">https://vancouverisland.ctvnews.ca/b-c-construction-industry-launches-mental-health-support-program-for-workers-1.5404120</a>	B.C. construction industry launches mental health support program for workers	Canada4	Programme launch with links	Advice/info/promo and links/resources	Yes
Designing buildings - the construction wiki	<a href="https://www.designingbuildings.co.uk/wiki/Construction_leadership_for_mental_health">https://www.designingbuildings.co.uk/wiki/Construction_leadership_for_mental_health</a>	Construction leadership for mental health	UK30	Good links to research, reports, interventions and webinars	Link to research/report/guidelines/courses	Yes
ECN - electrical contracting news	<a href="https://electricalcontractingnews.com/news/the-silent-construction-pandemic/">https://electricalcontractingnews.com/news/the-silent-construction-pandemic/</a>	Construction now threatened by 'silent pandemic'	US39	Link to new counselling mindfulness initiative	Counselling services	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Federation of master builders	<a href="https://www.lighthouseclub.org/mental-health/">https://www.lighthouseclub.org/mental-health/</a>	How to create a positive mental health culture within your workplace link to lighthouse club - <a href="https://www.lighthouseclub.org/mental-health/">https://www.lighthouseclub.org/mental-health/</a>	UK62	Links to lighthouse club construction industry charity	Link to research/report/guidelines/courses	Yes
General trade union (UK) GMB (trade union representing all workers - not just construction)	<a href="https://www.gmb.org.uk/news/two-three-workers-mental-health-harmed-coronavirus-crisis">https://www.gmb.org.uk/news/two-three-workers-mental-health-harmed-coronavirus-crisis</a>	Two in three workers' mental health harmed by coronavirus crisis	UK32	Poll results, mental health fact sheets, and other resources, LGBTQ resources and representation	Union website	Yes
Head to help	<a href="https://headtohelp.org.au/tradies/">https://headtohelp.org.au/tradies/</a>	HeadtoHelp understands the unique pressures tradies face. If you're feeling stressed by life or work, give us a ring to find local support.	Aust72	Helpline for tradies	Links to support services and videos	Yes
Health and safety at work	<a href="https://www.hse.gov.uk/">https://www.hse.gov.uk/</a>	Talking toolkit - preventing work-related stress in construction (does not mention COVID)	UK52	Links to many resources		Yes
Health and safety at work	<a href="https://www.hse.gov.uk/">https://www.hse.gov.uk/</a>	The absolutely essential health and safety toolkit - construction (does not mention covid)	UK53	Links to many resources	Advice/info/promo and links/resources	Yes
Ihasco	<a href="https://www.ihasco.co.uk/blog/entry/3103/mental-health-a-continuing-challenge-for-the-construction-industry">https://www.ihasco.co.uk/blog/entry/3103/mental-health-a-continuing-challenge-for-the-construction-industry</a>	Mental health - a continuing challenge for the construction industry	UK15	Health and safety body with links to online Mental Health in Construction Training course	Link to research/report/guidelines/courses	Yes
Institute for Work & Health (Canada)	<a href="https://www.iwh.on.ca/iwh-in-media/daily-reporter-2020-04-28">https://www.iwh.on.ca/iwh-in-media/daily-reporter-2020-04-28</a>	COVID-19: One more reason to take mental health seriously	Canada 6	Work and health safety body	News item/online article/blog	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Laborers' health and safety fund of north America	<a href="https://www.lhsfna.org/covid-19-resources/">https://www.lhsfna.org/covid-19-resources/</a>	Resources	US11		Links to support services and videos	Yes
Lighthouse	<a href="https://www.construction-industryhelpline.com/our-app.html">https://www.construction-industryhelpline.com/our-app.html</a>	New app launched to support construction workers mental health (doesn't specifically mention covid but is current)	UK60	Intervention launch or app - give information, advice and guidance on stress, anxiety, depression, anger and suicidal thoughts - confidential	Mental health app	Yes
Lighthouse/CITB/Building mental health	12 Report on mental health in industry	Building mental health, construction industry training board, mental health first aiders programme 2018-2021 Social value report (Collins McHugh)	UK54	MH first aid	Link to research/report/guidelines/courses	Yes
MarshMcLennan	<a href="https://www.brinknews.com/three-actions-to-address-mental-health-in-the-construction-industry/">https://www.brinknews.com/three-actions-to-address-mental-health-in-the-construction-industry/</a>	Three ways to address mental health in the construction industry	US14	Video expert on suicide in construction industry	Links to support services and videos	Yes
Mates in construction	<a href="https://mates.org.au/construction/research">https://mates.org.au/construction/research</a>	Whole lot of publications related to mental health interventions in blue collar industry - all are directly related to covid	Aust52	Links to OZ Mates publications	Link to research/report/guidelines/courses	Yes
Mates in mind (UK)	<a href="https://www.matesinmind.org/">https://www.matesinmind.org/</a>	Mates in minds - mental health training (doesn't specifically mention COVID)	UK37	Major construction sector NGO	Mates in Mind US	Yes
Mental health at work	<a href="https://www.mental-healthatwork.org.uk/">https://www.mental-healthatwork.org.uk/</a>	Building mental health in construction	UK41	Major website	Advice/info/promo and links/resources	Yes
National Association of Home builders	<a href="https://www.nahb.org/advocacy/industry-issues/safety-and-health/mental-wellbeing">https://www.nahb.org/advocacy/industry-issues/safety-and-health/mental-wellbeing</a>	Member mental health and wellbeing	US41	links to mental health screening	Link to research/report/guidelines/courses	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
National Association of Home builders	<a href="https://www.nahb.org/news-and-economics/industry-news/press-releases/2021/05/nahb-to-participate-in-first-mental-health-action-day-may-20">https://www.nahb.org/news-and-economics/industry-news/press-releases/2021/05/nahb-to-participate-in-first-mental-health-action-day-may-20</a>	NAHB to Participate in First Mental Health Action Day May 20	US40		Mental health month/day	Yes
National Association of Home builders		How Associations can promote worker wellbeing and behavioural health	US42		Link to research/report/guidelines/courses	Yes
National Association of Home builders		Building a caring culture - addressing mental health in the workplace	US43		Link to research/report/guidelines/courses	Yes
National Institute for occupational safety and health (Niosh)	<a href="https://www.cdc.gov/niosh/">https://www.cdc.gov/niosh/</a>	mental health suffers during pandemic: support fellow construction workers	US44	Lots of good resources for covid and construction	Link to research/report/guidelines/courses	Yes
PC Today	<a href="https://www.pbctoday.co.uk/news/health-safety-news/construction-industry-burnout/91537/">https://www.pbctoday.co.uk/news/health-safety-news/construction-industry-burnout/91537/</a>	Is the construction industry suffering from burnout? The Planning, BIM & Construction group	UK64	Building sector group	News item/online article/blog	Yes
Prospect (union - UK)	<a href="https://prospect.org.uk/news/simon-blake-mental-health-first-aid-at-work/">https://prospect.org.uk/news/simon-blake-mental-health-first-aid-at-work/</a>	Blog: Simon Blake: mental health at work (general union)	UK28	General Union	Advice/info/promo and links/resources	Yes
Randstad	<a href="https://www.randstad.co.uk/market-insights/attracting-recruiting-talent/how-to-combat-stress-construction/">https://www.randstad.co.uk/market-insights/attracting-recruiting-talent/how-to-combat-stress-construction/</a>	How to combat stress in construction - links to report on survey of mental health	UK67	Blog with link to report on mental health in construction	Link to research/report/guidelines/courses	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
Randstad	<a href="chrome-extension://efaidnbmninnibpcapcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.randstad.co.uk%2Fs3fs-media%2Fuk%2Fpub-lic%2F2021-05%2F-CPE_Are-employers-doing-enough-to-combat-stress-in-construction.pdf&amp;cldn=430702&amp;chunk=true">chrome-extension://efaidnbmninnibpcapcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.randstad.co.uk%2Fs3fs-media%2Fuk%2Fpub-lic%2F2021-05%2F-CPE_Are-employers-doing-enough-to-combat-stress-in-construction.pdf&amp;cldn=430702&amp;chunk=true</a>	Are employers doing enough to combat stress in construction?	UK77	Blog with link to report on mental health in construction	Link to research/report/guidelines/courses	Yes
Safework Australia	<a href="https://covid19.swa.gov.au/covid-19-information-workplaces/industry-information/building-and-construction">https://covid19.swa.gov.au/covid-19-information-workplaces/industry-information/building-and-construction</a>	Building and construction - not specifically covid	Aust5	Great site, advice and resources	Advice/info/promo and links/resources	Yes
Safework Australia		Building and construction - mental health - not specifically covid	Aust6	Great site, advice and resources	Advice/info/promo and links/resources	Yes
TAPS	<a href="https://www.tapssa.com.au/construction-safety-action-plan/">https://www.tapssa.com.au/construction-safety-action-plan/</a>	Construction safety action plan (includes mental health)	Aust71	<b>Initiatives to protect apprentices</b>	Advice/info/promo and links/resources	Yes
The Construction Industry Alliance for Suicide Prevention and LivingWorks	<a href="https://www.livingworks.net/blog/building-a-better-building-industry">https://www.livingworks.net/blog/building-a-better-building-industry</a>	Building a better building industry with suicide prevention training (doesn't mention covid but dated 2020)	Aust33	Suicide prevention	Website	Yes
The Construction Industry Alliance for Suicide Prevention and LivingWorks	<a href="https://www.livingworks.net/blog/construction-companies-working-to-address-high-suicide-rate">https://www.livingworks.net/blog/construction-companies-working-to-address-high-suicide-rate</a>	Blog: Construction companies working to address high suicide rates (dated 2021)	Aust35	Suicide prevention training site	Website	Yes
Worksafe Queensland	<a href="https://www.worksafe.qld.gov.au/news-and-events/newsletters/esafe-newsletters/esafe-editions/esafe-construction/july-2021/mates-in-construction-milestone-in-supporting-workers">https://www.worksafe.qld.gov.au/news-and-events/newsletters/esafe-newsletters/esafe-editions/esafe-construction/july-2021/mates-in-construction-milestone-in-supporting-workers</a>	MATES in construction - milestones for supporting workers	Aust53	Notice about Mates with links - <a href="https://www.worksafe.qld.gov.au/resources/campaigns/safe-work-month-2021/resources/presentations/suicide-prevention-for-young-workers-in-the-construction-industry">https://www.worksafe.qld.gov.au/resources/campaigns/safe-work-month-2021/resources/presentations/suicide-prevention-for-young-workers-in-the-construction-industry</a>	Advice/info/promo and links/resources	Yes

Organisation	URL	Title	File	Detail	Type	Useful?
World economic forum	<a href="https://www.weforum.org/agenda/2020/04/occupations-highest-covid19-risk/">https://www.weforum.org/agenda/2020/04/occupations-highest-covid19-risk/</a>	These are the occupations with the highest COVID-19 risk	global9	Map of high-risk occupations	Link to research/report/guidelines/courses	Yes
MBIE	<a href="https://www.mbie.govt.nz/dmsdocument/11600-construction-factsheet">https://www.mbie.govt.nz/dmsdocument/11600-construction-factsheet</a>	Construction fact sheet - not on mental health	NZ5		Factsheet	Yes
Axon, Mates in Construction, mental health foundation	<a href="chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fsecure.hasnz.org%2Fdownloads%2FDownloadView_MentalHealthinConstructionGuide29Aug2019_CHASNZ.pdf&amp;clen=1349098&amp;chunk=true">chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fsecure.hasnz.org%2Fdownloads%2FDownloadView_MentalHealthinConstructionGuide29Aug2019_CHASNZ.pdf&amp;clen=1349098&amp;chunk=true</a>	Mental health in construction: Information for managers in the construction industry	NZ18		Link to research/report/guidelines/courses	Yes
BRANZ (NZ)	<a href="https://www.branz.co.nz/about/corporate-publications/connecting-branzs-annual-review-2021/investigating-drivers-of-poor-mental-health-in-the-industry/">https://www.branz.co.nz/about/corporate-publications/connecting-branzs-annual-review-2021/investigating-drivers-of-poor-mental-health-in-the-industry/</a>	The mental health and wellbeing of small and medium-sized construction firms in New Zealand	NZ1		Link to research/report/guidelines/courses	Yes

