



Disaster preparedness survey 2021



Introduction, objectives and methodology	3
Summary of key findings	5
How prepared are New Zealanders?	11
Do New Zealanders know what to do in an emergency?	18
Barriers	25
Triggers	40
Communications	46
Earthquake drills	49
Information sources	51
Ensuring resilient communities	54
Emergency situations	56
Appendix	60

Introduction, objectives and methodology



Introduction & Objectives

The National Emergency Management Agency commissioned this research to understand the state of preparedness for a disaster amongst individuals and households in New Zealand.

The specific objectives of the research are to:

- Identify the **level of preparedness** amongst New Zealanders and their households. In particular if they've taken any steps to prepare or plan for emergencies in the last 12 months.
- Determine if New Zealanders know what **actions to take** during or following an earthquake or other disaster, particularly if they are near the coast.

Methodology

In total, 1,001 telephone interviews were carried out with New Zealanders aged 15 and over, from 19 May to 21 June, 2021.

Thirty percent of the interviews were conducted by calling landline telephones (300 interviews) and seventy percent were conducted by calling mobile telephones (701 interviews). In 2020 interviews were carried out 50%/50% landline/mobile and prior to 2019 all interviews were conducted by calling landlines.

The maximum margin of error is +/- 3.1 percentage points at the 95% confidence level (for a simple random sample).

The overall results have been weighted to 2018 Census figures to align the data with Census counts for age and gender.

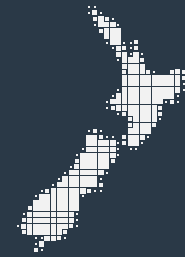
Notes for reading the report: Throughout the report the term 'New Zealanders' is used to refer to those 15 and over who currently live in New Zealand.



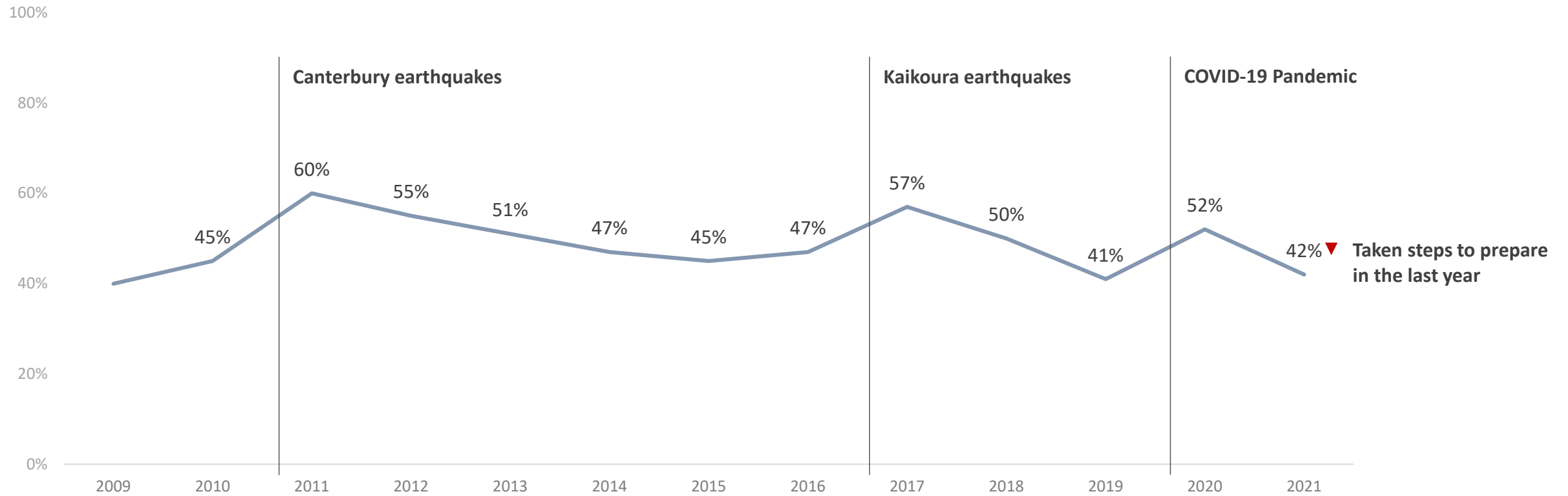
Summary of key findings



Actions taken to prepare in the last year



The number of New Zealanders who've taken steps to prepare themselves or their household for a disaster has decreased in 2021. This is the usual pattern in the years after a strong catalyst, as shown in the chart below.



▲ Significant increase/decrease since 2020

42% ▼ Taken steps to prepare in the last year

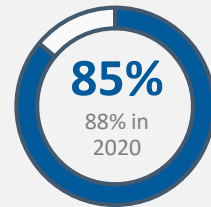
Level of preparedness



Over eight in ten New Zealanders have taken at least one action to be prepared for an emergency – they're most likely to have emergency supplies available, such as spare food, toilet paper, torch, spare batteries, etc. One in five New Zealanders are fully prepared at home.

Level of preparedness

Done at least one action*



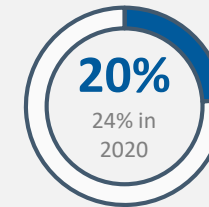
Household discussed or planned what to do in a disaster*, and/or

Have stored at least 9 litres of water for each household member*, and/or

Have emergency supplies, e.g., spare food, toilet paper, torch, spare batteries etc*, and/or

Have a getaway bag with emergency items*

Prepared at home*



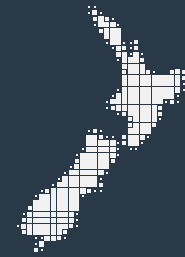
Household discussed or planned what to do in a disaster*, and

Have stored at least 9 litres of water for each household member*, and

Have emergency supplies, e.g., spare food, toilet paper, torch, spare batteries etc*, and

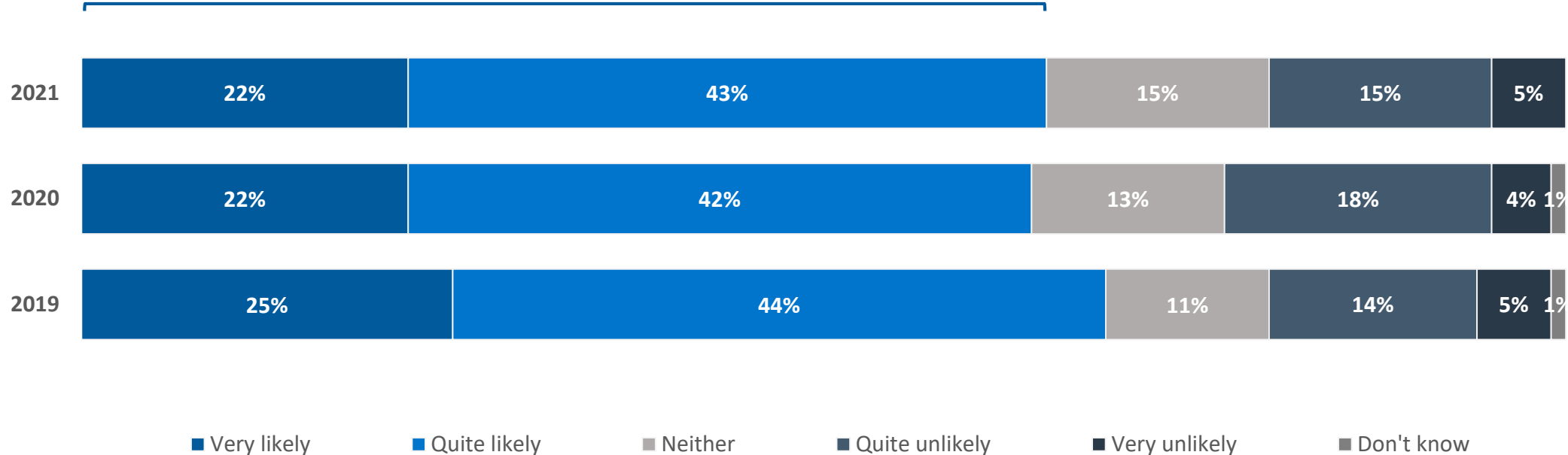
Check emergency survival items at least once a year*

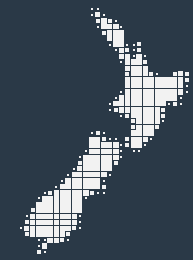
Likelihood to Prepare



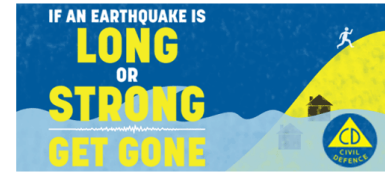
New Zealanders continue their strong intentions to improve their level of preparedness over the next year.

65% of New Zealanders say they are likely to take steps to prepare for a disaster in the next year





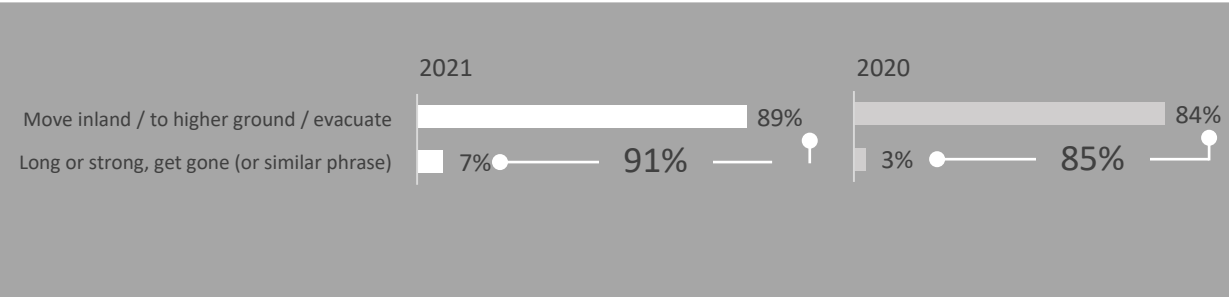
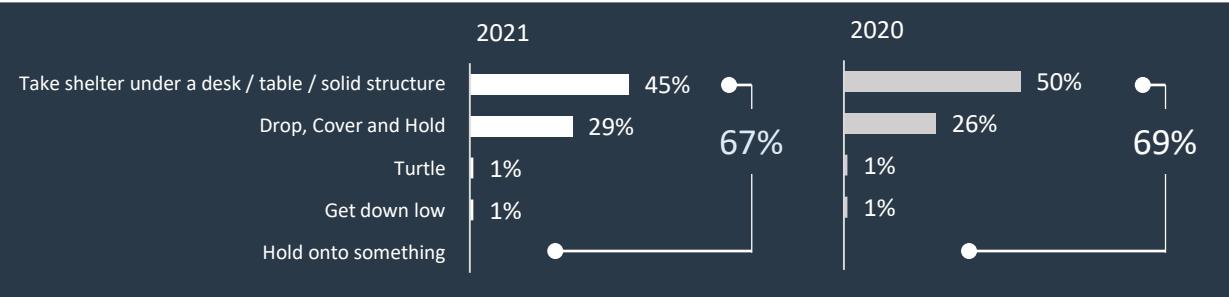
Most New Zealanders continue to know what actions they should take in the event of an earthquake or a tsunami.



Two thirds (67%) of New Zealanders know at least one correct action to take during a earthquake (in line with 69% in 2020).



Nine in ten New Zealanders know to evacuate if they are near the coast and a long or strong earthquake happens (up from 85% last year)



▲ Significant increase/decrease since 2020

Barriers and triggers to preparing



The research explored the incidence and impact of seven barriers to preparedness. When we assessed the incidence of each barrier (% of who have the barrier) by its impact (strength of its effect) one barrier was determined to be of high priority to address and a further two barriers were determined to be secondary priorities.

We also explored the incidence and impact of three triggers. Two are more effective motivators to get people to act.

Priority barrier



Lack of knowledge (affects 28%, high impact)

Lack of knowledge on how to prepare is a significant barrier for many New Zealanders.

Those who lack knowledge tend to say:

- 1) They don't have information about preparedness and are unsure about where to find these resources
- 2) They don't have a good understanding of the impacts of a disaster in their neighbourhood and the role of warning systems.

Secondary barriers



Likelihood of event (affects 43%, medium impact)

- New Zealanders who do not think about what disasters could occur in their area are much less likely to prepare



Optimism (affects 19%, high impact)

- Believing it's unlikely they will ever be involved in a disaster prevents many New Zealanders from being prepared

Effective triggers to encourage preparation



Social norm – what friends and family think (impacts 65%, high effect)

- New Zealanders are more likely to take action to get prepared themselves if they perceive that their friends and family think it's important to be prepared



Family concern (impacts 47%, medium effect)

- Thinking about what will happen to their family in a disaster is a relatively powerful trigger for motivating New Zealanders to prepare for a disaster

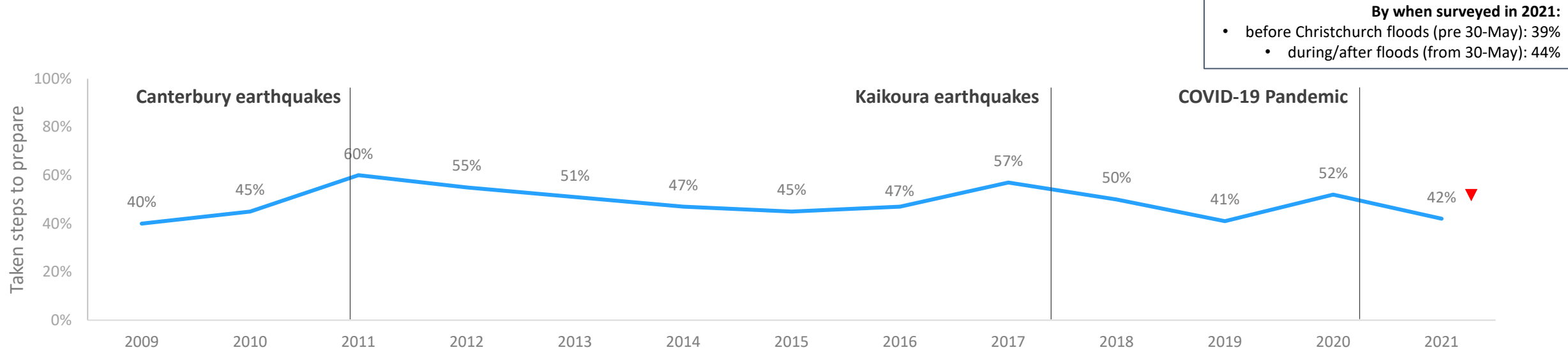
How prepared are New Zealanders?



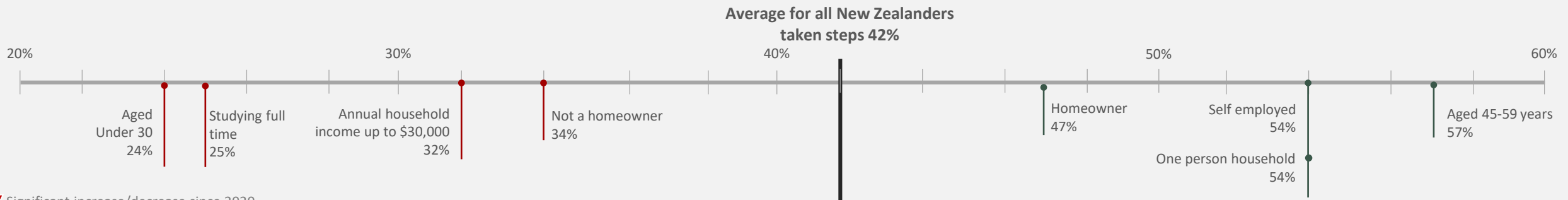
Taken steps to prepare in the last year



This year around four in ten New Zealanders say they have taken steps to prepare themselves or their household for a disaster in the past twelve months. This is a significant decrease from last year, and is in line with the 41% who reported having taken action in the 2019 survey.



The following groups are less likely than average to have taken steps to prepare for a disaster in the past twelve months: younger New Zealanders (aged under 30), those studying full time, people who do not own their own home, those who have a lower annual household income (under \$30,000).

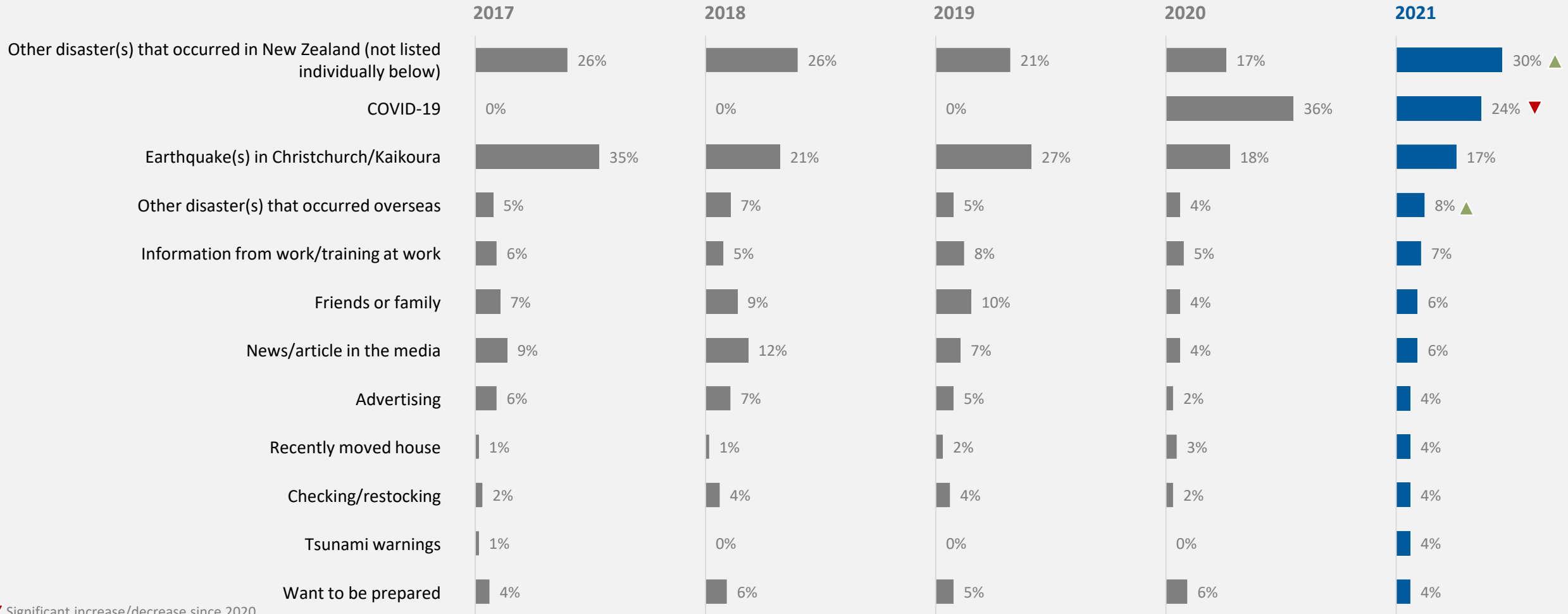


▲▼ Significant increase/decrease since 2020

Perceived prompts to take action



When asked what prompted these actions, the main prompts are disasters that directly affect New Zealanders



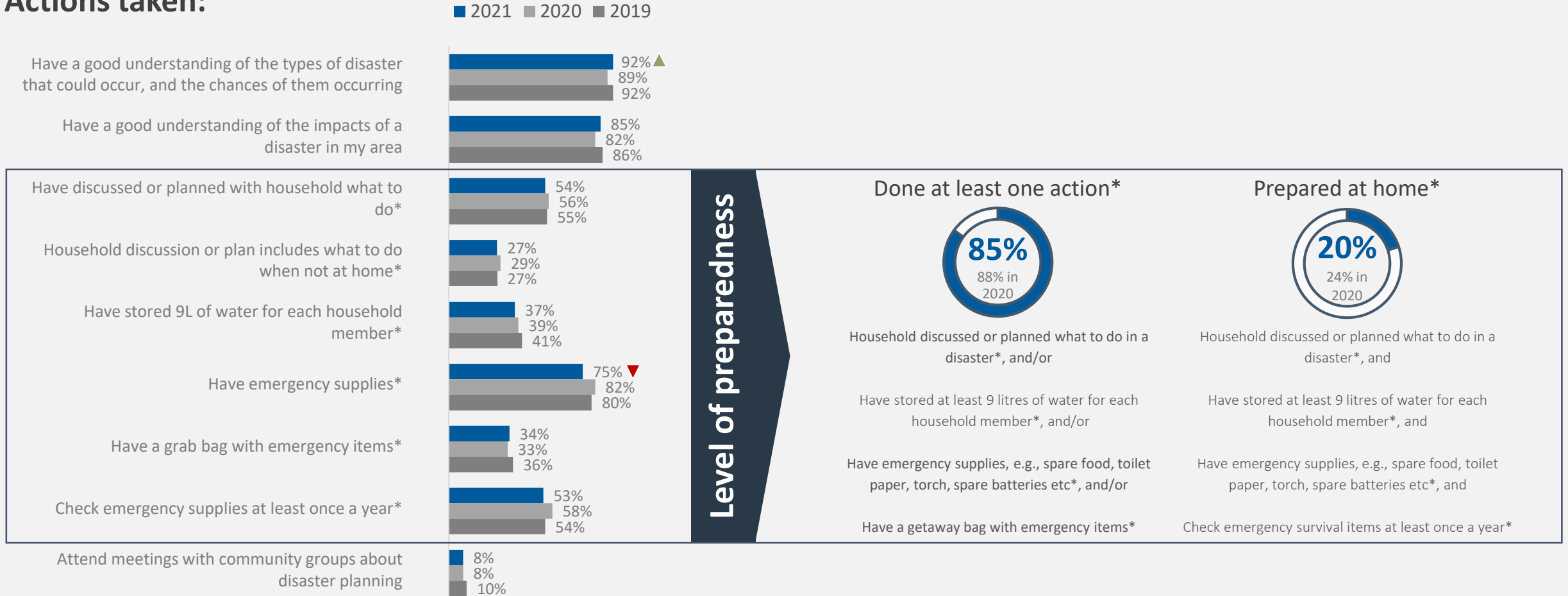
Source: Q2i What prompted you to do this?
 Base: Those who have taken steps to prepare themselves or their household in the last 12 months (2017 n=573; 2018 n=509; 2019 n=446; 2020 n=535; 2021 n=454)
 Results 2% and under in 2020 are not shown

Total level of preparedness



When we measured specific actions taken, this decreased level of preparedness is mainly driven by not having emergency supplies available, although there is also a drop in taking the majority of the other actions. One positive area is understanding, with more New Zealanders now saying they have a good understanding of what the effects would be from a disaster in their area (back to levels found in 2019).

Actions taken:



▲/▼ Significant increase/decrease since 2020

Source: Q2e Which of the following statements apply to you? | Q2f Does your household emergency plan or discussion include what to do when you are not at home?

Base: All respondents (2019 n=1,031; 2020 n=1,001)

Note: Preparedness levels are not mutually exclusive.

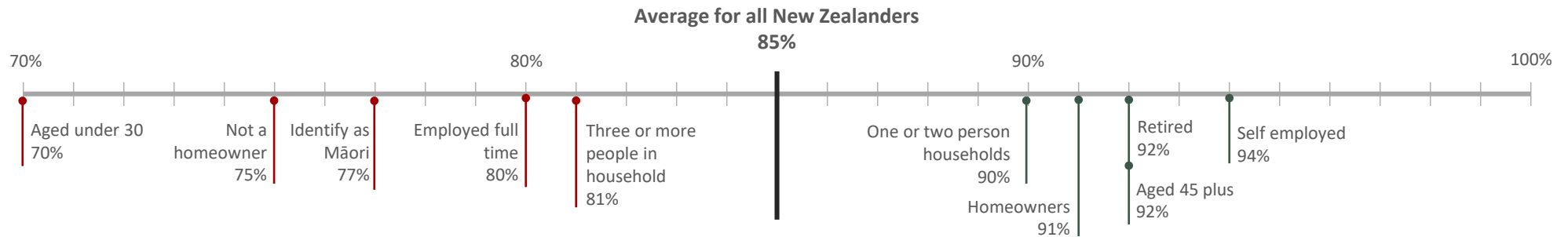
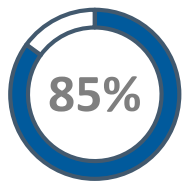
Who is least likely to be prepared?



Younger New Zealanders, those who do not own their own home, and those who live in larger households are least likely to have done at least one action to prepare themselves or their household for a disaster.

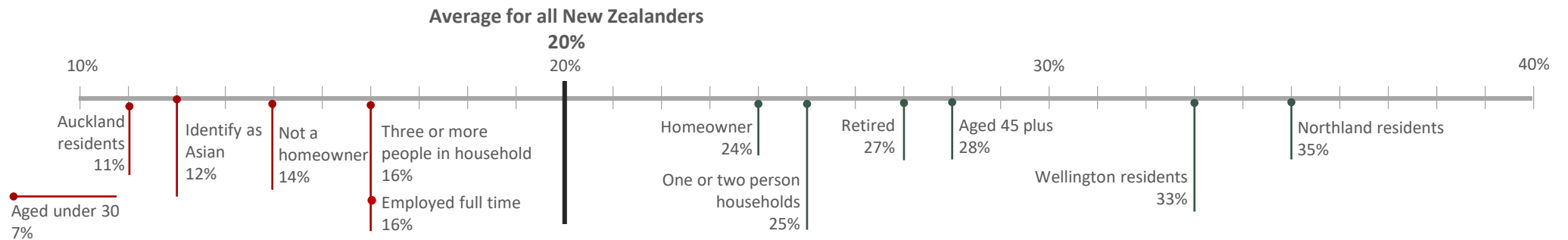
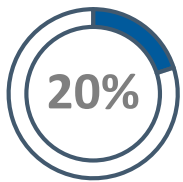
The following groups are less likely than average to have done at least one action for preparedness: younger New Zealanders, those who are not homeowners, those who identify as Māori, those employed full time, those who live in larger households.

Done at least one action*



The following groups are less likely than average to be prepared at home: younger New Zealanders, those who live in Auckland, those who identify as Asian, those who are not homeowners, those who live in larger households, those who are employed full time.

Prepared at home*



*See previous slide for full definition.

Source: Q2e Which of the following statements apply to you? | Q2f Does your household emergency plan or discussion include what to do when you are not at home?

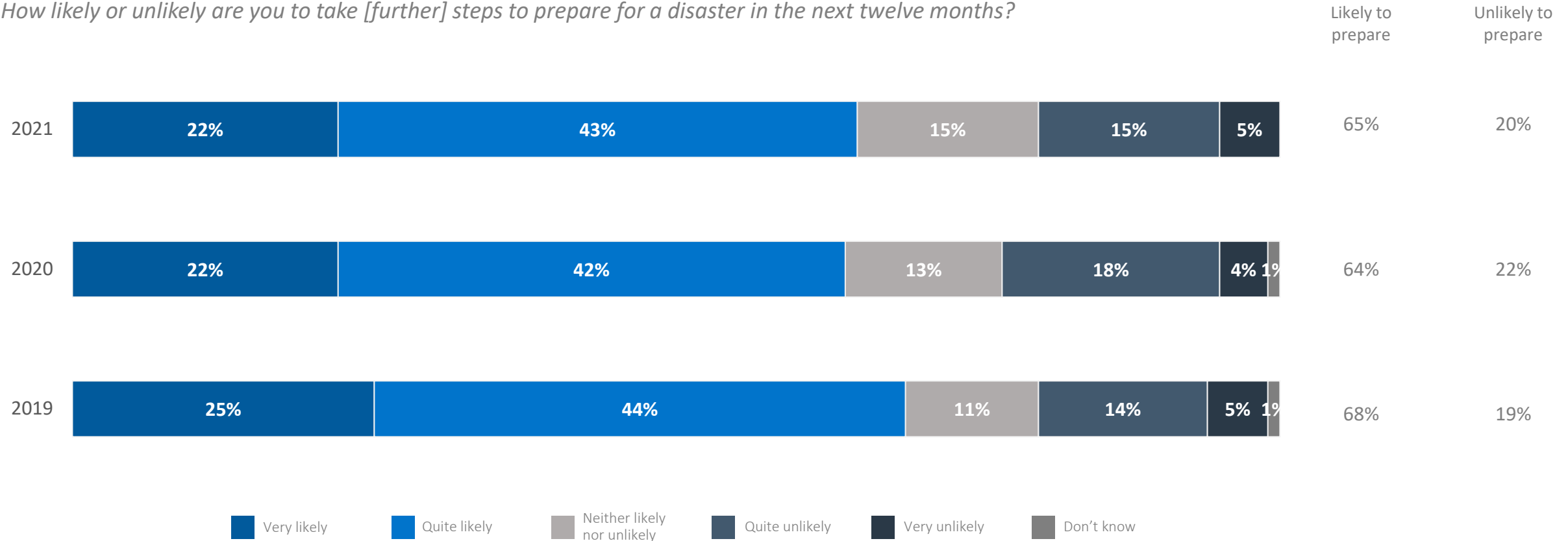
Base: All respondents (2021 n=1,001)

Likelihood of preparing



Two-thirds of New Zealanders say they are likely to take action, or further action, to prepare for a disaster in the next twelve months.

Q. How likely or unlikely are you to take [further] steps to prepare for a disaster in the next twelve months?



Source: Q3a How likely or unlikely are you to take [further] steps to prepare for a disaster in the next twelve months?

Base: All respondents (2019 n=1,031; 2020 n=1,001; 2021 n=1,001)

Note: Reference time changed from 'six months' to 'twelve months' in 2019.

Top 10 things to do to be prepared

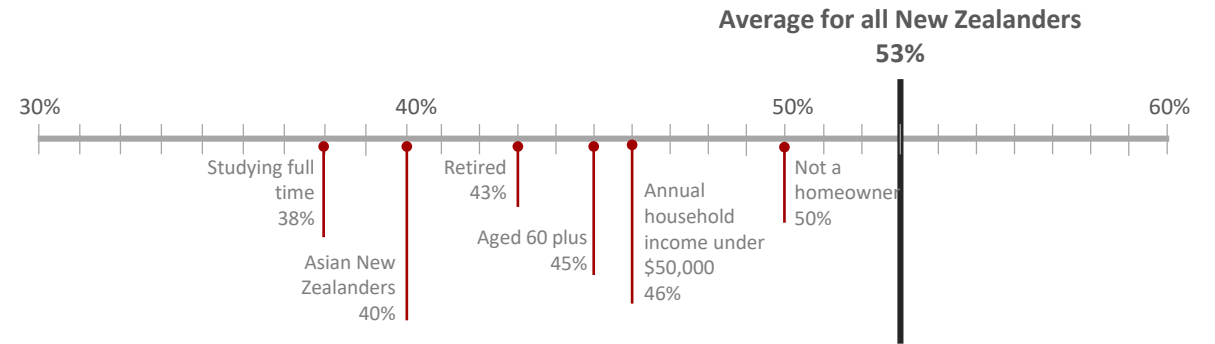


New Zealanders believe the most important things they can do to prepare for a disaster are to have stored food and water, and the necessary emergency items

Top ten perceived actions to be prepared:



Groups less likely than average to mention at least one of: water, food, emergency plan, emergency items or a grab bag:



Note: New wording in 2021 (previously: "What do you think is the single most important thing you could do, in order to be prepared for a disaster?")
 Source: Q2di What one thing could you do to make yourself more prepared for a disaster than you are currently?
 Base: All respondents (2021 n=1,001)
 Results 2% and under are not shown

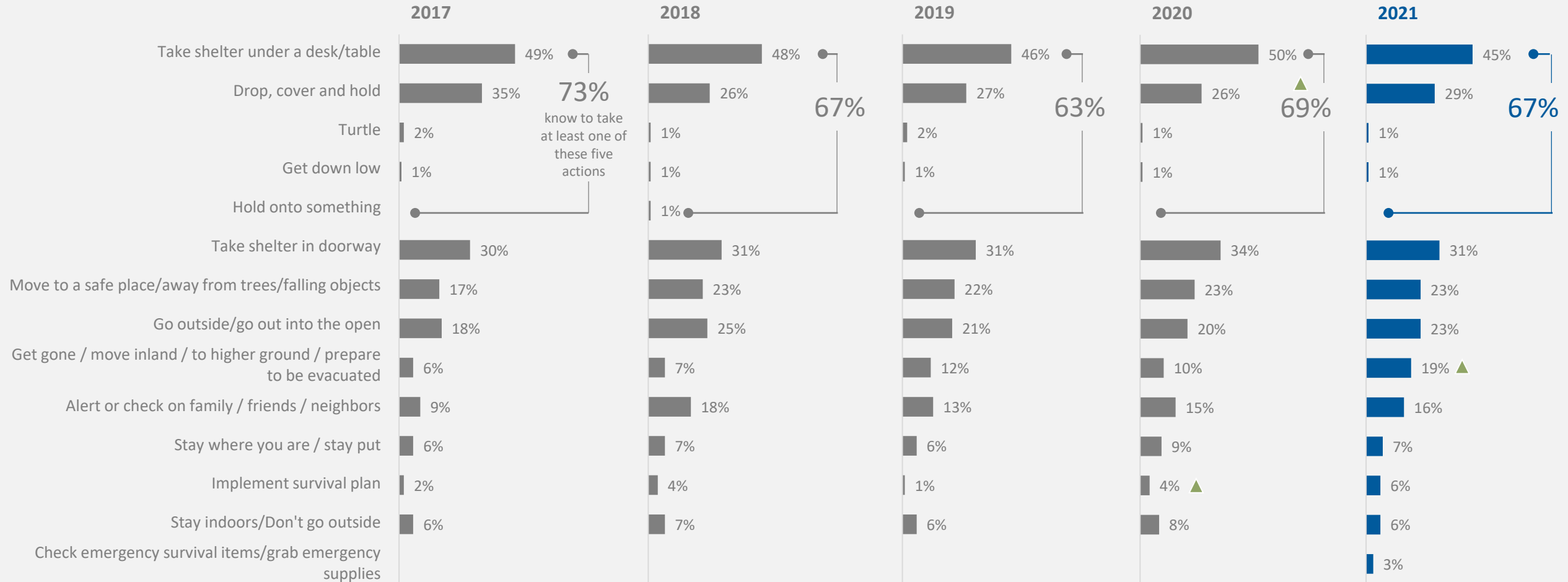
Do New Zealanders know what to do in an emergency?



Actions to take during a strong earthquake



Two thirds of New Zealanders know what to do during a strong earthquake.

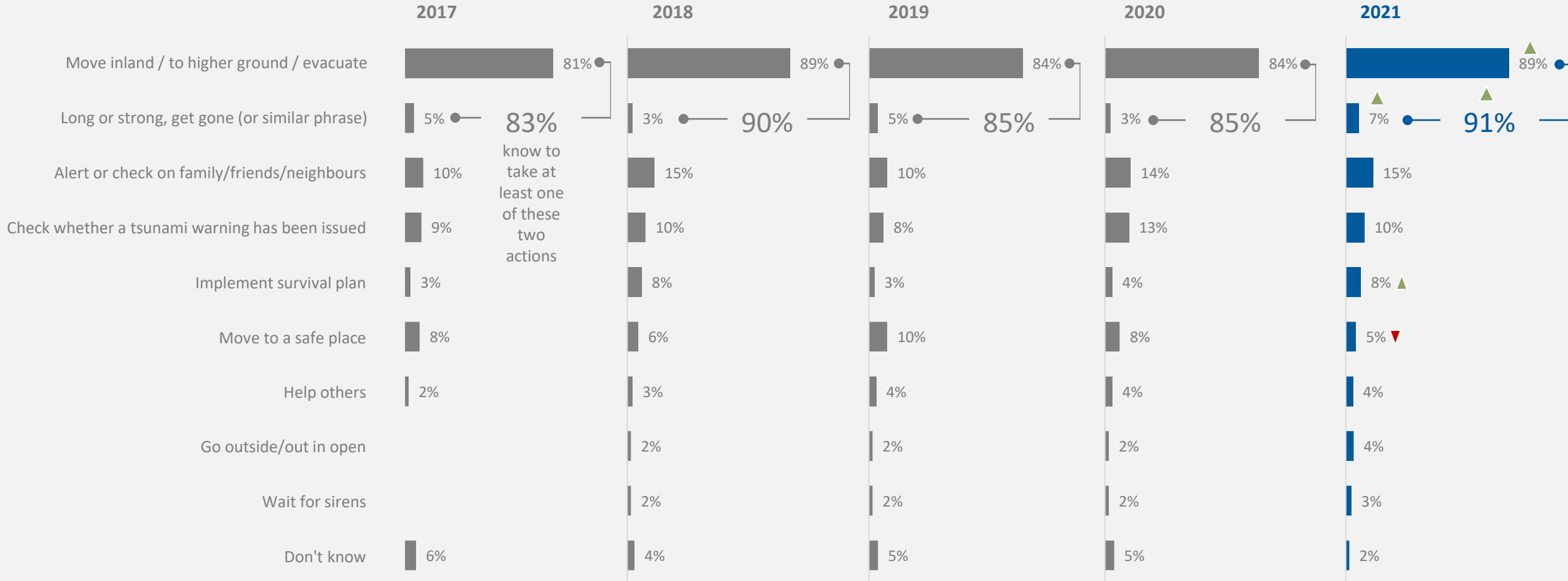


▲▼ Significant increase/decrease since 2020

Actions to take when near the coast and a long or strong earthquake happens



Nine in ten New Zealanders know they need to 'Get Gone' if they are near the coast and a long or strong earthquake happens. This is a significant increase compared to last year



▲ Significant increase/decrease since 2020

Source: Q4ei Imagine that you are near the coast and a long or strong earthquake happened. What action should you take?

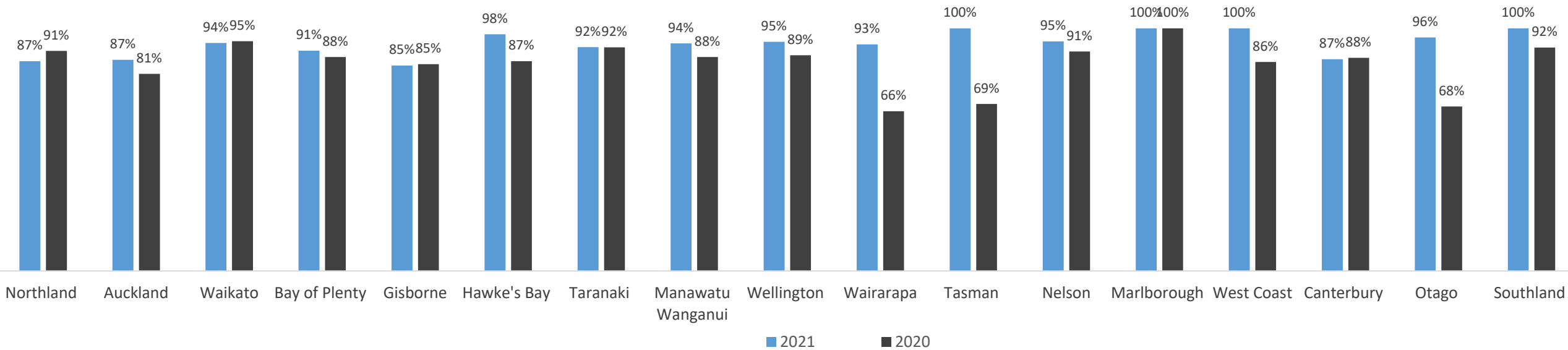
Base: All respondents (2017, 2018 n=1,000; 2019 n=1,031; 2020 n=1,001; n=1,001)

Results 3% and under in 2020 are not shown

Actions to take when near the coast and a long or strong earthquake happens, cont.



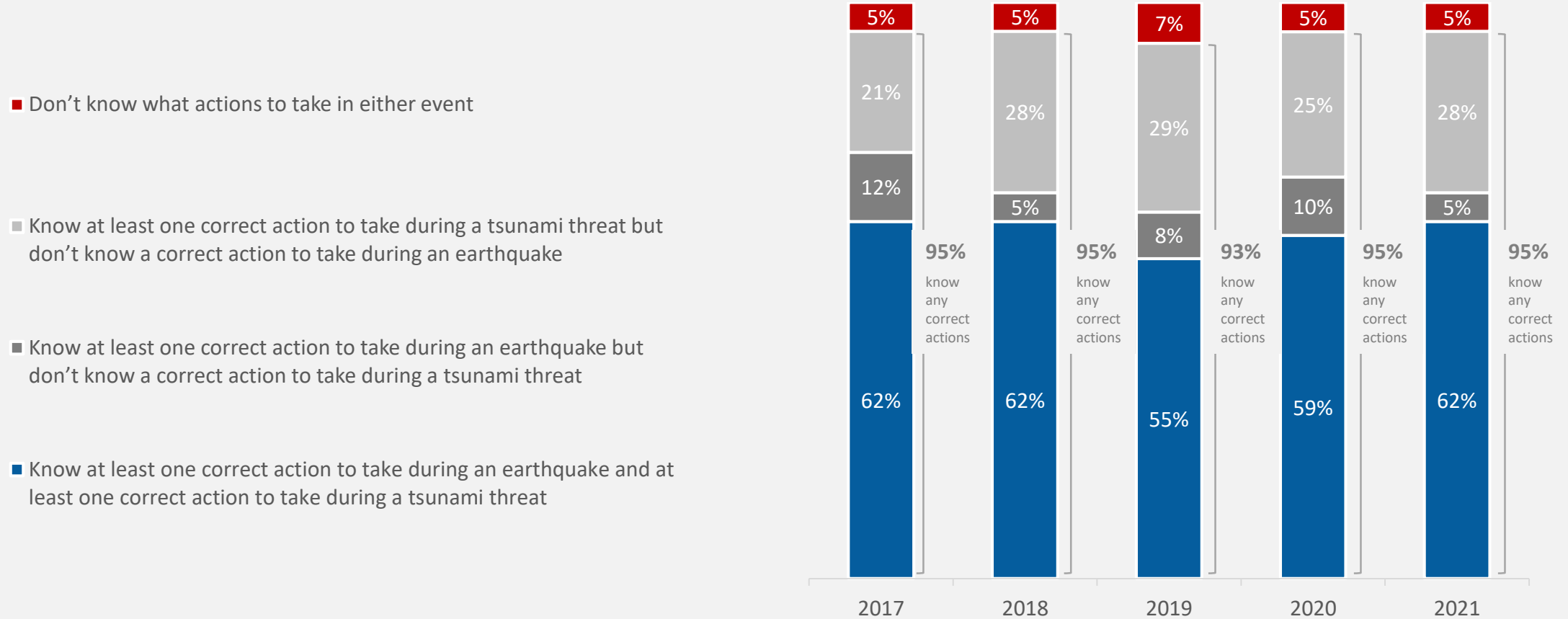
Actions to taken near the coast if a long or strong earthquake happens:
 There's been an increase in awareness of what actions need be taken across many of the regions this year



Knowledge that will keep New Zealanders safe during and following a strong earthquake



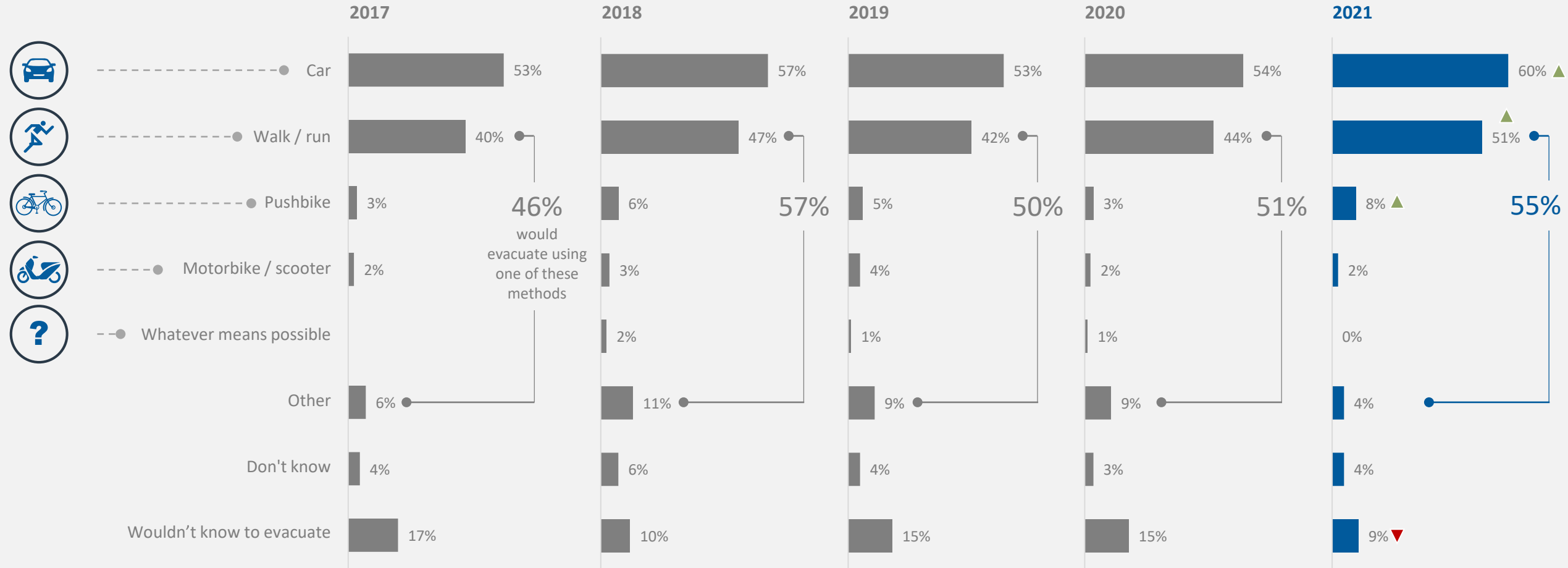
Six in ten New Zealanders know what to do during an earthquake and know what to do following a long or strong earthquake.



Planned evacuation methods



Over half of New Zealanders say they would evacuate using a method other than a car, which is an improvement (although not significant) compared to last year.

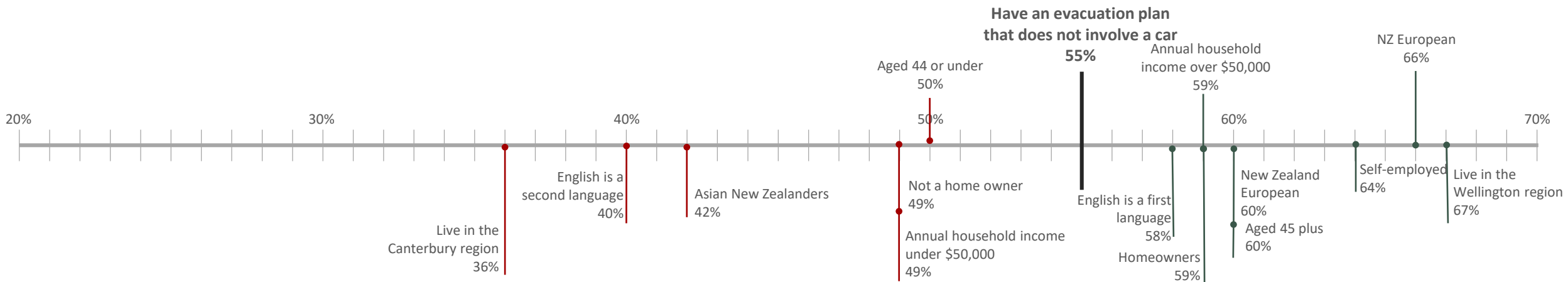
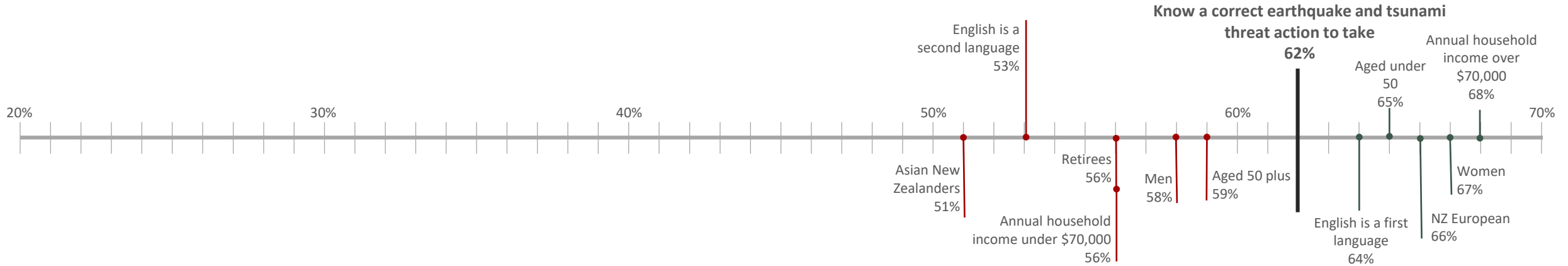


▲ ▼ Significant increase/decrease since 2020

Who is least likely to know what to do?



New Zealanders who speak English as a second language, Asian New Zealanders, those with a lower household income, those aged over 50, and retirees are least likely to know both the correct earthquake actions and the correct tsunami actions.










BARRIERS



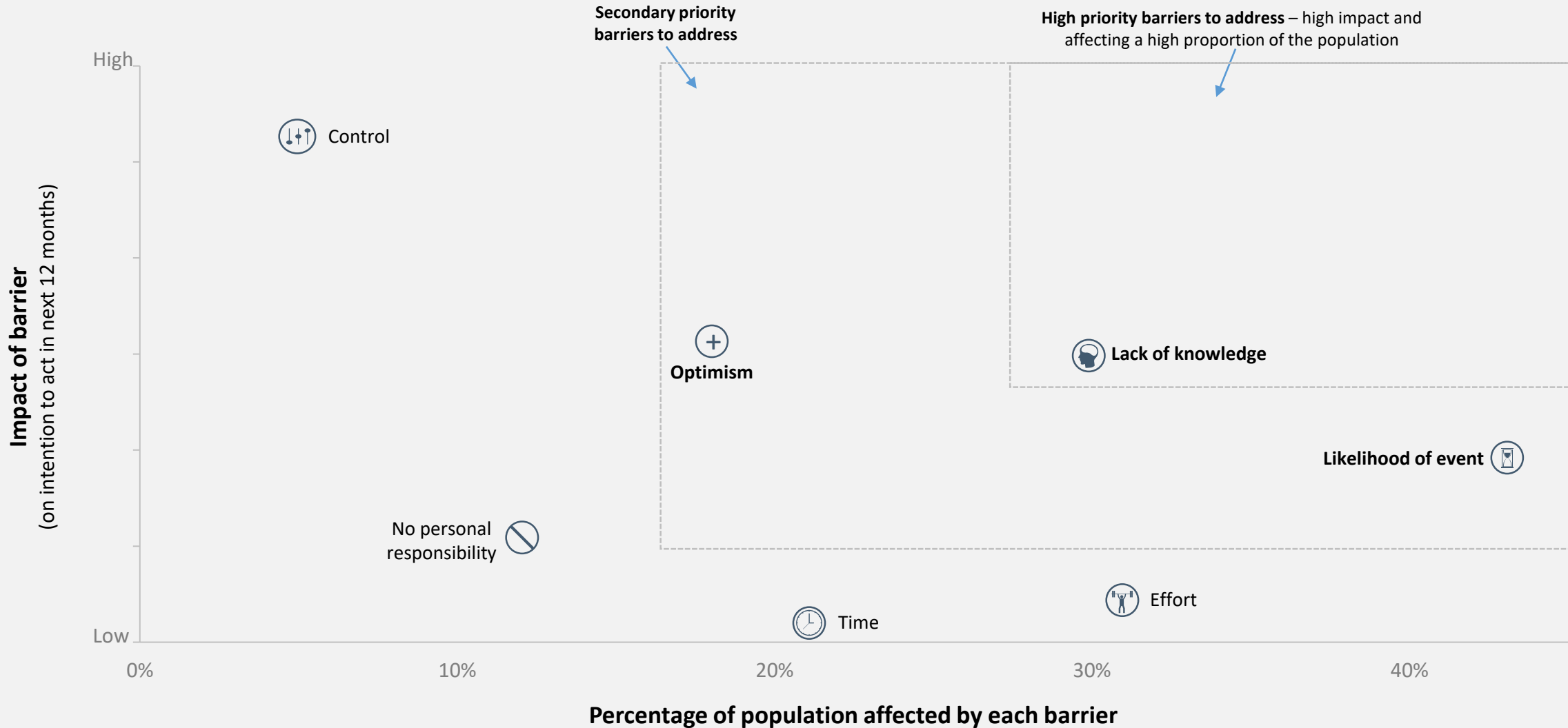
The research specifically explored the incidence and impact of seven barriers to preparedness



Barriers

 Lack of knowledge	<i>How much, if anything do you know about preparing for a disaster? (Q2a)</i>
 Likelihood of event	<i>I don't often think about what disasters could happen in my area (Q6a_2)</i>
 Optimism	<i>It's unlikely I'll ever be in a disaster (Q6a_9)</i>
 Effort	<i>How easy or difficult do you think it is to prepare for a disaster? (Q2c)</i>
 Control	<i>What I do now will help to keep me and my household safe during a disaster (Q6a_7)</i>
 No personal responsibility	<i>People will be there to help following a disaster, so I don't really need to prepare in advance (Q6a_1)</i>
 Time	<i>There will always be adequate warning before a disaster strikes (Q6a_3)</i>

When we assessed the incidence of each barrier (% of population who have a barrier) by their impact (strength of its effect on likelihood to prepare), the main barrier to address is: lack of knowledge about what to do to prepare. The two secondary barriers to address are: complacency when it comes to knowing what disasters could happen in their area, and the belief that they will probably never experience a disaster first hand.



Primary and secondary barriers to address



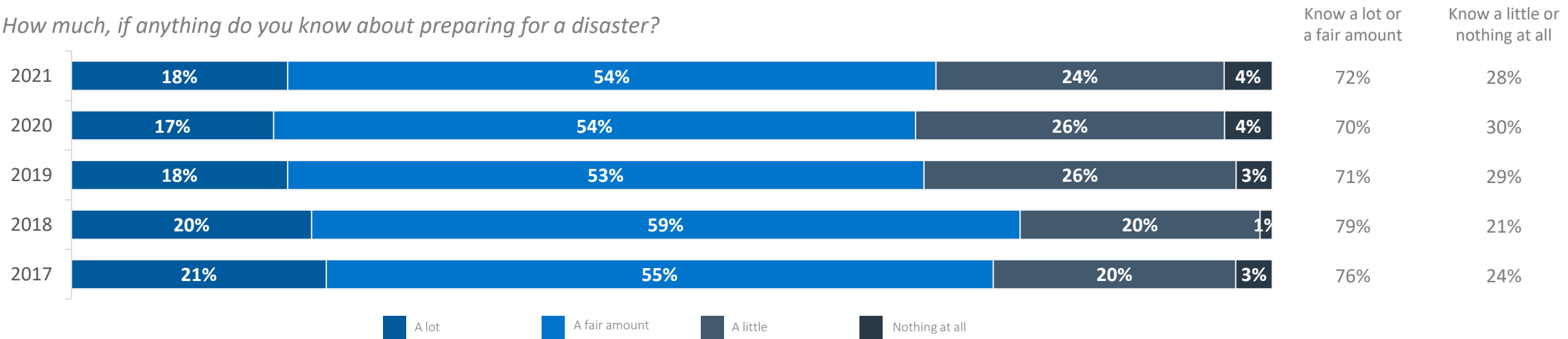


Lack of knowledge – primary barrier

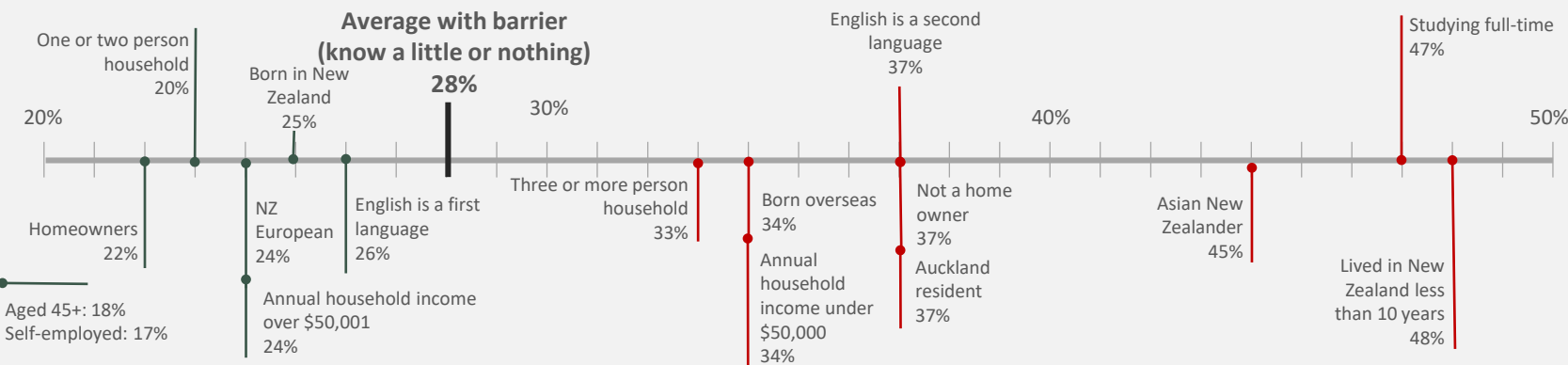


Nearly three in ten New Zealanders know little or nothing about preparing for a disaster, which is their main barrier to getting prepared.

Q. How much, if anything do you know about preparing for a disaster?



The following groups are significantly less likely or significantly more likely than average to have this barrier:



Those who know little or nothing about preparing for a disaster are less likely to have:

- Discussed or planned with household what to do in a disaster
- Check supplies at least once a year
- Stored enough water
- A grab bag



Lack of knowledge – primary barrier, cont.

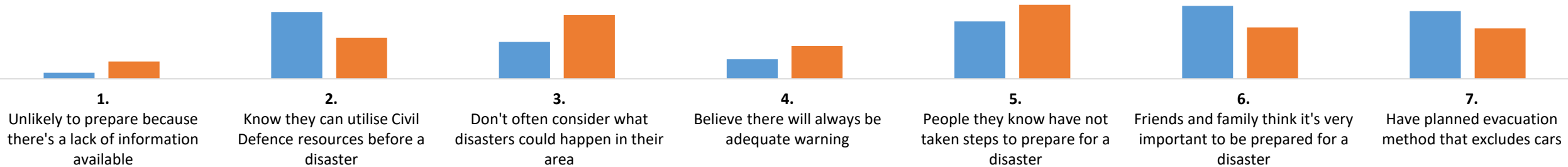


Knowledge gaps among those who feel they lack knowledge.

There are some key themes for those who say they know little or nothing about preparing for a disaster, when compared to those who say they know a lot or a fair amount: 1) having a lack of information about preparedness and where they can find resources, 2) not having a good understanding of the impacts of a disaster in their neighbourhood and the role of warning systems, 3) their peers not having prepared for a disaster or thinking it's important to prepare.

■ Those who say they know a lot / a fair amount about preparing for a disaster

■ Those who say they know little or nothing about preparing for a disaster



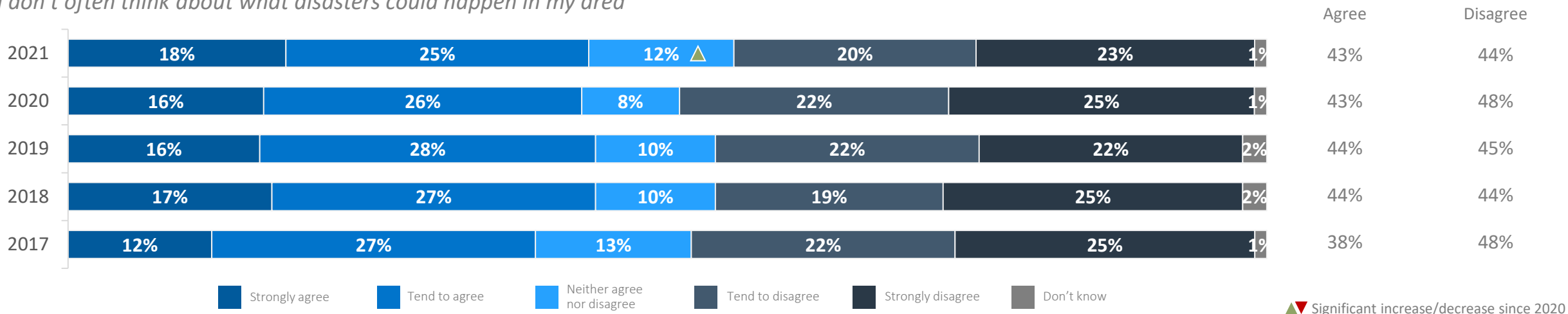


Likelihood of event – secondary barrier

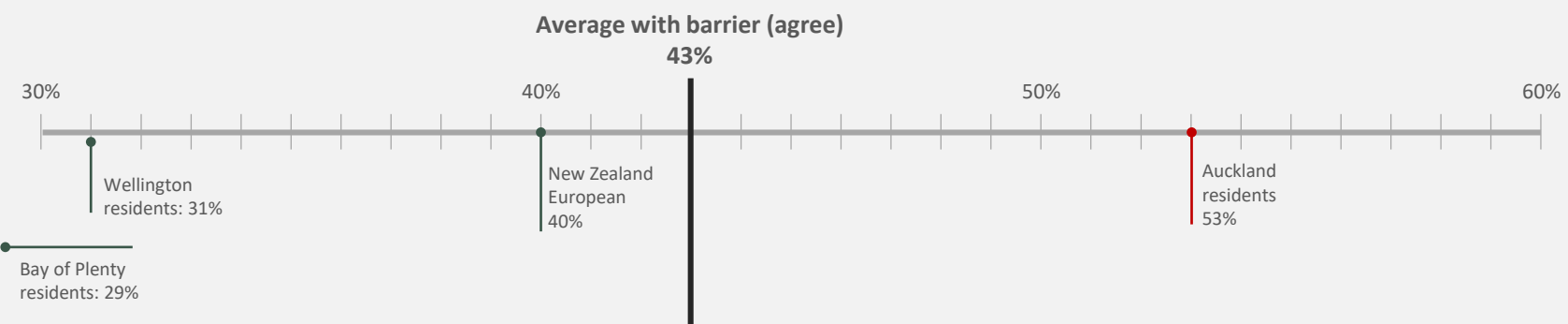


This barrier impacts a large proportion of the New Zealand population. Over four in ten New Zealanders don't often think about what disasters could happen in their area.

Q. I don't often think about what disasters could happen in my area



The following groups are significantly less likely or significantly more likely than average to have this barrier:



Those who don't often think about what disasters could happen in their area are less likely to have:

- A grab bag
- Stored sufficient water
- Discussed or planned with household what to do in a disaster
- Check supplies at least once a year

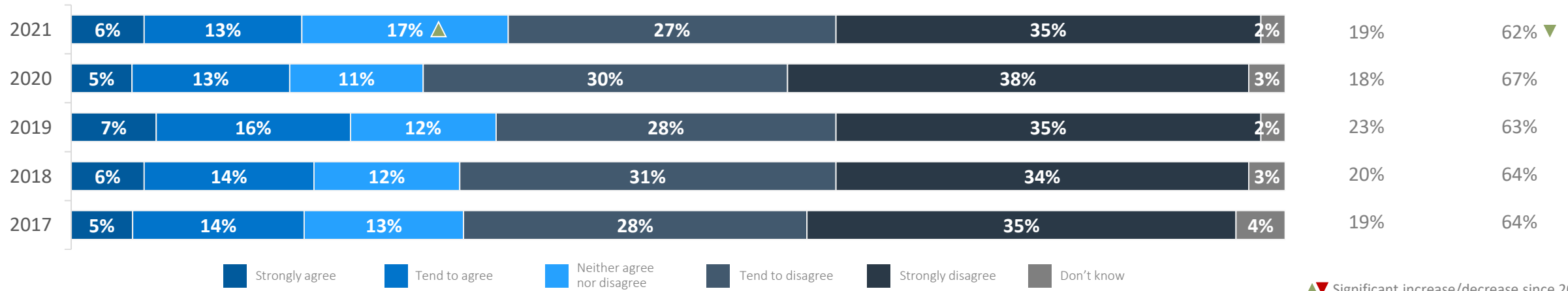


Optimism – secondary barrier



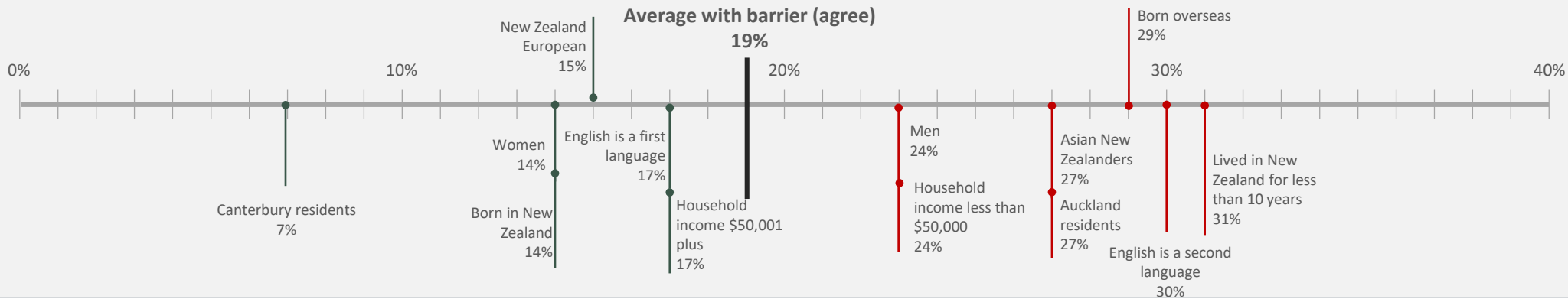
This year fewer New Zealanders disagree it's unlikely they will ever be in a disaster (62%, down from 67% in 2020).

Q. It's unlikely I'll ever be in a disaster



Agree	Disagree
19%	62%
18%	67%
23%	63%
20%	64%
19%	64%

The following groups are significantly less likely or significantly more likely than average to have this barrier:



Those who think it's unlikely they will ever be in a disaster are less likely to have:



A grab bag

Lower priority barriers



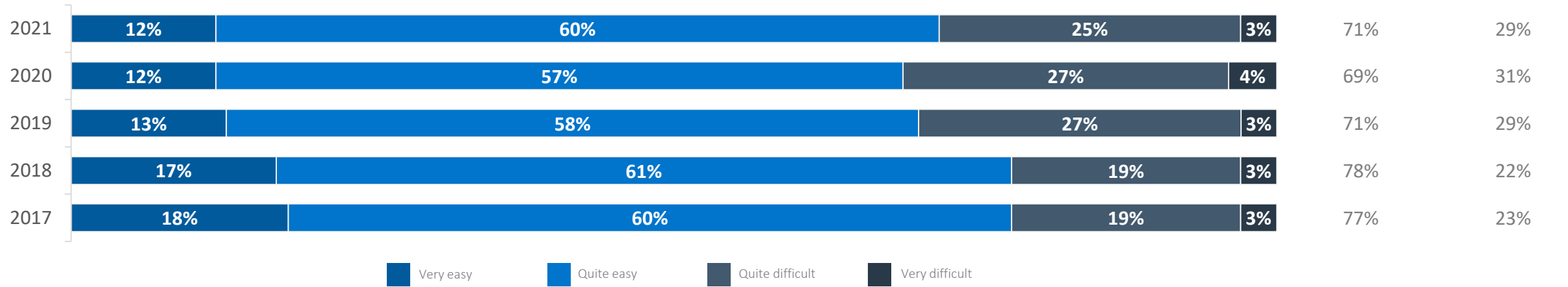


Effort

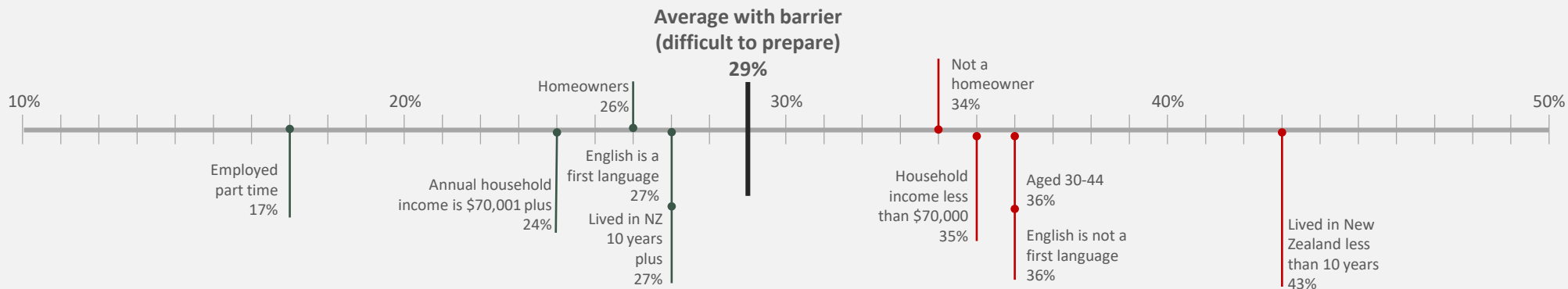


Three in ten New Zealanders feel it is difficult to prepare for a disaster.

Q. How easy or difficult do you think it is to prepare for a disaster?



The following groups are significantly less likely or significantly more likely than average to have this barrier:



Those who think it is difficult to prepare for a disaster are less likely to have:

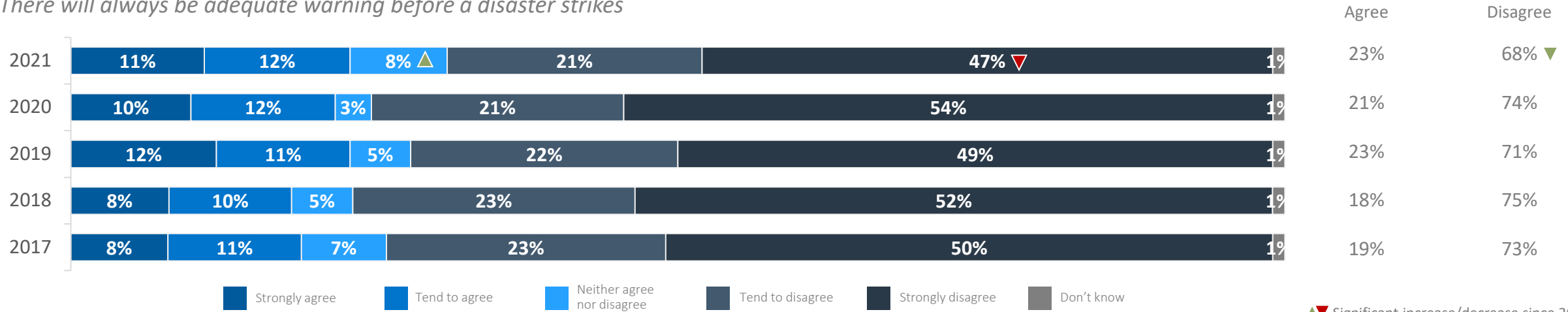


Discussed or planned with household what to do in a disaster



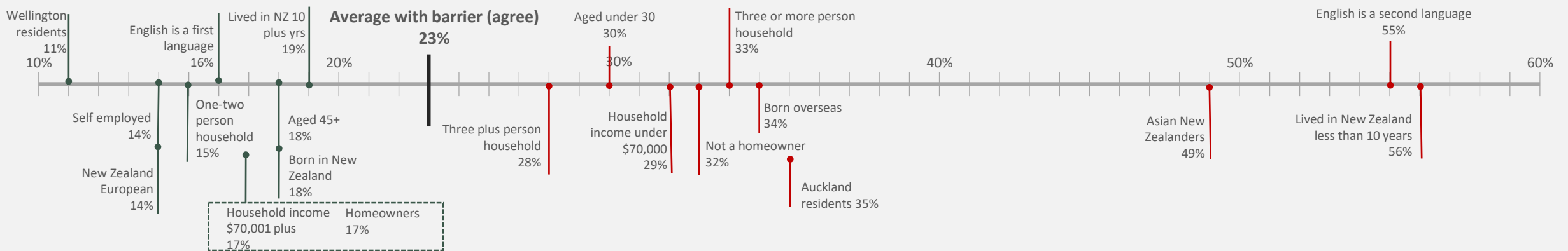
Nearly a quarter of New Zealanders believe there will always be adequate warning before a disaster strikes.

Q. There will always be adequate warning before a disaster strikes



▲▼ Significant increase/decrease since 2020

The following groups are significantly less likely or significantly more likely than average to have this barrier:



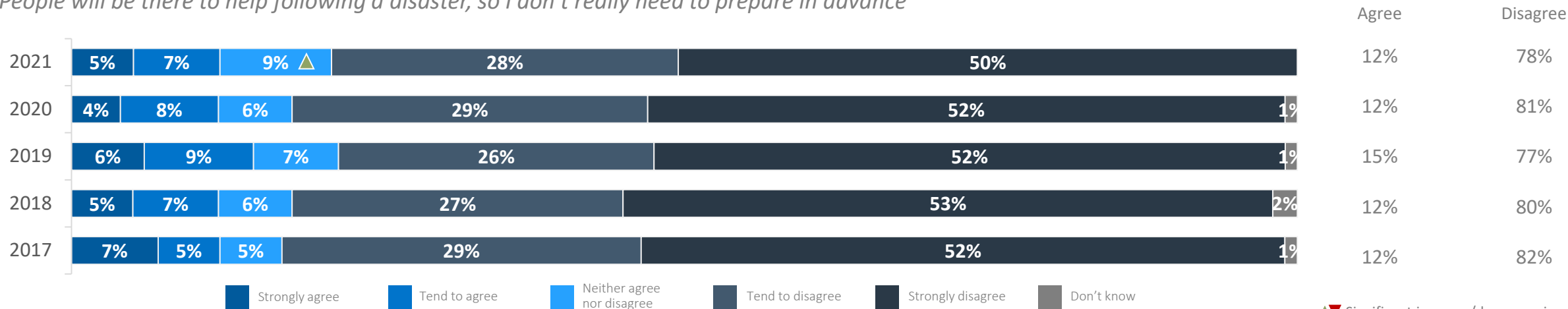


No personal responsibility



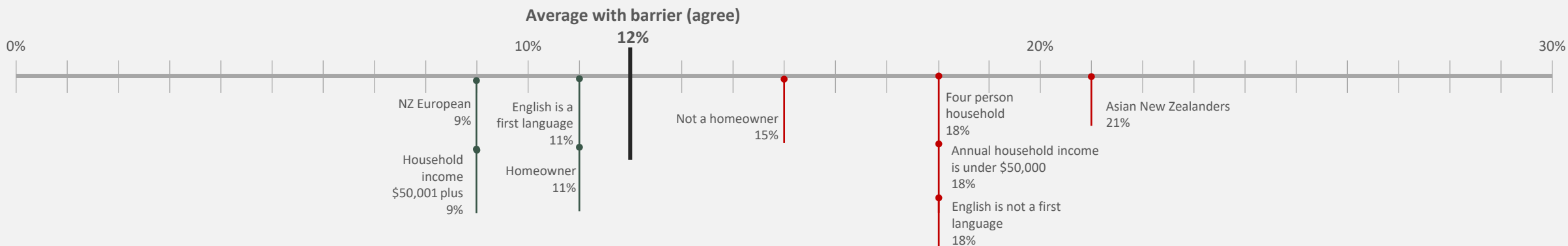
One in ten of the New Zealand population believe others will be there to help them following a disaster so they don't really need to prepare now.

Q. People will be there to help following a disaster, so I don't really need to prepare in advance



▲▼ Significant increase/decrease since 2020

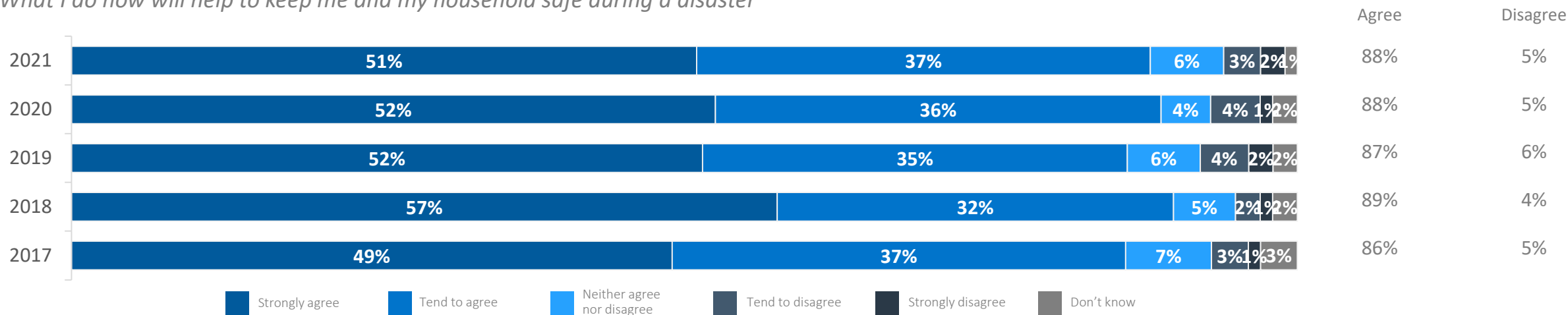
The following groups are significantly less likely or significantly more likely than average to have this barrier:





Just five percent of New Zealanders believe prior preparation will not keep themselves and their household safe in a disaster. However, for those who have this barrier it has a large impact on their likelihood to prepare.

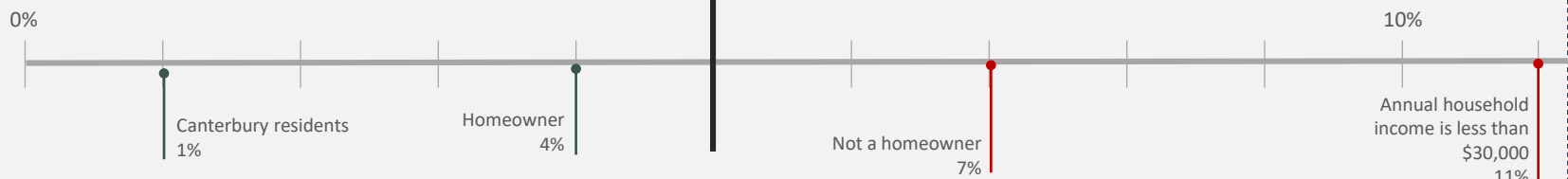
Q. What I do now will help to keep me and my household safe during a disaster



The following groups are significantly less likely or significantly more likely than average to have this barrier:

Average with barrier (disagree)

5%



Those who don't believe what they do now will keep themselves and their household safe during a disaster are less likely to have:



A grab bag



Stored sufficient water



The necessary emergency supplies



Discussed or planned with household what to do in a disaster

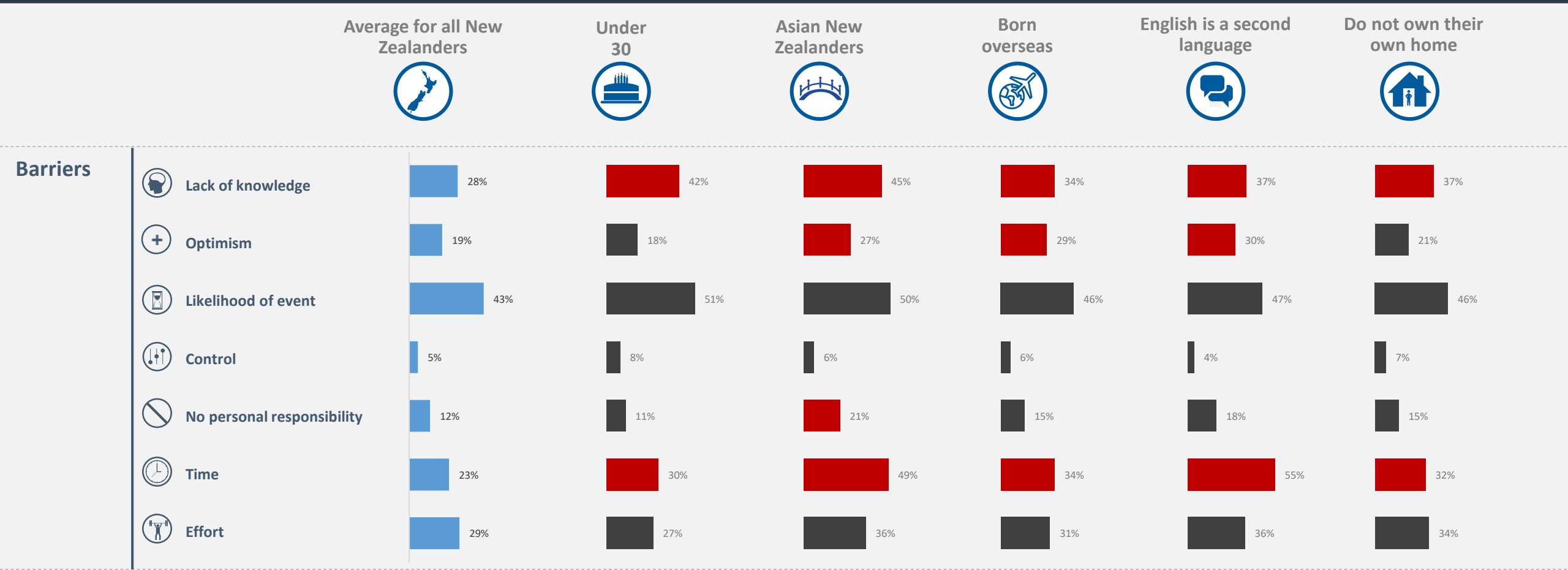


Check supplies at least once a year

Greatest barriers for those most at risk



The most at risk groups (i.e. the most under-prepared groups) have similar barriers to the overall population. However, lack of knowledge, time, and thinking there's unlikely to be a disaster tend to be significantly larger barriers for these groups.



■ | Significantly more of a barrier than average

TRIGGERS



The research also explored the incidence and impact of three triggers to get people to act



Triggers



Social norm

My friends and family think it's very important to be prepared for a disaster (Q6a_6)



Family concern

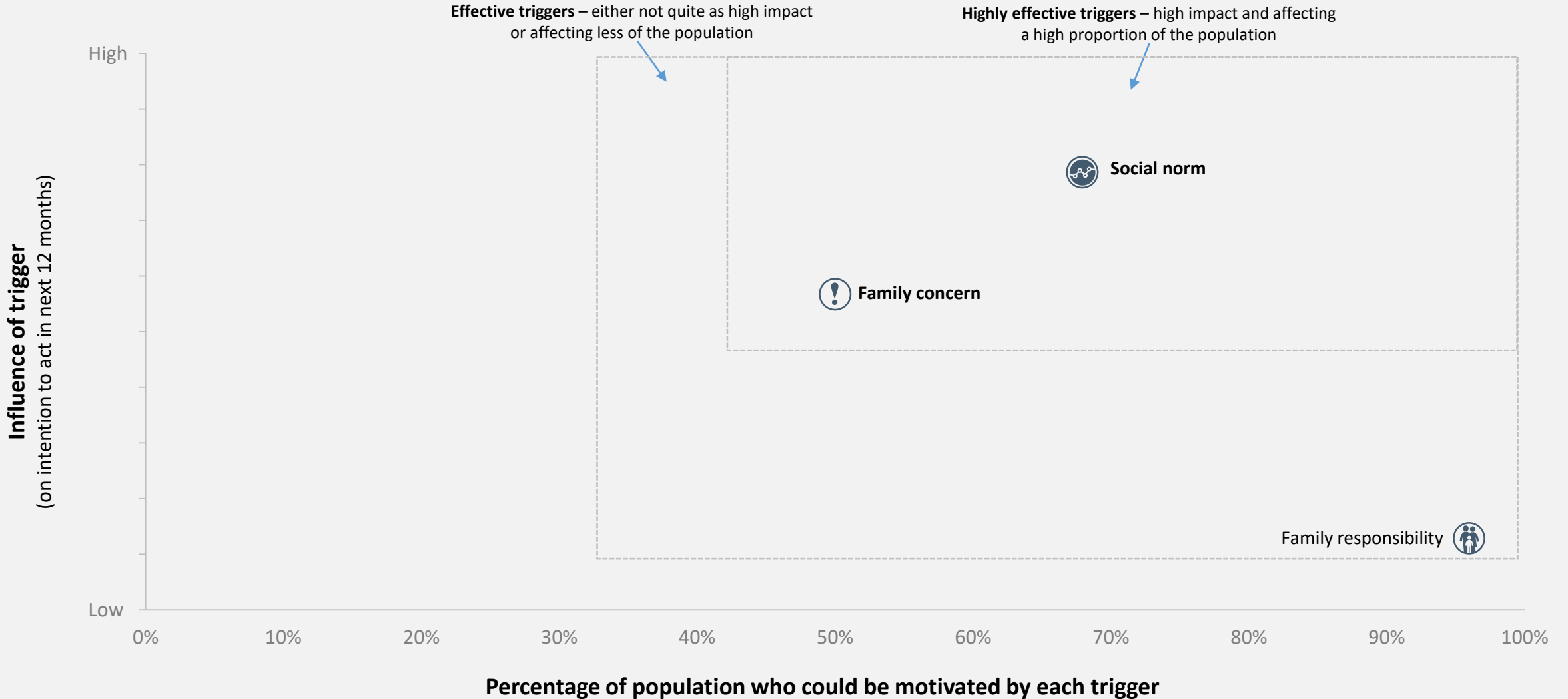
I often worry about what might happen to me or my family if there's a disaster (Q6a_8)



Family responsibility

It is my responsibility to look after myself and my family in a disaster (Q6a_4)

Of the three triggers, two stand out as being particularly effective: 1) friends and family thinking its important to be prepared and, 2) concern about what will happen to them and their family in a disaster



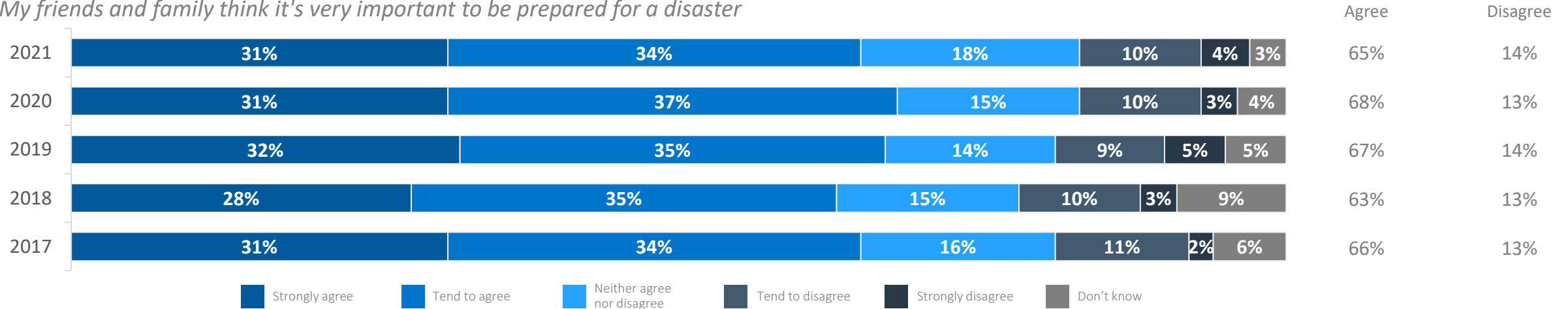


Social norm

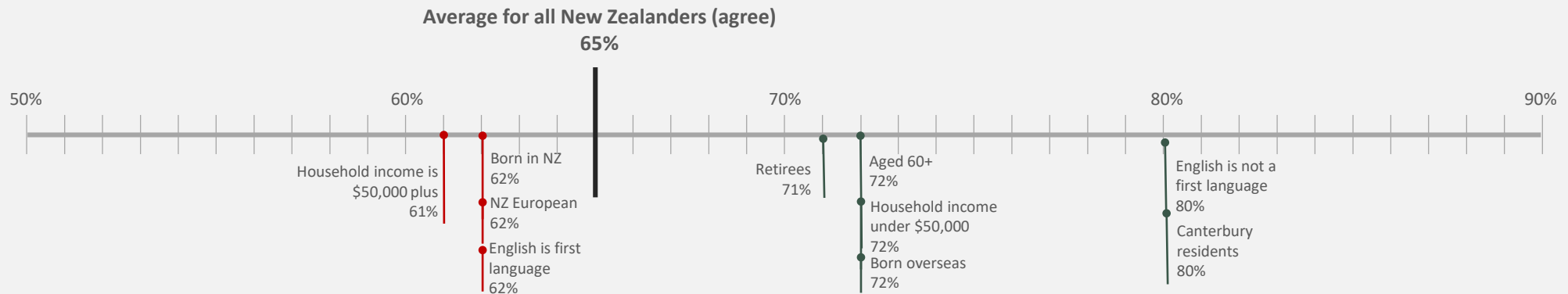


What friends and family think has the largest influence on how likely New Zealanders are to prepare for a disaster. Eight in ten New Zealanders who speak English as a second language say their friends and family think it's important, which may be an effective channel of communication and motivation to get this group prepared.

Q. My friends and family think it's very important to be prepared for a disaster



The following groups are significantly less likely or significantly more likely than average to be triggered by this social norm:



Source: Q6a_6 How much do you agree or disagree with each of the following statements... my friends and family think it's very important to be prepared for a disaster

Base: All respondents (2016, 2017, 2018, n=1,000; 2019 n=1,031; 2020 n=1,001; 2021 n=1,001)

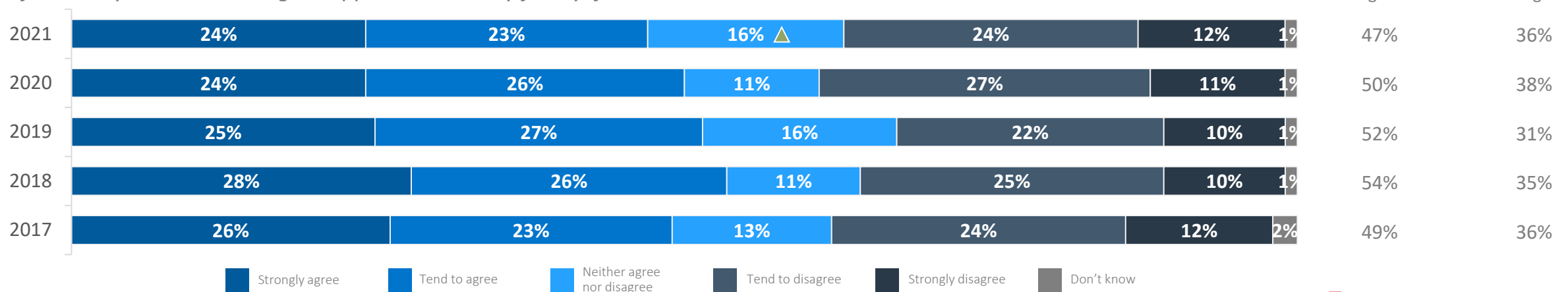


Family concern



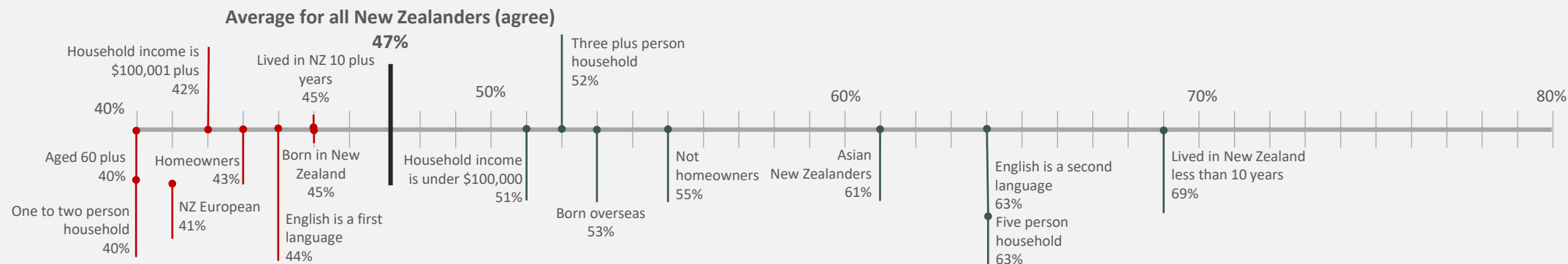
Concern for family is another strong trigger. Those who English is not a first language, those who live in larger households, and those who have lived in the country less than ten years are particularly more likely to be worried about what will happen.

Q. I often worry about what might happen to me or my family if there's a disaster



▲▼ Significant increase/decrease since 2020

The following groups are significantly less likely or significantly more likely than average to be triggered by family concern:



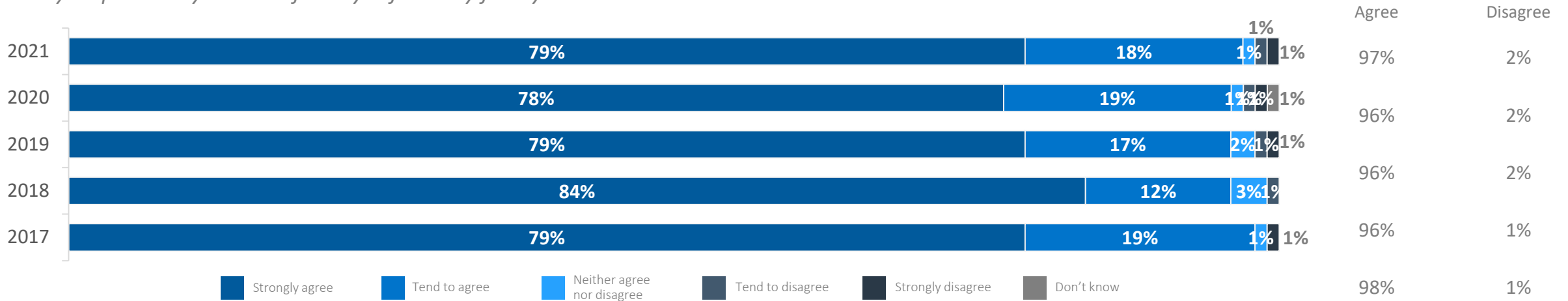


Family responsibility

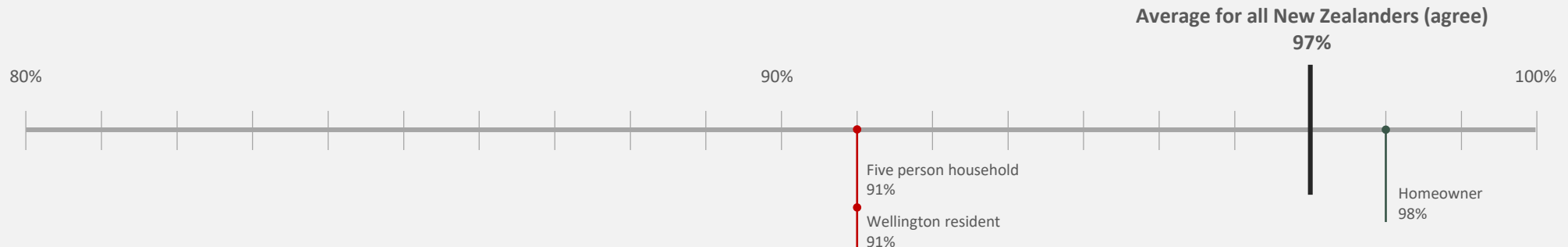


New Zealanders have an almost universal agreement of self responsibility when it comes to looking after themselves and their family in a disaster.

Q. It is my responsibility to look after myself and my family in a disaster



The following groups are significantly less likely or significantly more likely than average to be impacted by family responsibility:



Source: Q6a_4 How much do you agree or disagree with each of the following statements... it is my responsibility to look after myself and my family in a disaster
Base: All respondents (2016, 2017, 2018, n=1,000; 2019 n=1,031; 2020 n=1,001; 2021 n=1,001)

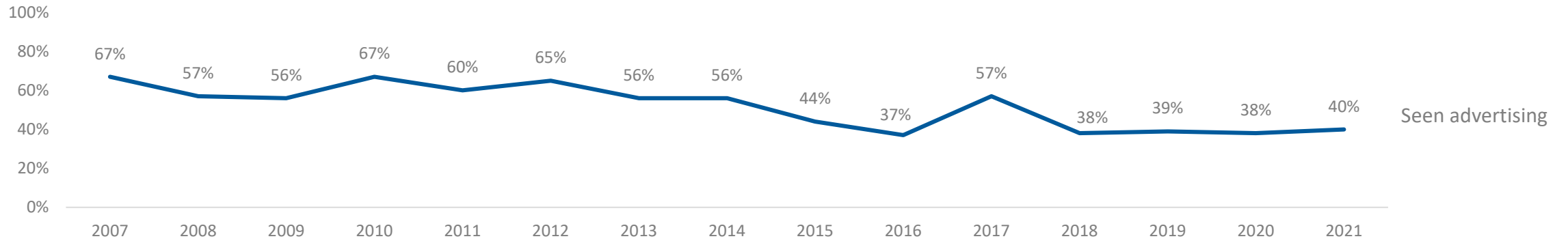
Communications



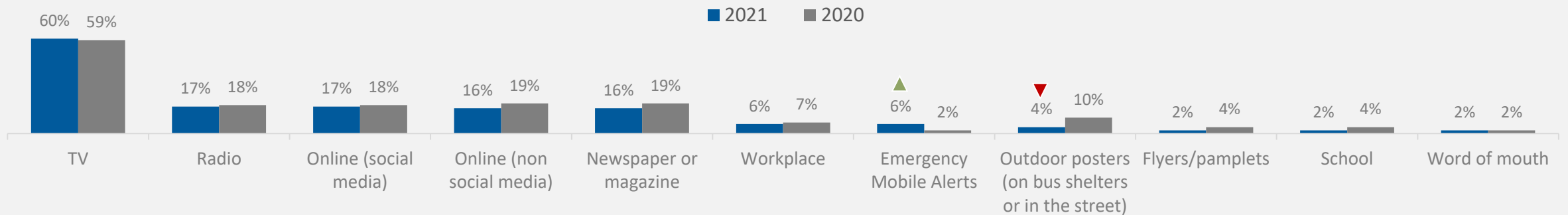
Advertising



Advertising awareness has remained steady for the last four years. Of those who have seen advertising the majority saw it on TV, radio, online, or in newspapers or magazines.



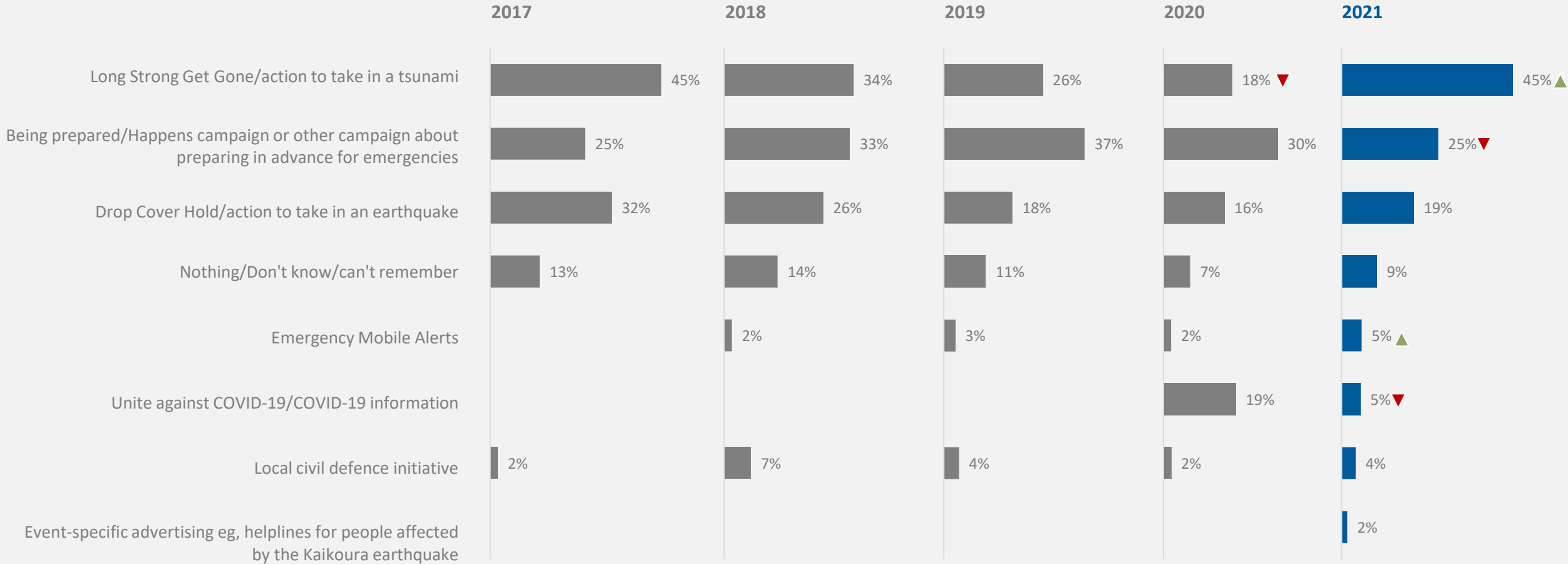
Those who recall advertising mostly say they saw it on TV. There is an increase in awareness through EMAs this year.



▲▼ Significant increase/decrease since 2020

Note: Results 1% and under in 2021 are not shown. *Question wording changed in 2019 to refer to 'information or ads' (previously 'ads' only).
 Source: Q5a Have you recently seen, heard or read any information or advertising about preparing for a disaster? Q5b Where did you see, hear or read the information or ads?
 Base: All respondents (2019 n=1,031; 2020 n=1,001; 2021 n=1,001), those seen, heard of read ads (2020 n=382; 2021 n=428)

This year over four in ten people remember advertising about action to take in a tsunami.



▲ ▼ Significant increase/decrease since 2020

Note: Results 2% and under in 2019 are not shown
 Source: Q5ai What do you remember about the ads?
 Base: Those seen, heard of read ads (2017 n=616; 2018 n=385; 2019 n=421; 2020 n=382; 2021 n=428)

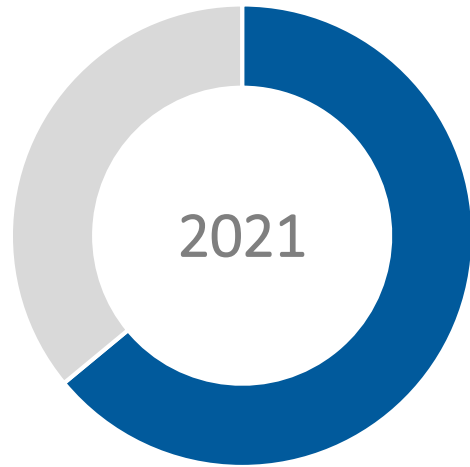
Earthquake drills



Earthquake drill



Nearly two thirds of New Zealanders have taken part in an earthquake drill by doing the Drop, Cover, and Hold action at some point.

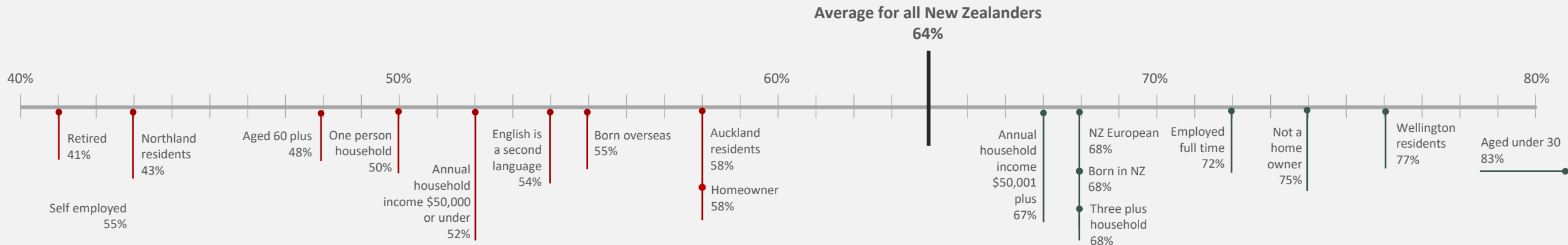


64%

have participated at some point in the past



The following groups are significantly less likely or significantly more likely than average to have ever taken part in a Drop, Cover, and Hold drill:



New question wording: 2021

Source: Q5i Have you ever taken part in an earthquake drill by doing the Drop, Cover, and Hold action?

Base: All respondents (2021 n=1,001)

Information sources

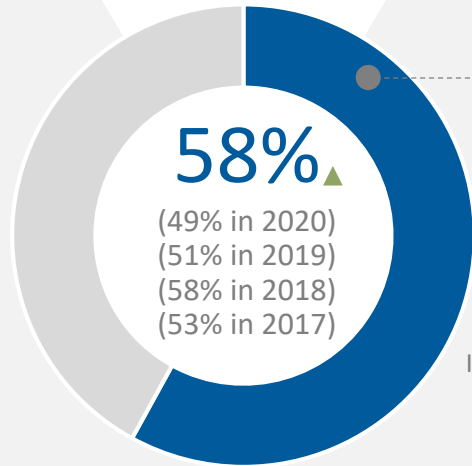


Sources of information before a disaster



There's a significant increase in New Zealanders knowing you can get information from Civil Defence, which is driven by the website being the go-to source for information about disasters before they occur.

Mention Civil Defence in some form



	2017	2018	2019	2020	2021
Civil Defence website	50%	51%	48%	44%	56% ▲
Get Ready website				1%	5%
Civil Defence (unspecified)	1%	6%	2%	4%	1%
Local Civil Defence	1%	1%	1%	1%	0%
Get Thru website	1%	1%		1%	0%
Phone Civil Defence	1%	1%			1%
Local / Regional Council	20%	25%	21%	18%	19%
Google search	16%	15%	16%	16%	17%
Yellow Pages	20%	14%	11%	9%	8%
TV	10%	9%	9%	7%	7%
Radio	11%	9%	10%	8%	7%
Government websites	2%	3%	2%	8%	7%
Internet / website (unspecified)	4%	8%	8%	8%	6%
Brochures	4%	4%	4%	7%	5%
News / media	3%	4%	3%	4%	4%
Cellphone / app	2%	5%	4%	5%	4%
Word of mouth - neighbours/friends	2%	4%	4%	5%	4%
Don't know	8%	5%	7%	8%	6%

▲ Significant increase/decrease since 2020

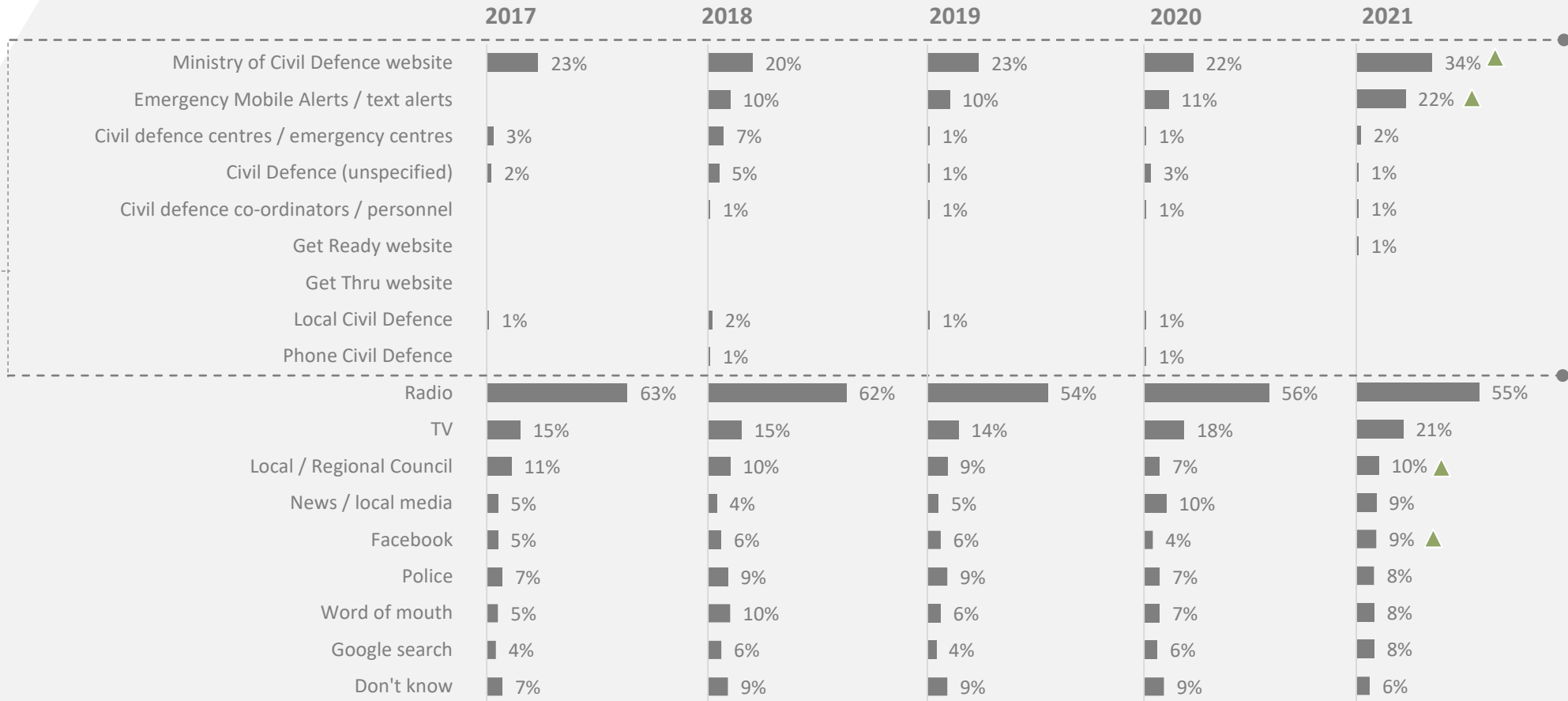
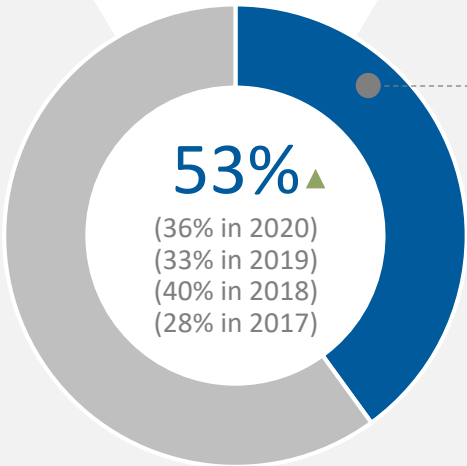
Source: Q4f Before a disaster, where can you get information about how to prepare?
 Base: All respondents (2017, 2018 n=1,000; 2019 n=1,031, 2020 n=1,001; 2021 n=1,001)
 Results 3% and under in 2021 are not shown

Sources of information during or immediately after a disaster



Over half of New Zealanders say they would get information from Civil Defence during or immediately after a disaster. This increase is driven by more people saying they would utilise the Civil Defence website and get information via EMAs.

Mention Civil Defence in some form



▲ Significant increase/decrease since 2020

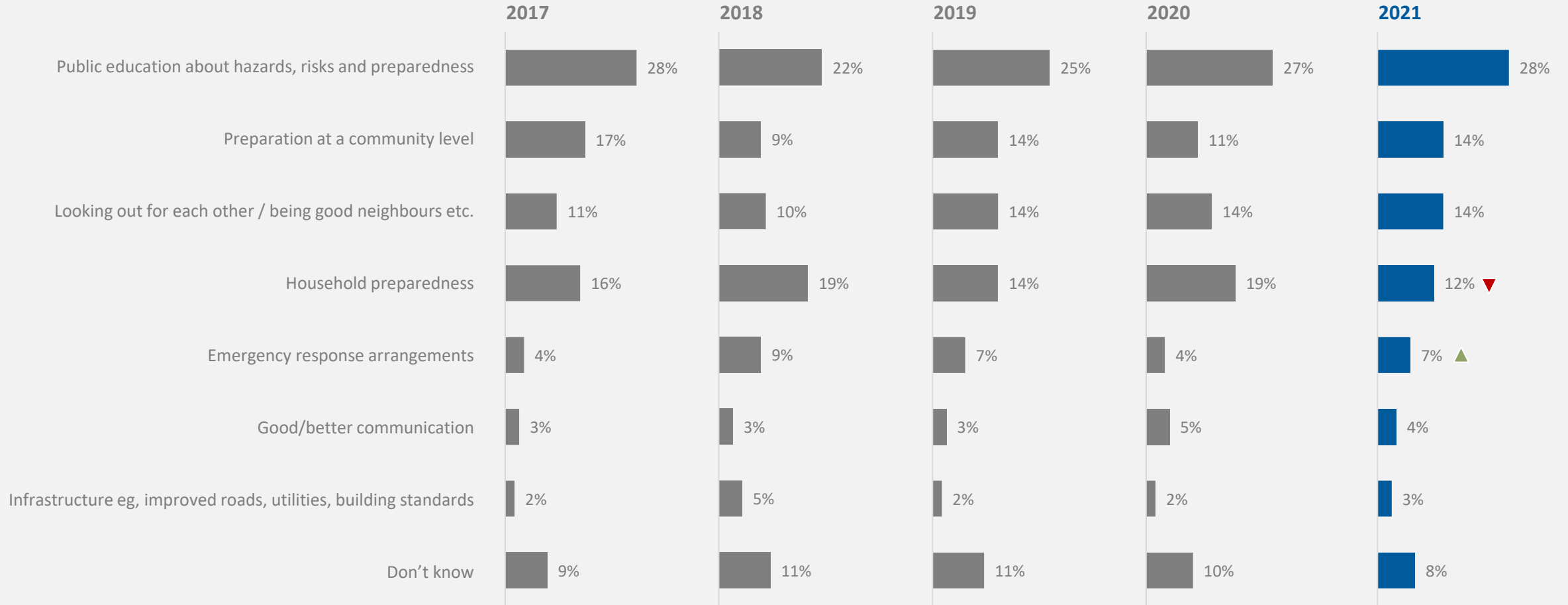
Ensuring resilient communities



Ensuring resilient communities



Public education about the risks and preparedness continues to be key to ensuring resilient communities.



▲ Significant increase/decrease since 2020

Source: Q7a What do you think is the single most important thing that we, as a nation, need to do to ensure our communities can withstand and recover from a disaster?

Base: All respondents (2017, 2018 n=1,000; 2019 n=1,031; 2020 n=1,001; 2021 n=1,001)

Results 2% and under in 2021 are not shown

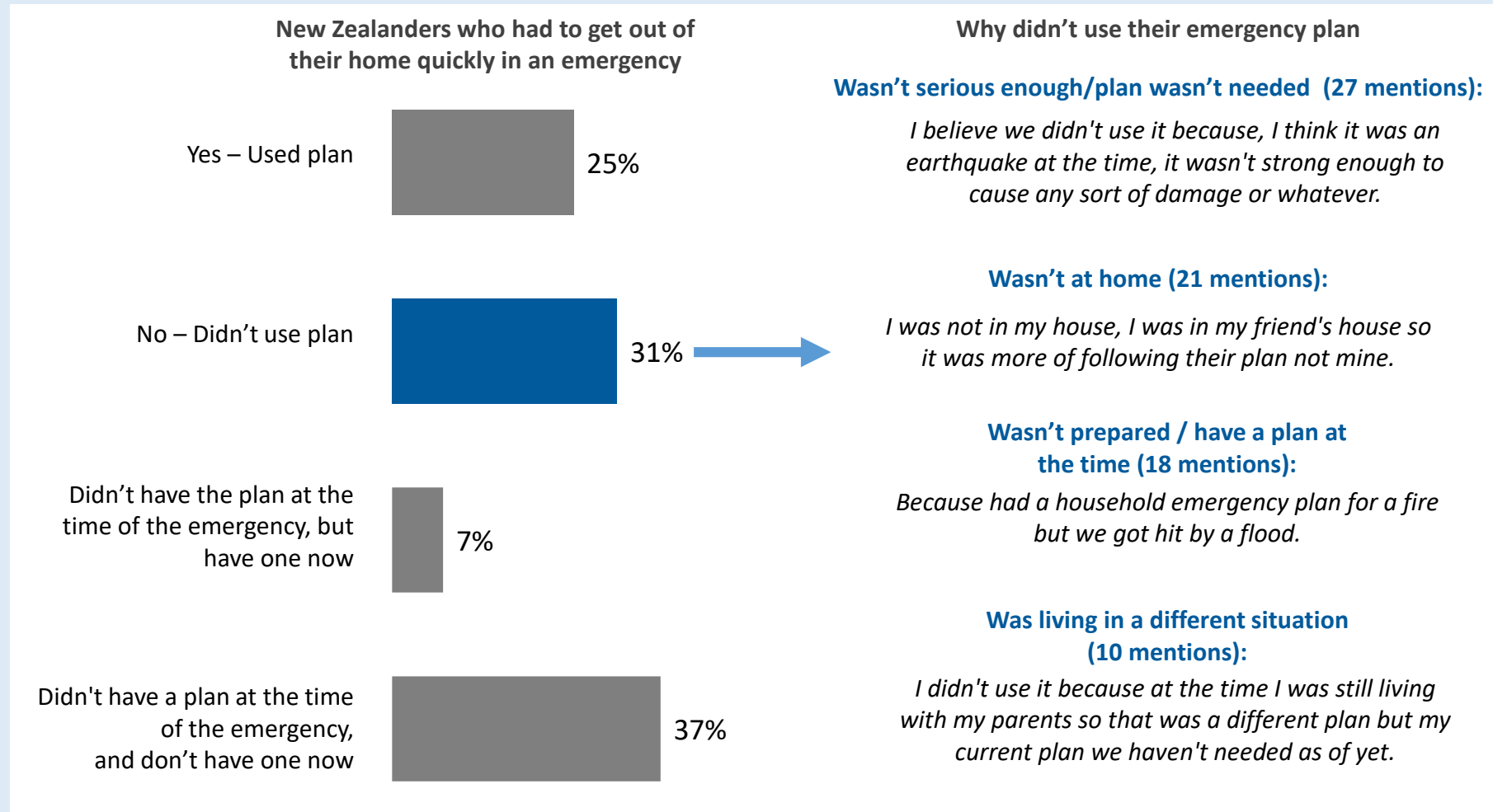
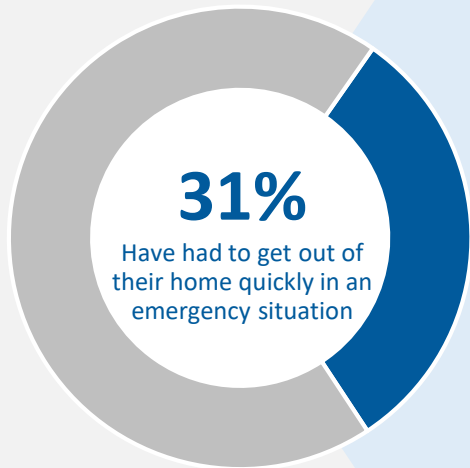
Emergency situations



Use of household emergency plans



Three in ten New Zealanders say they have been in a situation which necessitated them getting out of their homes quickly. The main reason those who had a plan didn't use it was because the emergency and outcome didn't warrant it.



New questions in 2021

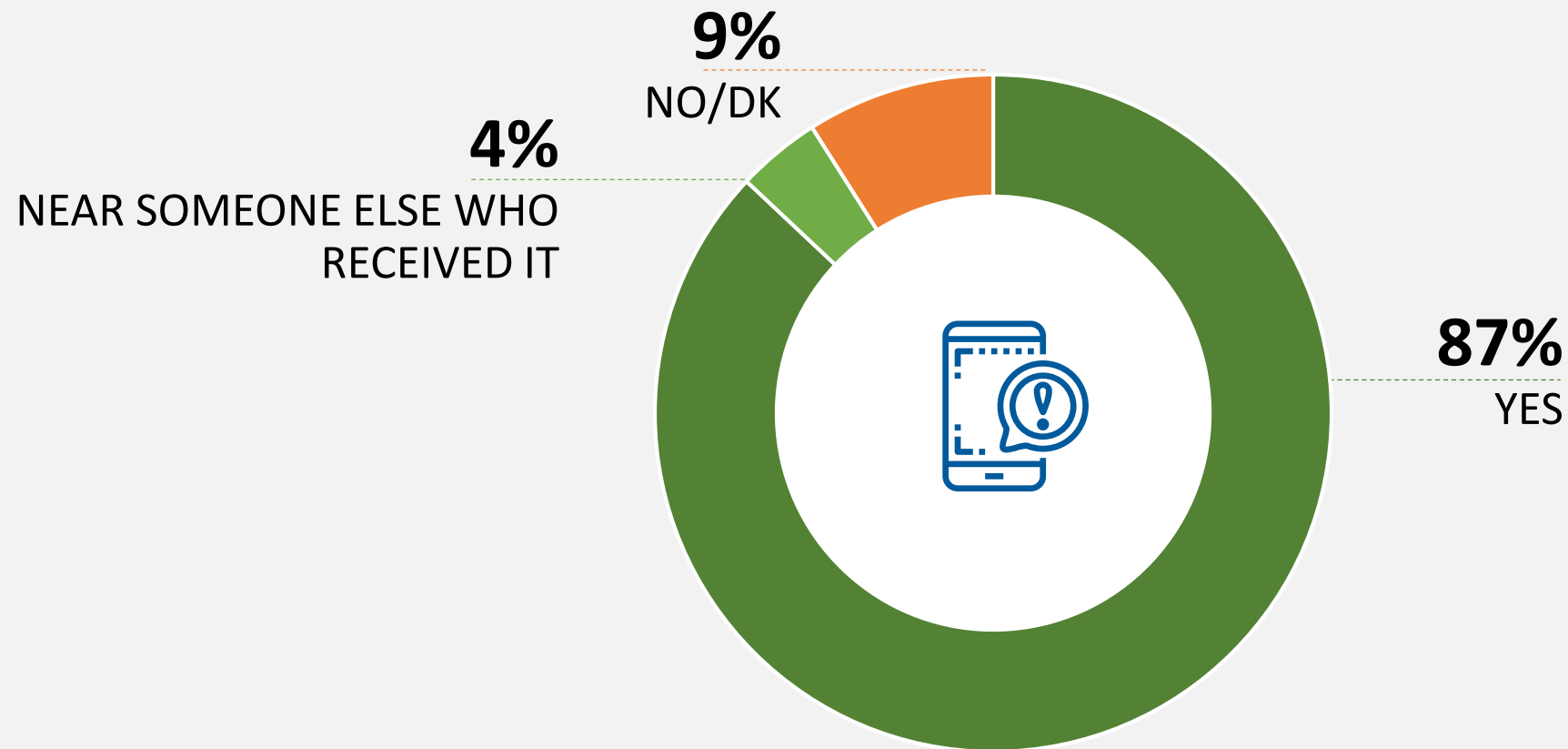
Source: Q8a Have you ever been in an emergency situation which has meant you've had to get out of your home quickly? Q8b Earlier you mentioned you have an emergency plan, have you ever had to use any part of this in an emergency situation? Q8c Why didn't you use your household emergency plan?

Base: All respondents (2021 n=1,001); those who had to get out of their home in an emergency situation (n=309)

Emergency Mobile Alert



Nine in ten New Zealanders either received an EMA themselves or were near someone who did in the last year.



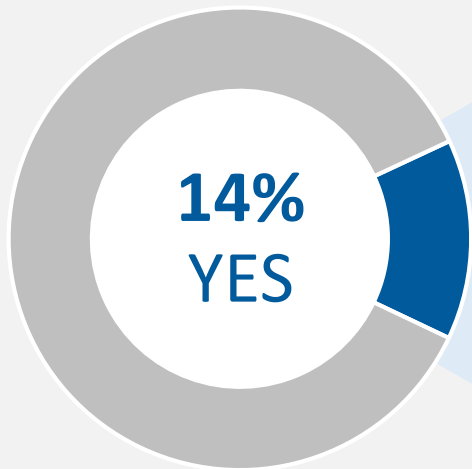
New questions in 2021

Source: Q9a Do you remember getting an Emergency Mobile Alert on your own mobile phone in the last year? Q9b Were you near anyone else when they received an Emergency Mobile Alert on their mobile phone?

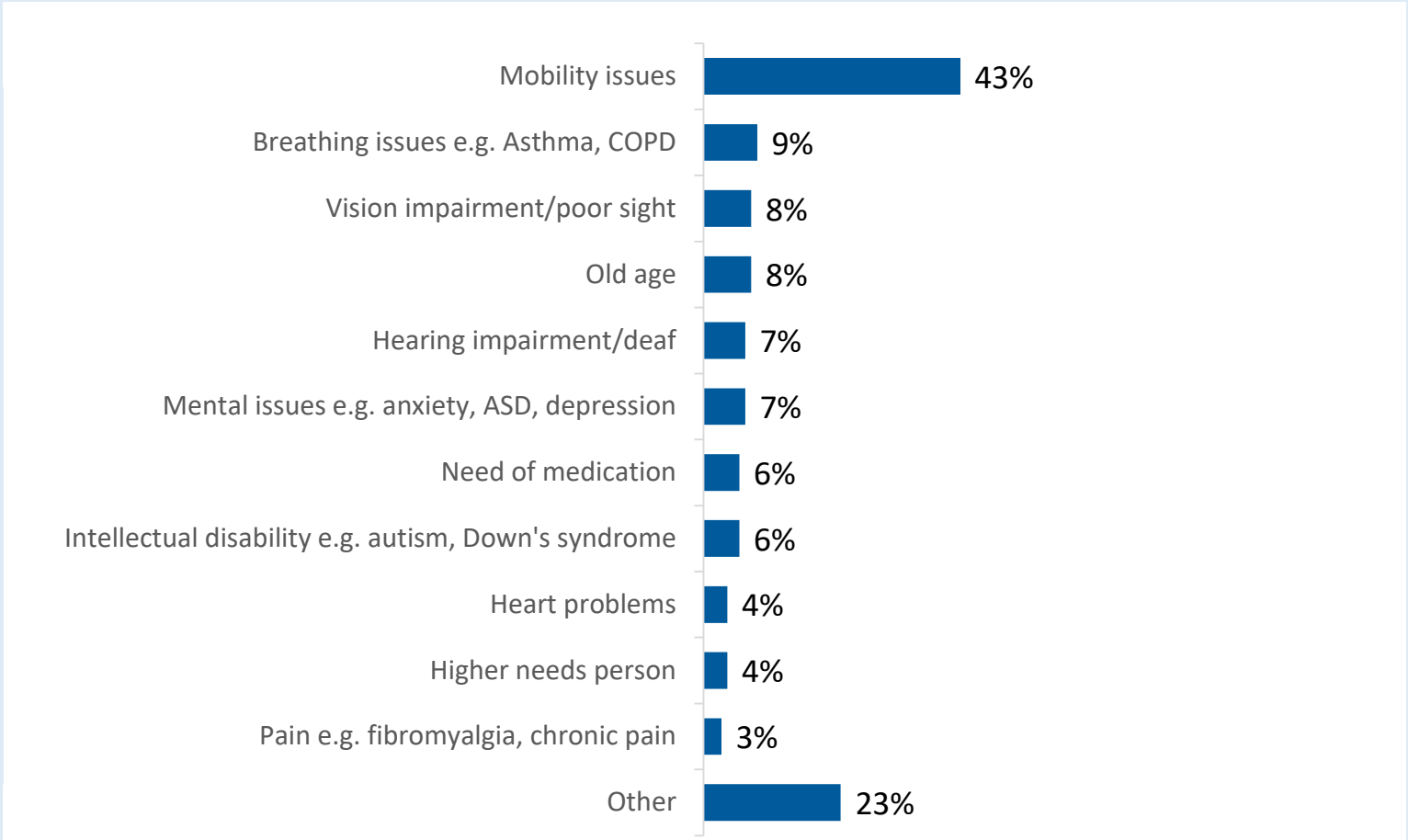
Base: All respondents (2021 n=1,001)

Disability affecting ability to through a disaster

Fourteen percent of New Zealanders say they or someone else in their household has a disability which may impact their ability to get through a disaster.



either I or someone else in household has a disability which may affect ability to get through a disaster



New questions in 2021

Source: D13a Do you or anyone else in your household have a disability which might affect your ability to get through in a disaster? D13b Could you please tell me how the disability might affect the ability to get through a disaster?

Base: All respondents (2021 n=1,001); those who have/someone in household has a disability (n=159)

Appendix – Preparedness continuum

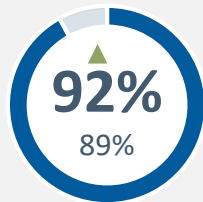


Understand the risk

Have taken action to prepare

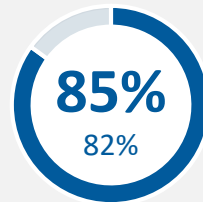
2021
2020

Aware



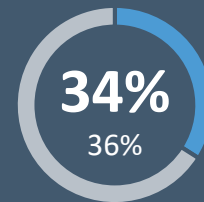
Have a good understanding of the types of disasters that could occur in New Zealand, and the chances of them occurring

Understand



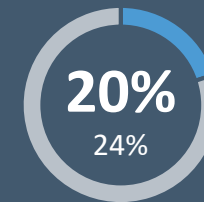
Have a good understanding of what the effects would be if a disaster struck in their area

Committed



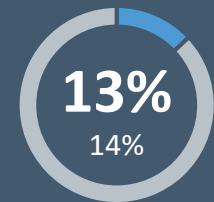
Have stored at least 9 litres of water for each household member*
Have emergency supplies, e.g., spare food, toilet paper, torch, spare batteries etc*

Prepared at home



Household discussed or planned what to do in a disaster*
Have stored at least 9 litres of water for each household member*
Have emergency supplies, e.g., spare food, toilet paper, torch, spare batteries etc*
Check emergency survival items at least once a year*

Fully Prepared

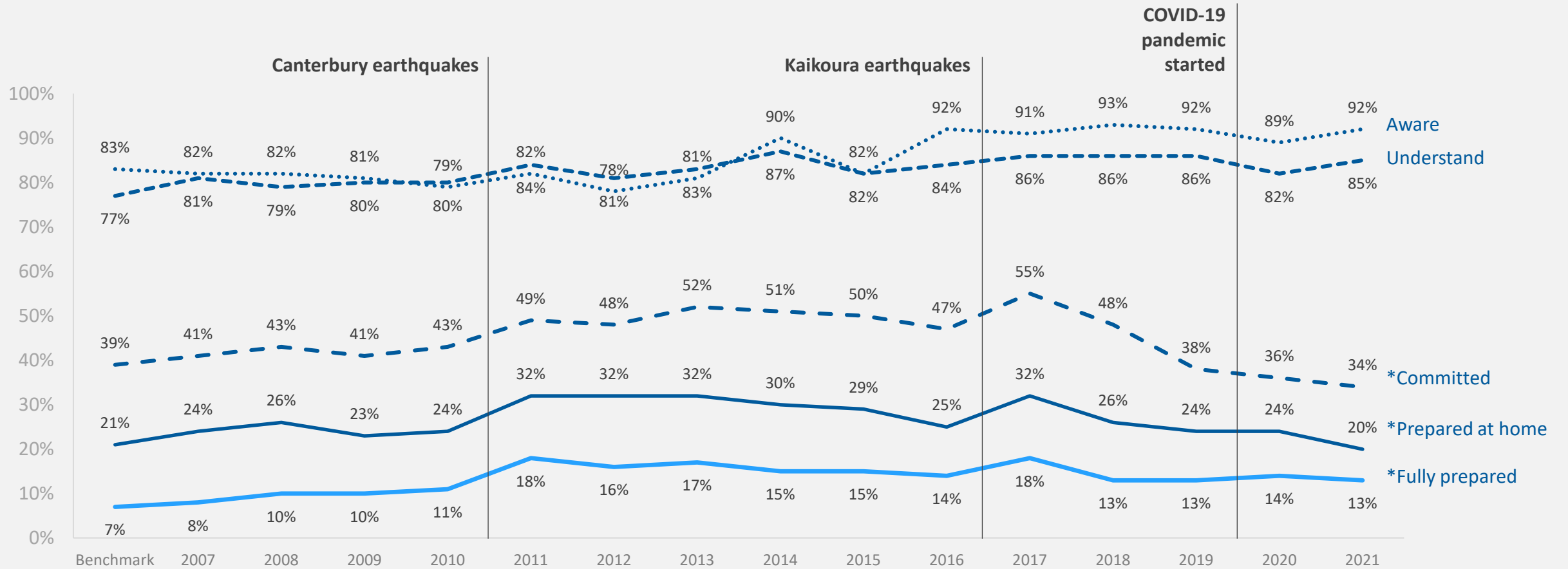


Household emergency plan or discussion includes what to do when not at home*
Have stored at least 9 litres of water for each household member*
Have emergency supplies, e.g., spare food, toilet paper, torch, spare batteries etc*
Check emergency survival items at least once a year*

▲▼ Significant increase/decrease since 2020

Note: Changes were made to these questions/statements in 2019 so results have not been compared to 2018 or earlier years.
Source: Q2e Which of the following statements apply to you? Q2f Does your survival plan include what to do when you are not at home?
Base: All respondents (2019 n=1,031, 2020 n=1,001)

Preparedness continuum – time series



*Caution: changes have been made to these questions/statements in 2019 so results from 2019 onwards are indicative versus previous years only.
 Source: Q2e Which of the following statements apply to you? Q2f Does your survival plan include what to do when you are not at home?
 Base: All respondents (2021 n=1,001)