



Disaster preparedness survey 2020



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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 were 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.
- Find out the **awareness and participation in ShakeOut** and the **TsunamiWalkOut**.

Methodology

In total, 1,001 telephone interviews were carried out, with New Zealanders aged 15 and over, from 4 June to 26 July, 2020.

Half of the interviews were conducted by calling landline telephones (501 interviews) and half were conducted by calling mobile telephones (500 interviews). 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.

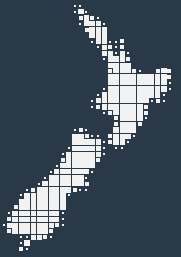
Notes for reading the report: Throughout the report the term 'New Zealanders' is used to refer to those 15 and over who currently live in New Zealand.



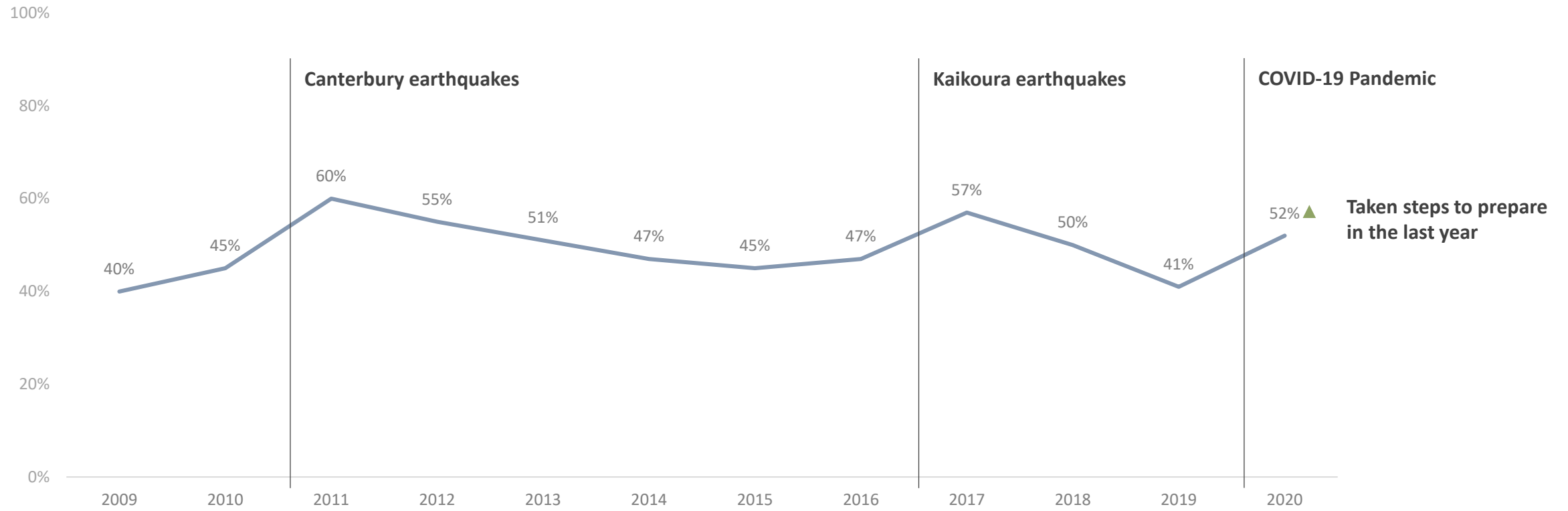
Summary of key findings



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 risen in 2020. As shown in the chart below, major events provide a strong catalyst.



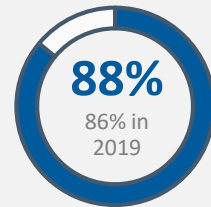
▲ Significant increase/decrease since 2019

Level of preparedness

Nearly nine 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. A quarter of New Zealanders are fully prepared at home.

Level of preparedness

Done at least one action*



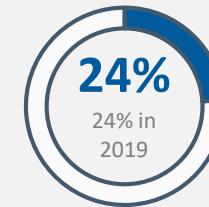
Household discussed or planned what to do in a disaster*, and/or

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

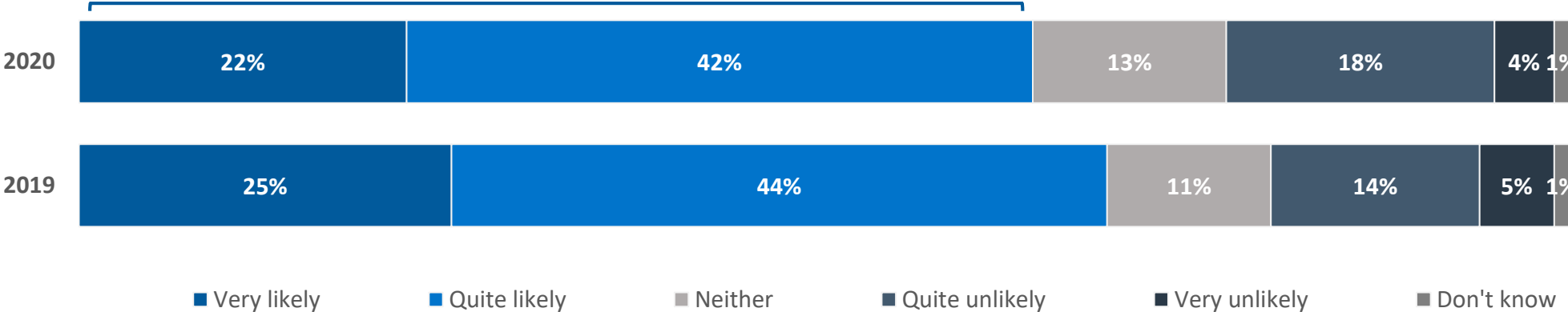
Check emergency survival items at least once a year*

Likelihood to Prepare



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

64% of New Zealanders say they are likely to take steps to prepare for a disaster in the next year



Knowledge



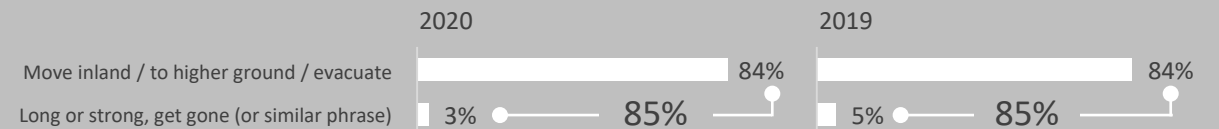
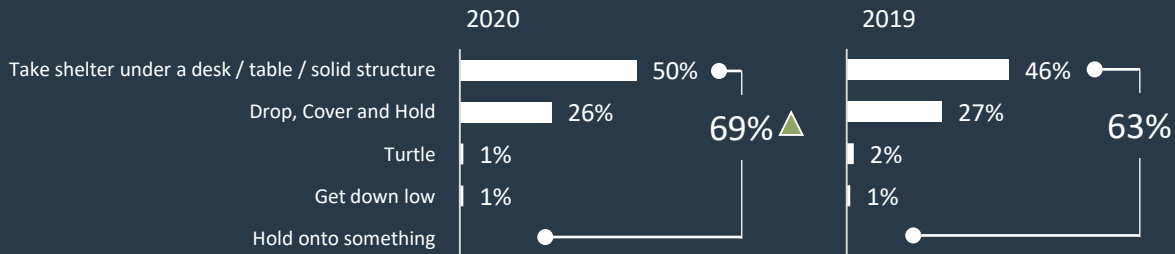
Most New Zealanders continue to know what actions they should take in the event of an earthquake or a tsunami.



Two thirds (69%) of New Zealanders know at least one correct action to take during a earthquake (up from 63% in 2019).



Almost all (85%) New Zealanders know to evacuate if they are near the coast and a long or strong earthquake happens



▲ Significant increase/decrease since 2019



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 were determined to be effective motivators to get people to act.

Priority barrier



Lack of knowledge (affects 30%, high impact)

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

- Those who say they know little or nothing about preparing for a disaster tend to have five key knowledge gaps, they:
- 1) have a reduced understanding of what the effects would be if a disaster struck in their area,
 - 2) have a reduced understanding of the types of disasters that could occur in New Zealand, and the chances of them occurring,
 - 3) are less likely than average to know to drop, cover, hold during an earthquake,
 - 4) are less likely than average to know to evacuate after a long or strong earthquake (if they are near the coast), and
 - 5) are less likely than average to know they can utilise Civil Defence resources before a disaster.

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 18%, 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 68%, 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 50%, medium effect)

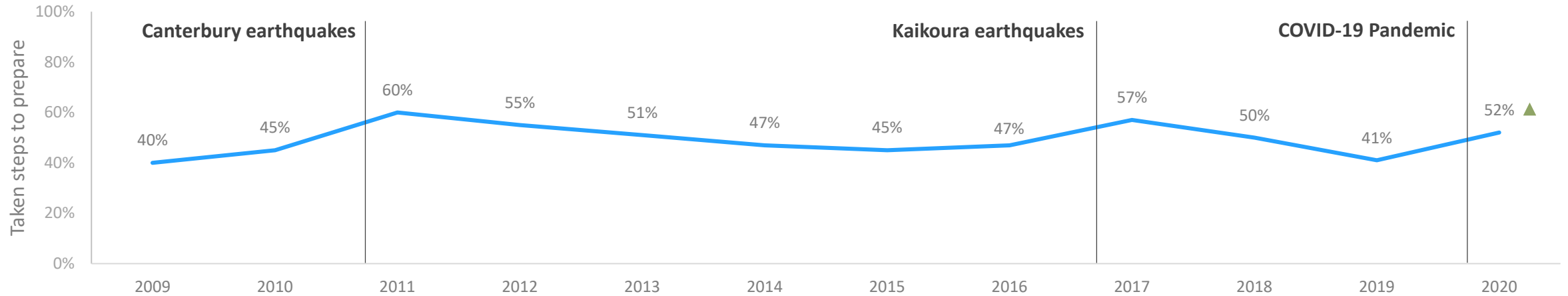
- Thinking about what will happen to their family in a disaster is a relatively powerful trigger for motivating New Zealanders to prepare for a disaster

How prepared are New Zealanders?

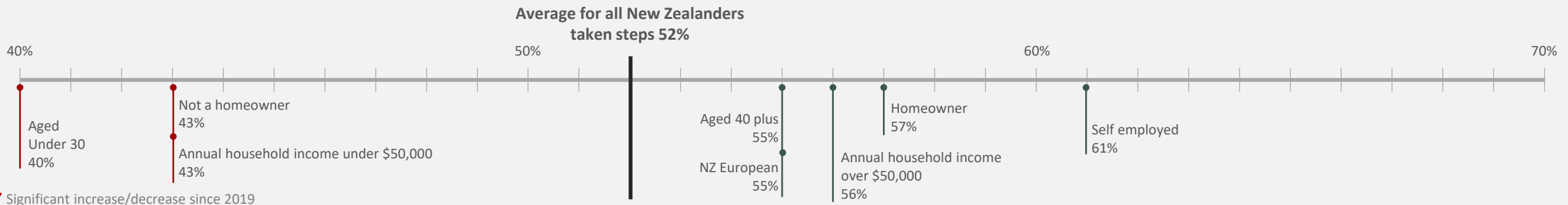


Taken steps to prepare in the last year

New Zealanders are optimistic about their preparedness levels. This year, more than half say they have taken steps to prepare themselves or their household for a disaster in the past twelve months. This is a significant improvement from 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 who do not own their own home and those who have a lower annual household income (under \$50,000).

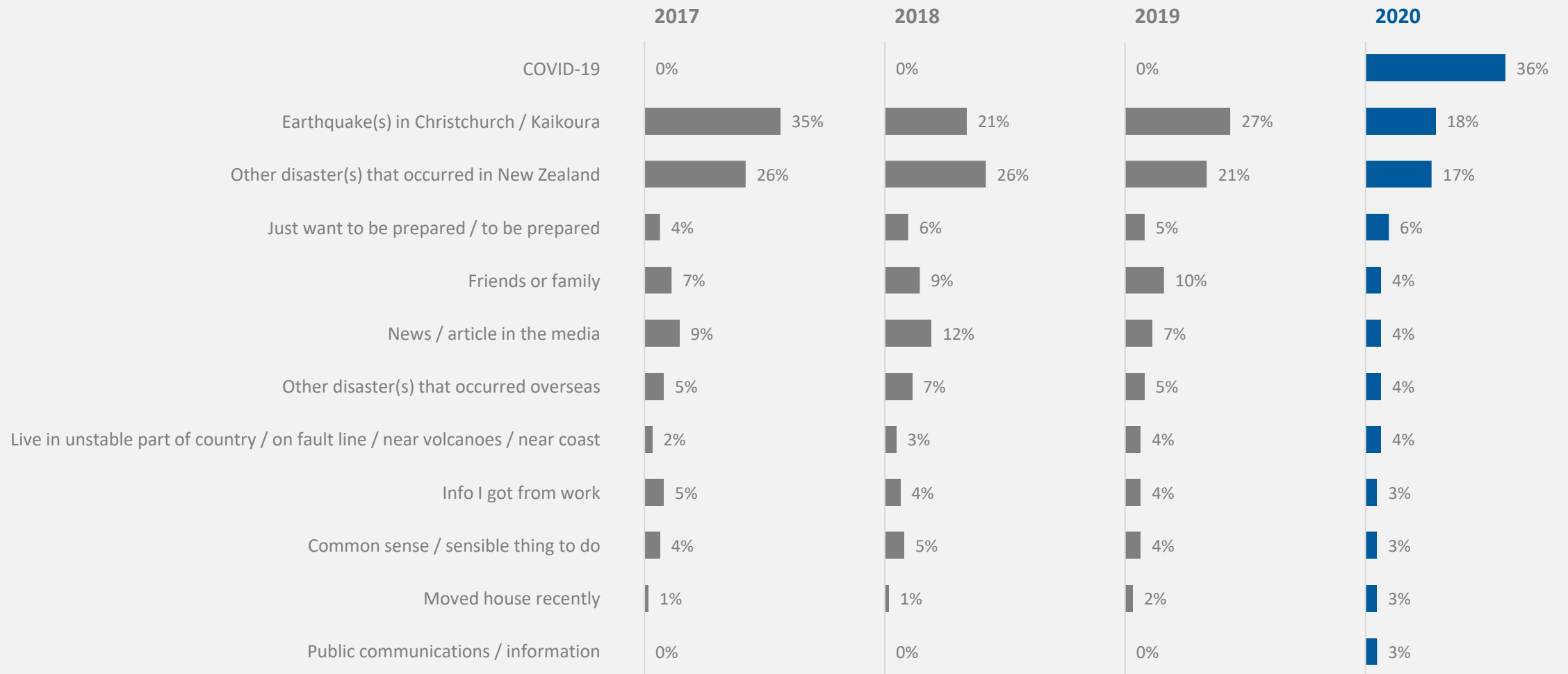


▲ Significant increase/decrease since 2019



Perceived prompts to take action

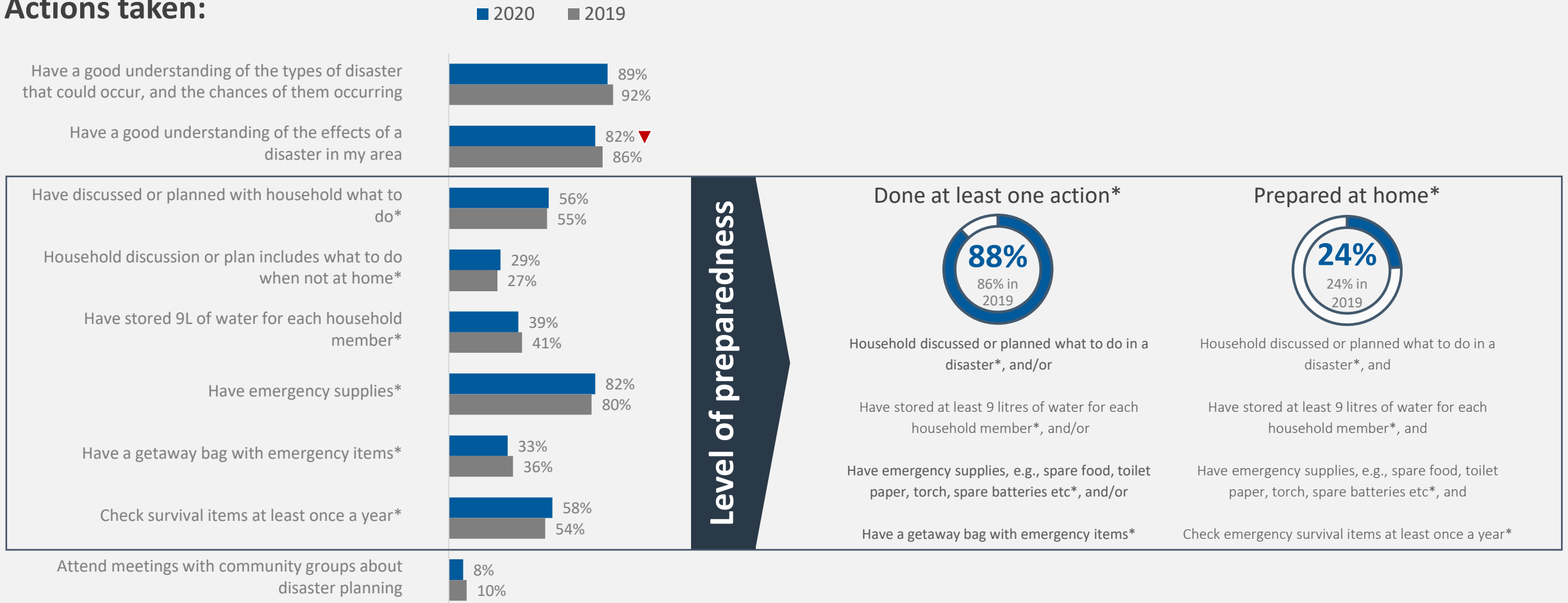
When asked what prompted these actions, more than a third attributed their actions to the COVID-19 pandemic.



Total level of preparedness

However, when we measured specific actions taken, this increased level of preparedness was not observable and findings were broadly consistent with 2019. One area of change is understanding, fewer New Zealanders now say they have a good understanding of what the effects would be from a disaster in their area.

Actions taken:



▲ ▼ Significant increase/decrease since 2019



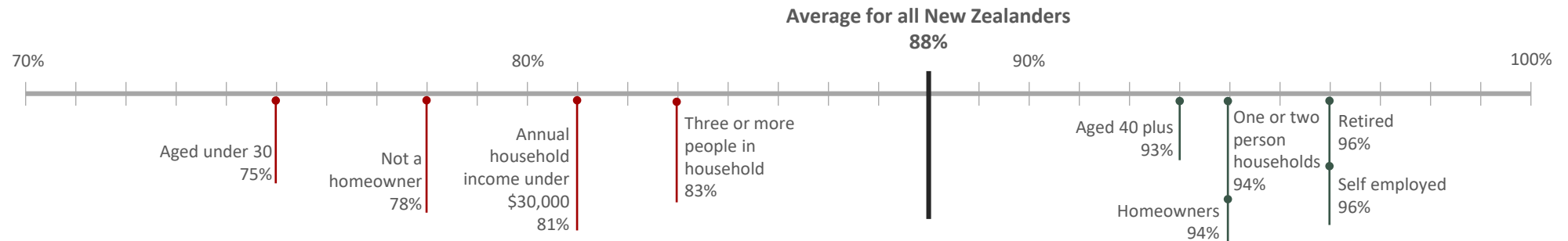
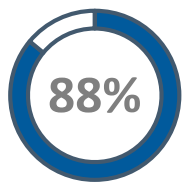
Source: Q2e Which of the following statements apply to you? | Q2f Does your household emergency plan or discussion include what to do when you are not at home?
 Base: All respondents (2019 n=1,031; 2020 n=1,001)
 Note: Preparedness levels are not mutually exclusive.

Who is least likely to be prepared?

Younger New Zealanders, those who do not own their own home, those with a lower household income, 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.

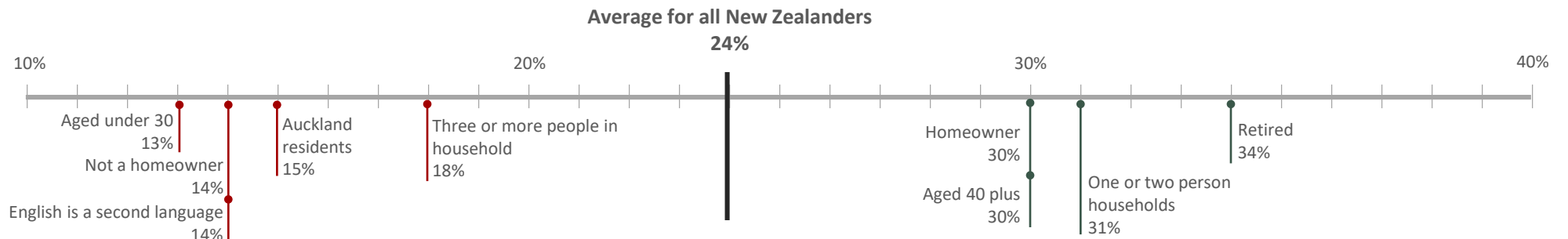
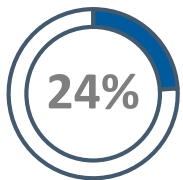
The following groups are less likely than average to have done at least one action for preparedness: younger New Zealanders, those who are not homeowners, those who have a lower annual household income, and those who live in larger households.

Done at least one action*



The following groups are less likely than average to be prepared at home: younger New Zealanders, those who are not homeowners, those who speak English as a second language, Auckland residents, and those who live in larger households.

Prepared at home*



*See previous slide for full definition.

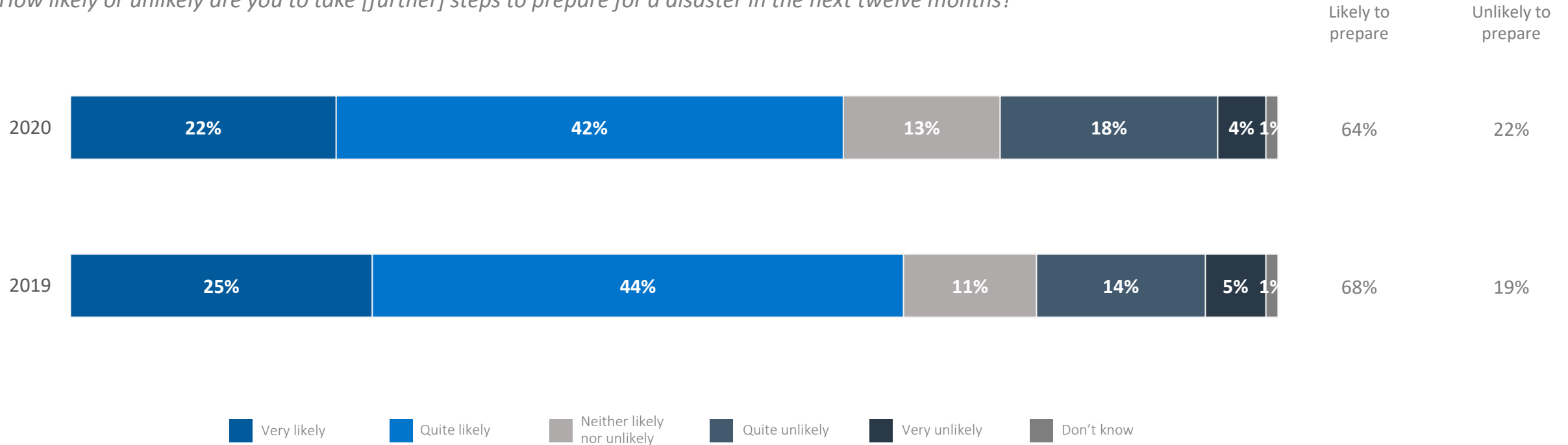
Source: Q2e Which of the following statements apply to you? | Q2f Does your household emergency plan or discussion include what to do when you are not at home?

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

Likelihood of preparing

Just under 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?

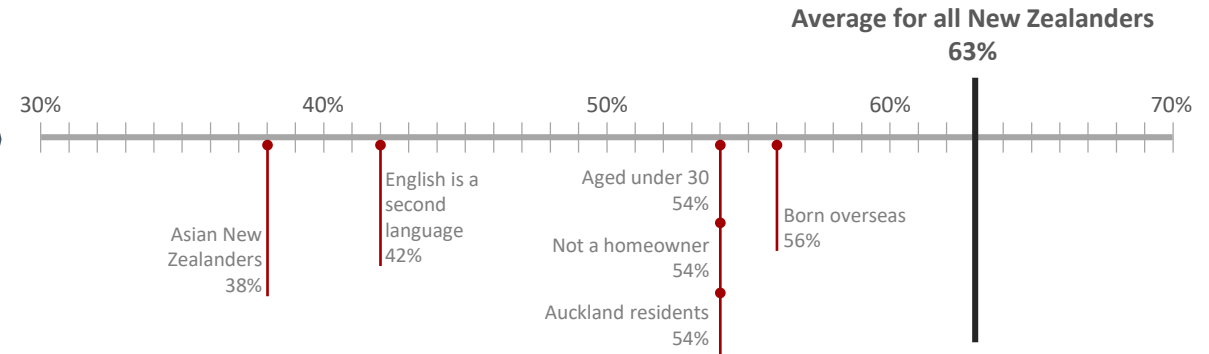


Top 10 things to do to be prepared

New Zealanders believe the most important things they can do to prepare for a disaster are to have stored food and water, and discussed a household emergency plan.

	2019	2020
Have water	30%	29%
Have food	25%	27%
Have discussed or planned what to do	17%	20%
Have necessary emergency items	17%	18%
Understand what to do	9%	8%
Be prepared	7%	7%
Have emergency bag ready	7%	6%
Have a torch or other lighting	5%	6%
Have a first aid kit	5%	4%
Have medication / medical supplies	3%	4%
Have batteries	3%	4%
Have alternative means to electricity	3%	4%

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



Note: New question in 2019
 Source: Q2di What do you think is the single most important thing you could do, in order to be prepared for a disaster?
 Base: All respondents (2019 n=1,031; 2020 n=1,001)
 Results 3% and under in 2020 are not shown

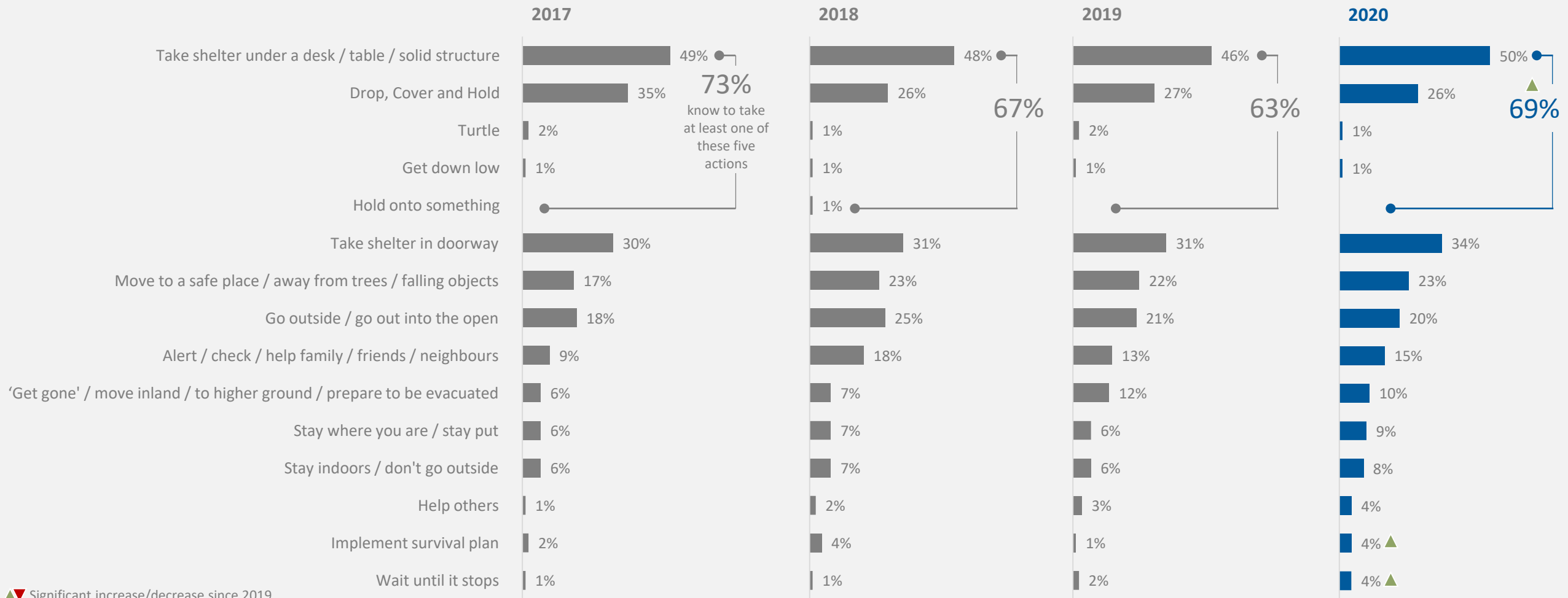
Do New Zealanders know what to do in an emergency?



Actions to take during a strong earthquake



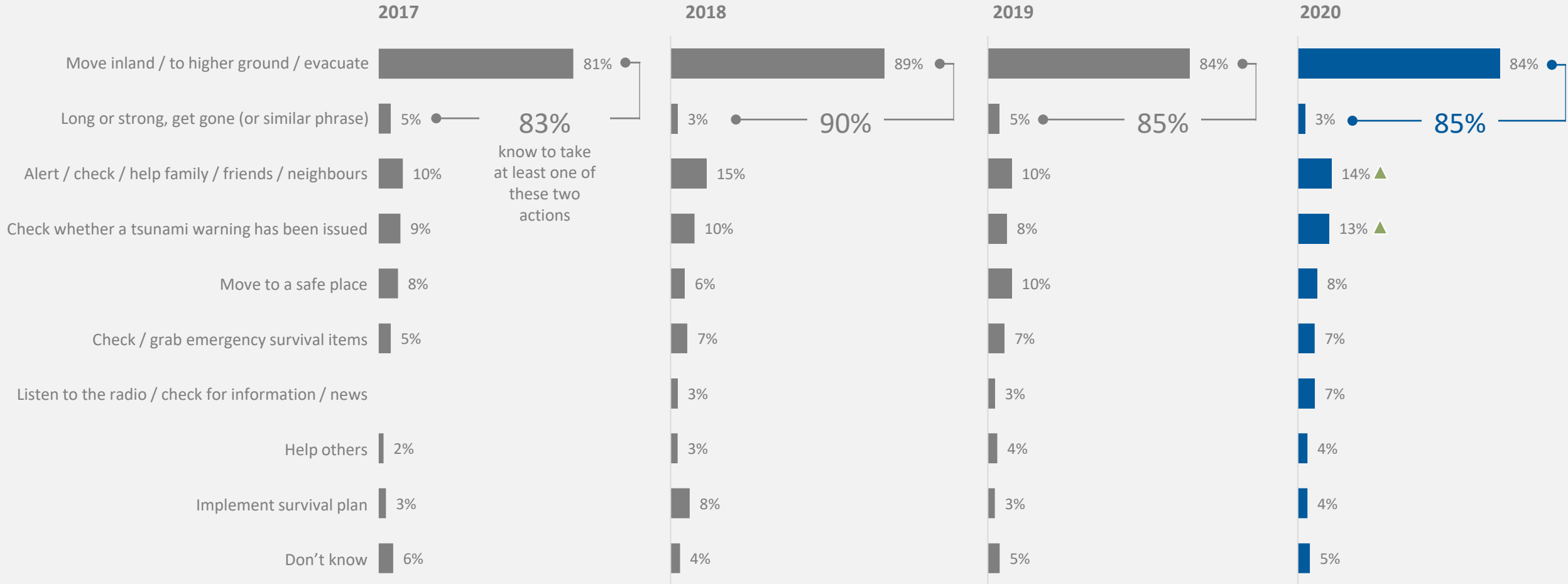
Sixty-nine percent of New Zealanders now know what to do during a strong earthquake. This is a significant improvement from the 2019 finding of sixty-three percent.



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



Most New Zealanders know they need to 'Get Gone' if they are near the coast and a long or strong earthquake happens.

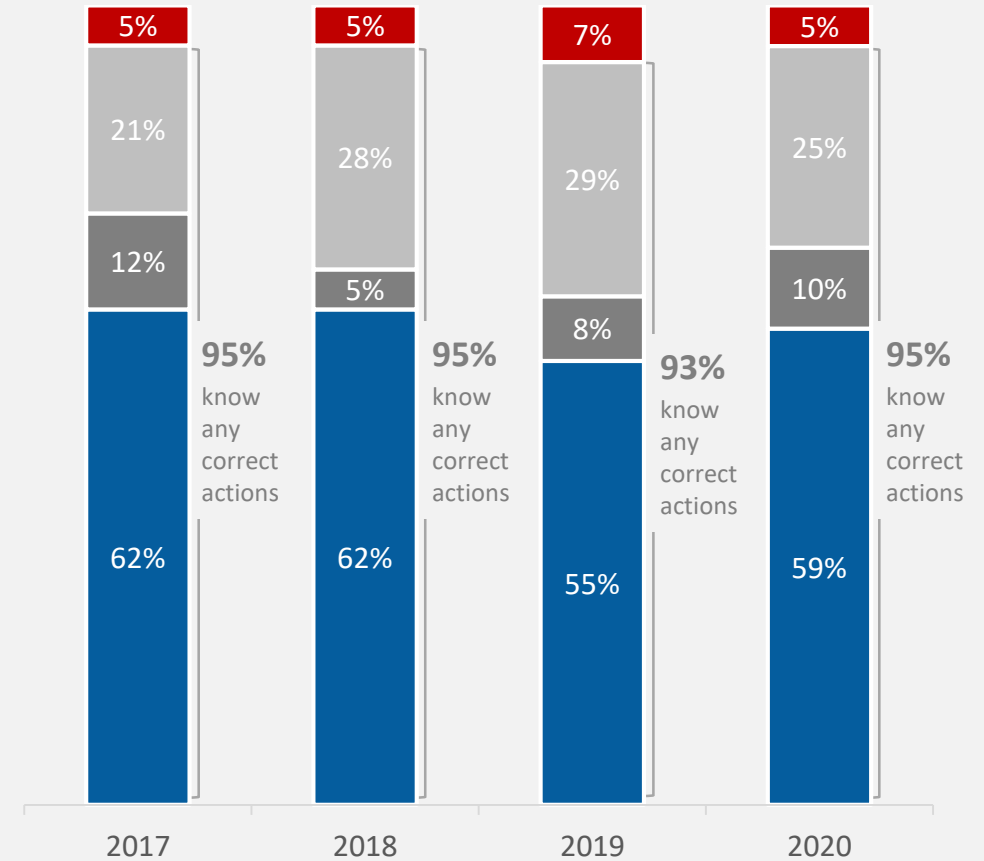


▲/▼ Significant increase/decrease since 2019

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

Just over half of New Zealanders know what to do during an earthquake and know what to do following a long or strong earthquake.

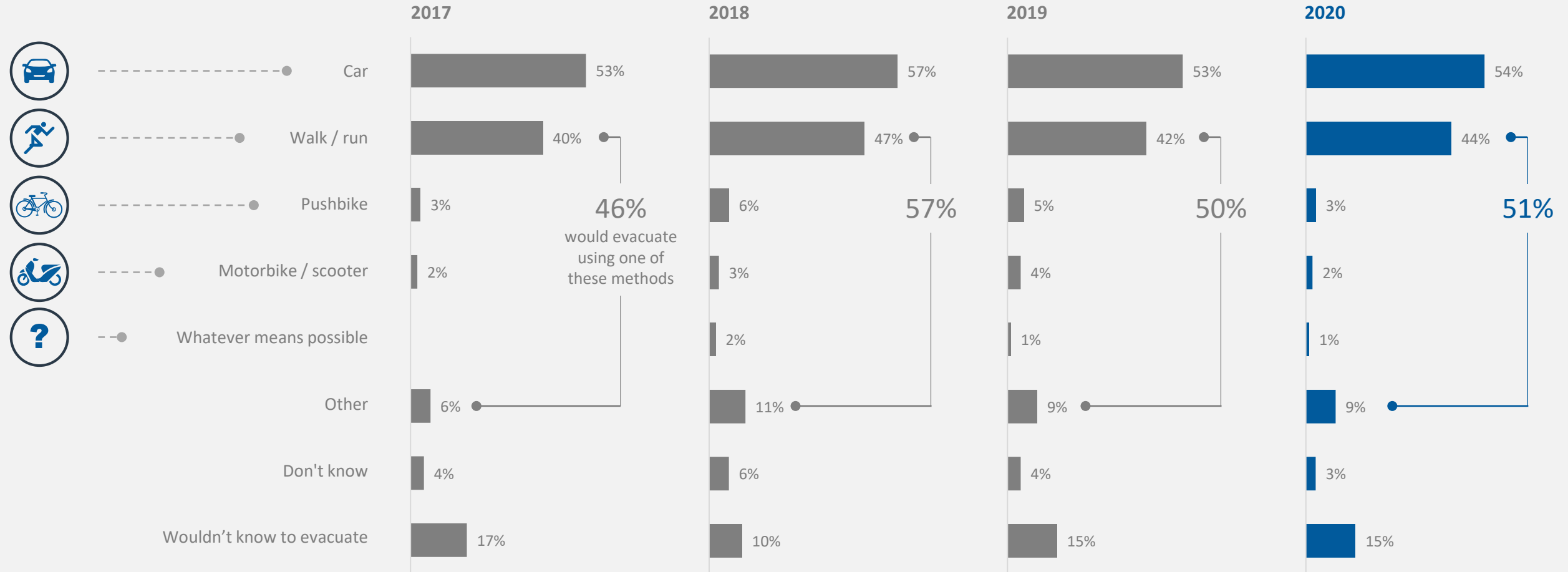
- Don't know what actions to take in either event
- Know at least one correct action to take during a tsunami threat but don't know a correct action to take during an earthquake
- Know at least one correct action to take during an earthquake but don't know a correct action to take during a tsunami threat
- Know at least one correct action to take during an earthquake and at least one correct action to take during a tsunami threat



Planned evacuation methods

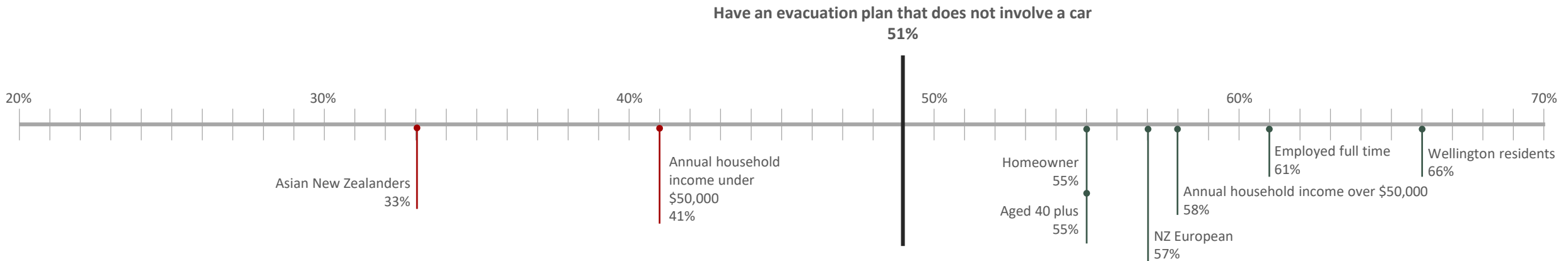
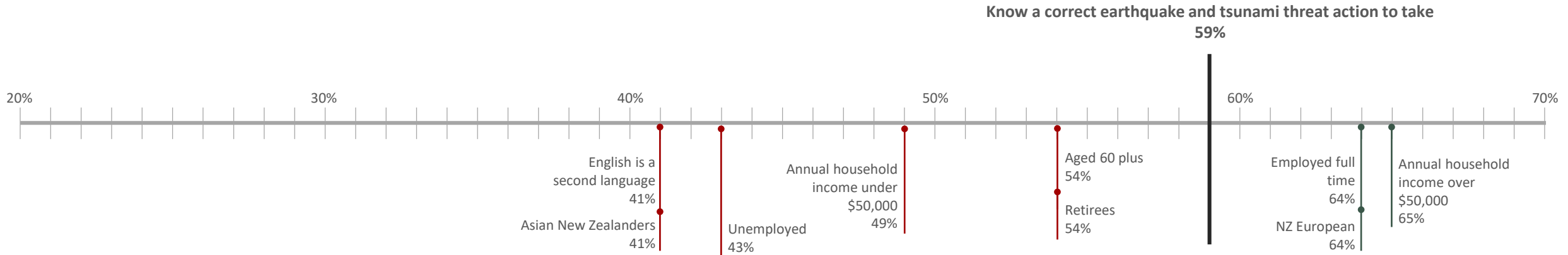


Half of New Zealanders say they would evacuate using a method other than a car.



Who is least likely to know what to do?

New Zealanders who speak English as a second language, Asian New Zealanders, those who are unemployed, those with a lower household income, those aged over 60, and retirees are least likely to know both the correct earthquake actions and the correct tsunami actions.










BARRIERS

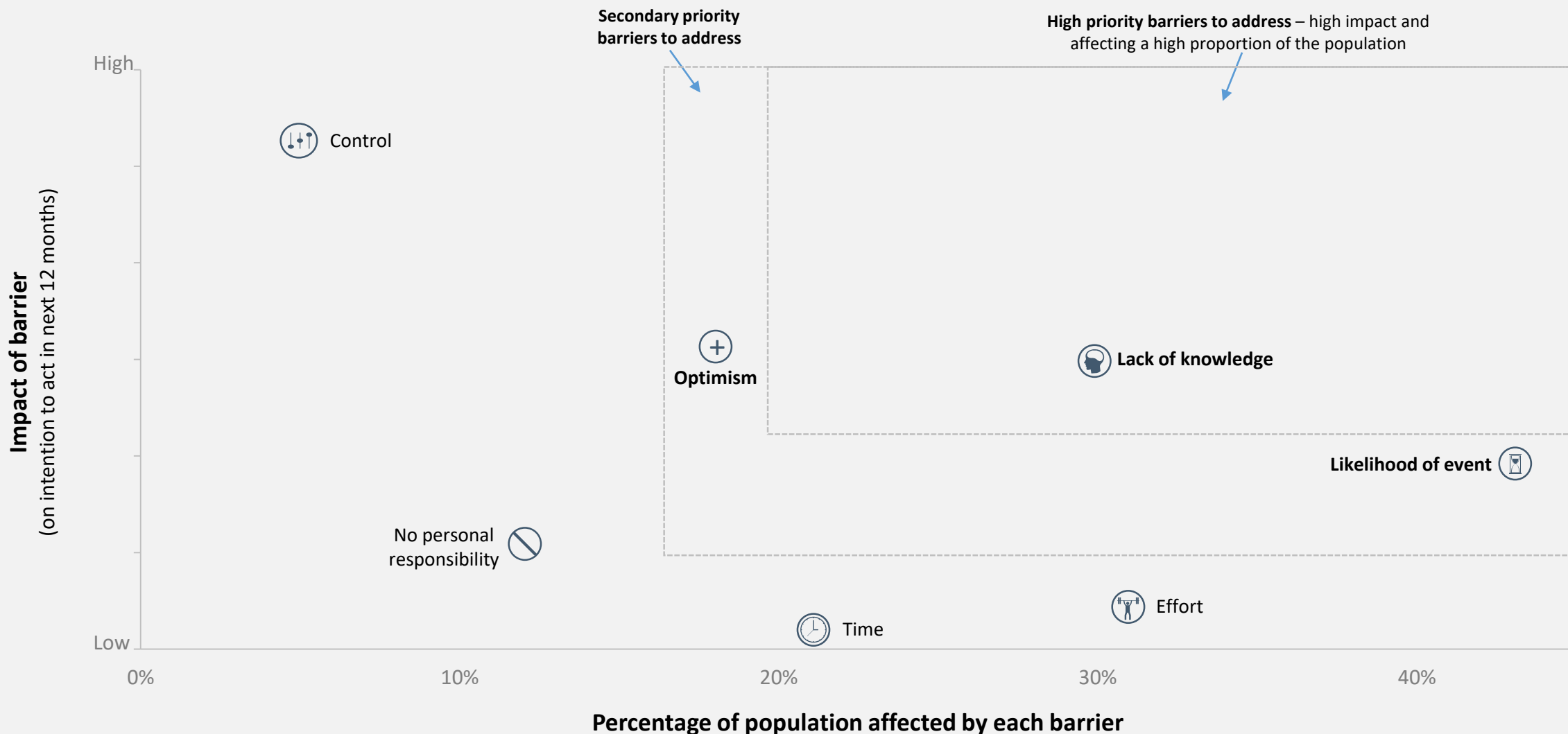


The research specifically explored the incidence and impact of seven barriers to preparedness

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) three barriers stood out as priorities to address: lack of knowledge about what to do to prepare, 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

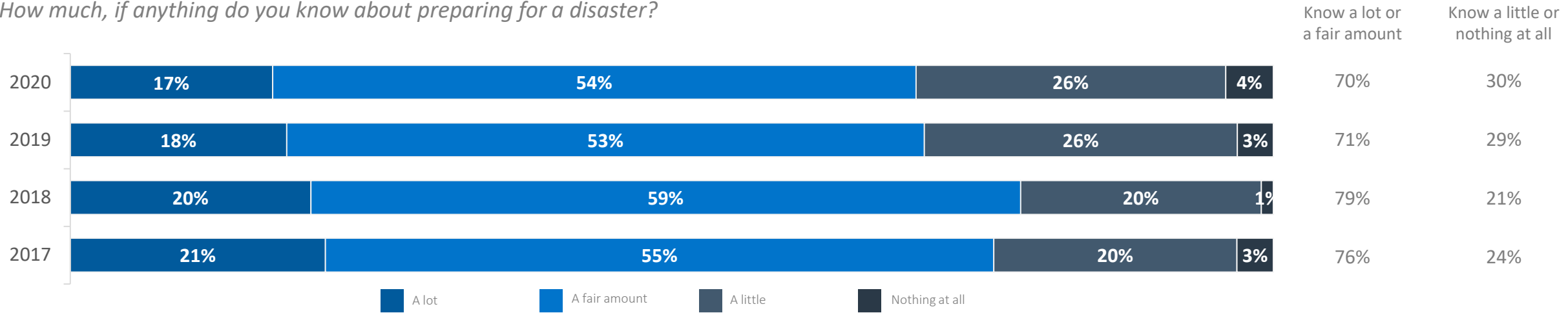




Lack of knowledge – primary barrier

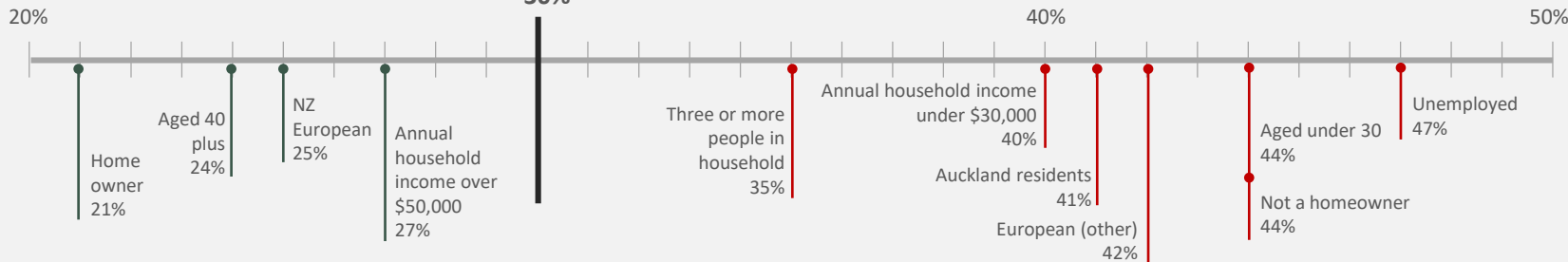
Nearly a third of all New Zealanders know little or nothing about preparing for a disaster, for these people this is a huge barrier to getting prepared.

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:

Average with barrier (know a little or nothing) 30%



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



A getaway bag



Stored sufficient water



The necessary emergency supplies



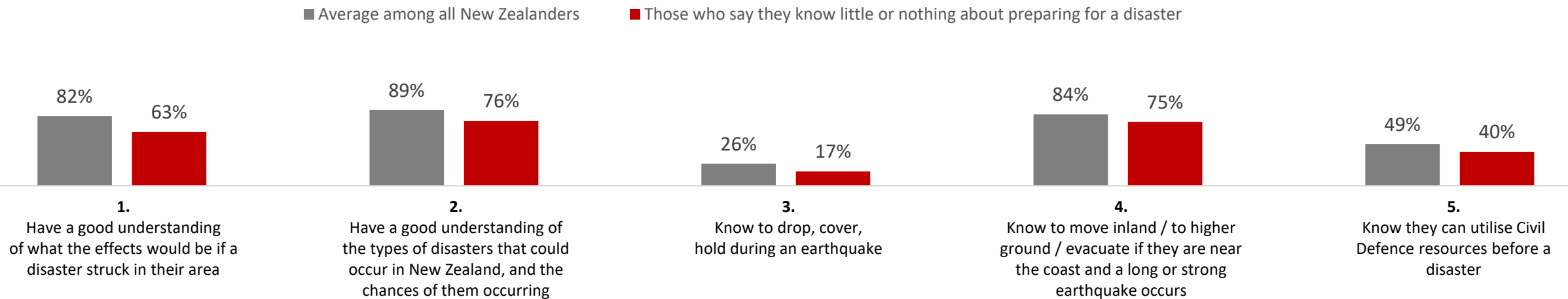
Discussed or planned with household what to do in a disaster



Lack of knowledge – primary barrier, cont.

Knowledge gaps among those who feel they lack knowledge.

Those who say they know little or nothing about preparing for a disaster have five key knowledge gaps (when compared to the average among all New Zealanders). Helping New Zealanders improve their knowledge in these areas is likely to have a positive impact on their overall disaster preparation knowledge, which in turn may empower them to become more prepared.*

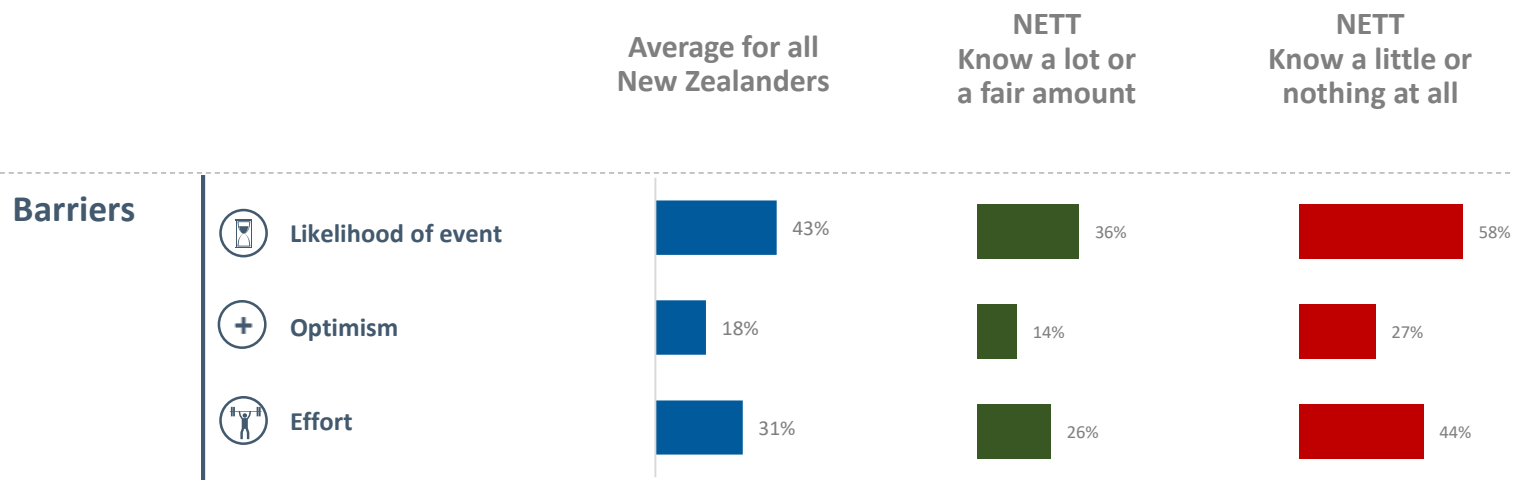


* Knowledge areas are ranked in order based on their percentage point difference from average.
Base: All respondents (2020 n=1,001), those who know little or nothing about preparing for a disaster (2020 n=262)



Lack of knowledge – primary barrier, cont.

Those who feel they lack knowledge are also more likely than average to be impacted by three of the other barriers: Likelihood of event, optimism and effort.

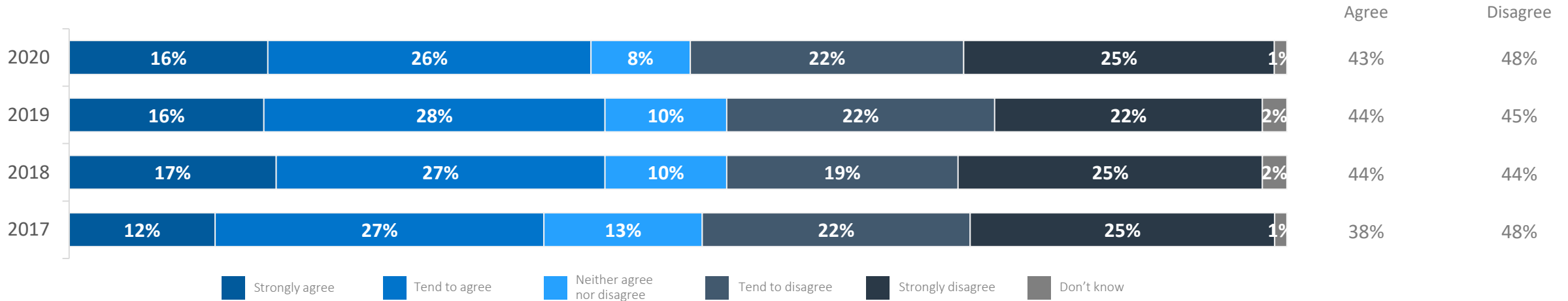




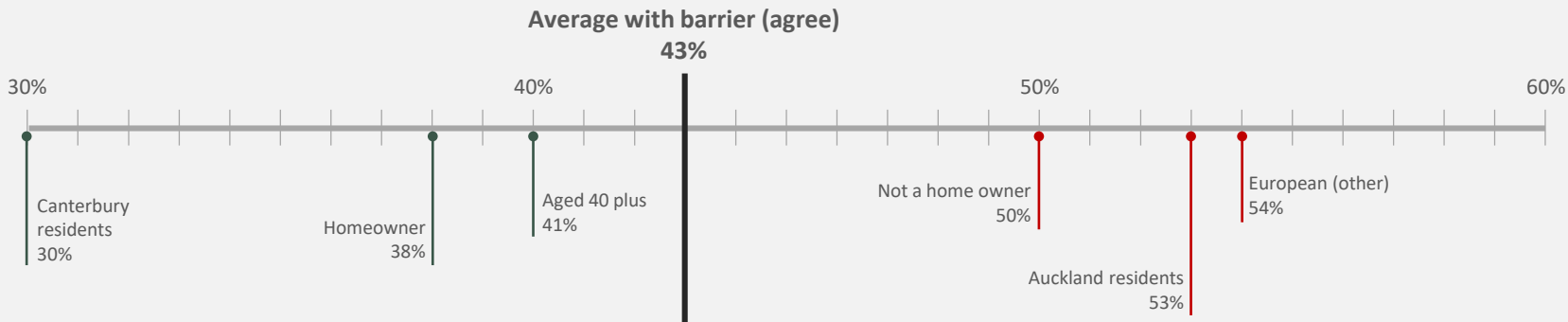
Likelihood of event – secondary barrier

This barrier impacts a large proportion of the New Zealand population. Nearly half of 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 getaway bag
- Stored sufficient water
- The necessary emergency supplies
- Discussed or planned with household what to do in a disaster

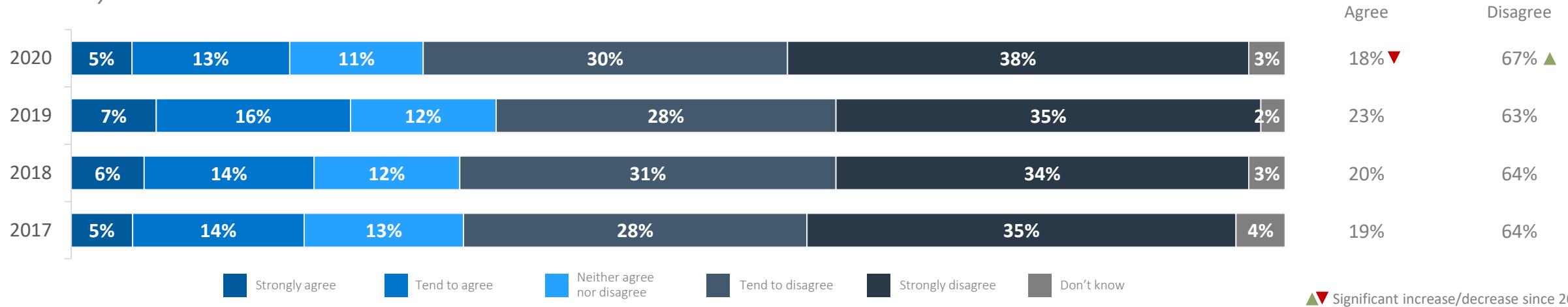




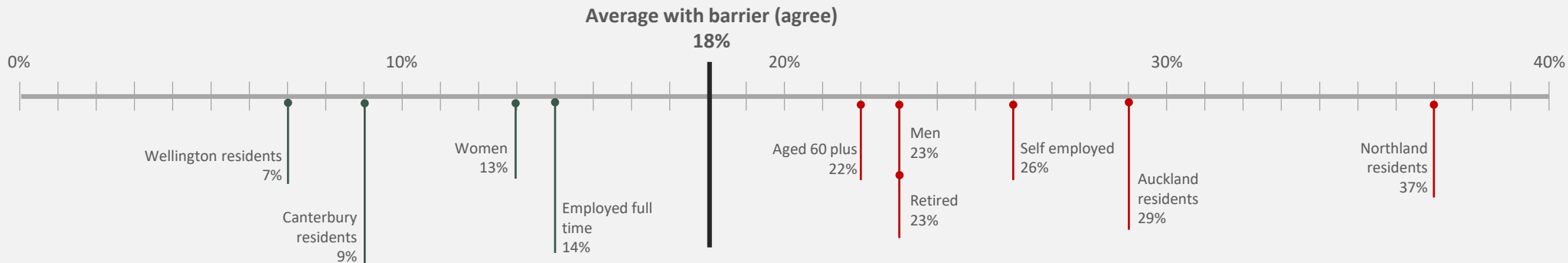
Optimism – secondary barrier

This year fewer New Zealanders think it's unlikely they will ever be in a disaster (18%, down from 23% in 2019). However, among these New Zealanders this false sense of security is a strong barrier preventing them from becoming prepared.

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



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:



Discussed or planned with household what to do in a disaster



Lower priority barriers

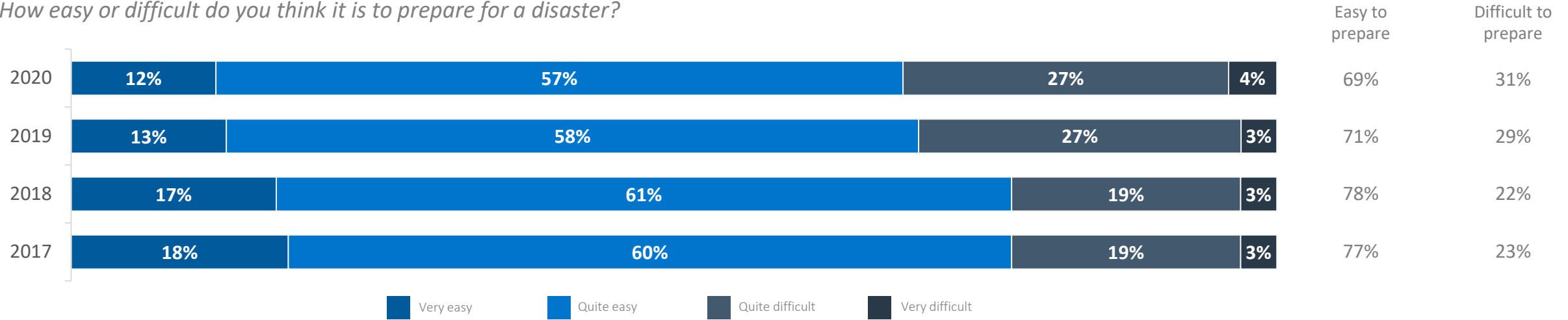




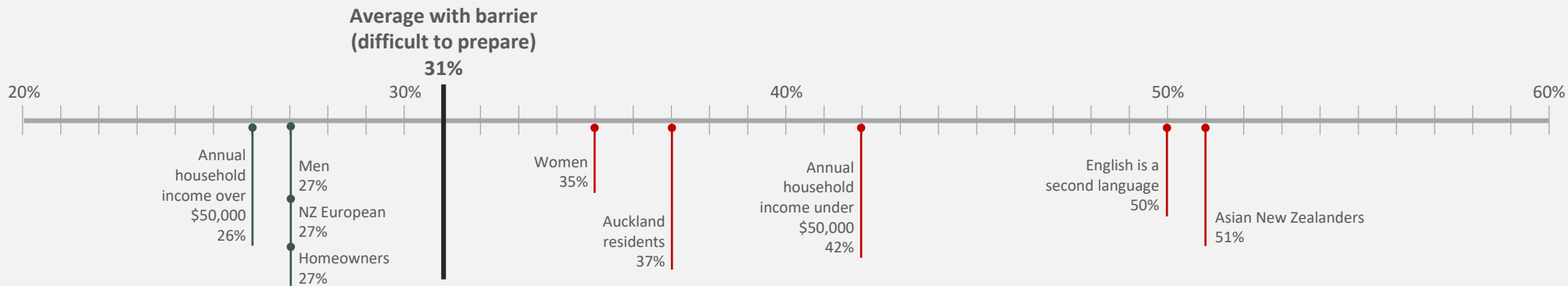
Effort

A third of 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:



Stored sufficient water

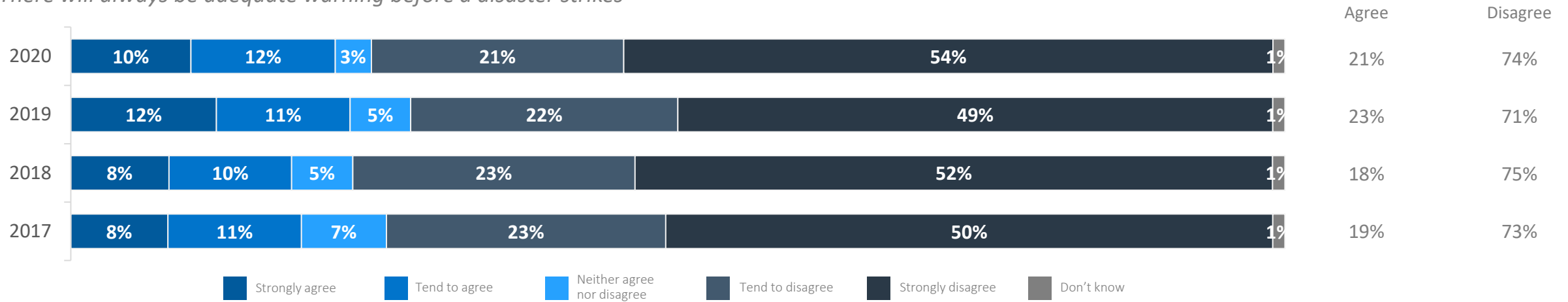


Discussed or planned with household what to do in a disaster

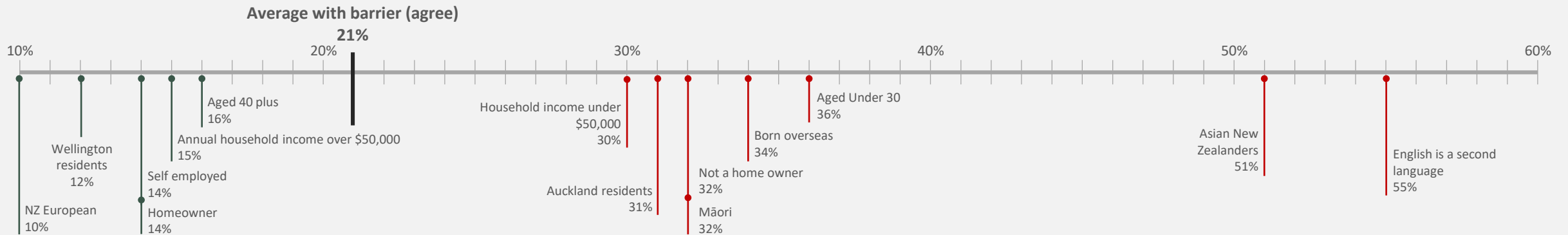


One in five New Zealanders believe there will always be adequate warning before a disaster strikes.

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



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

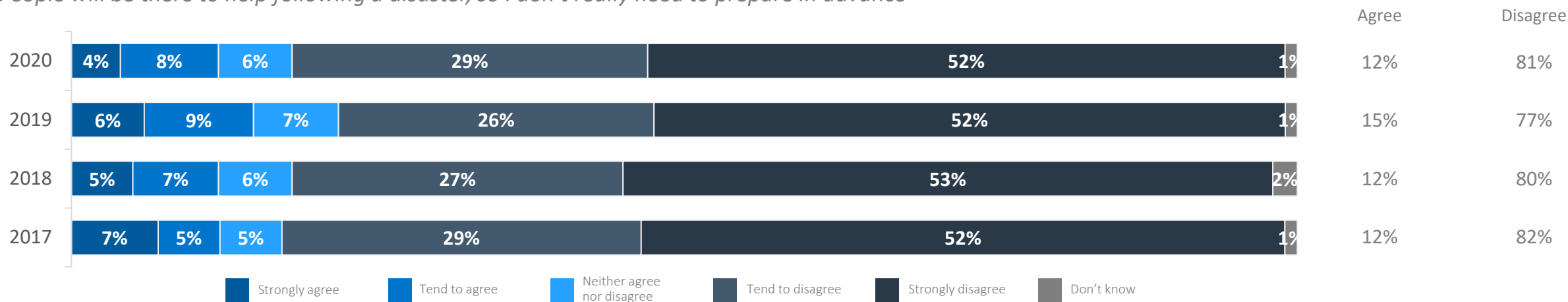




No personal responsibility

Twelve percent 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



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

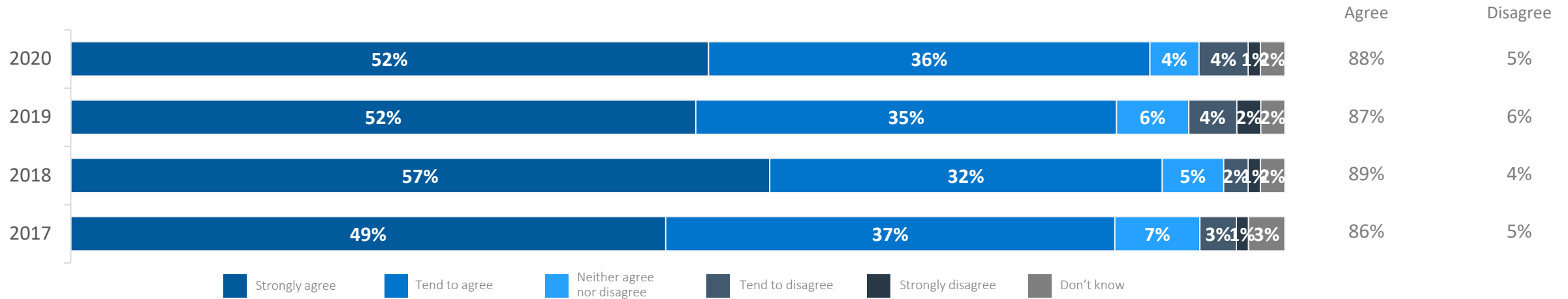




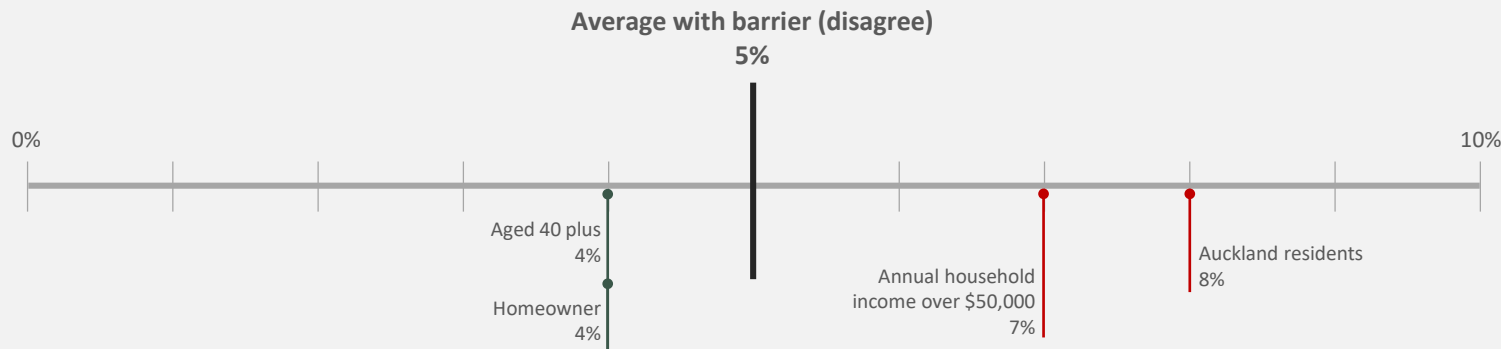
Control

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:



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



Stored sufficient water



The necessary emergency supplies

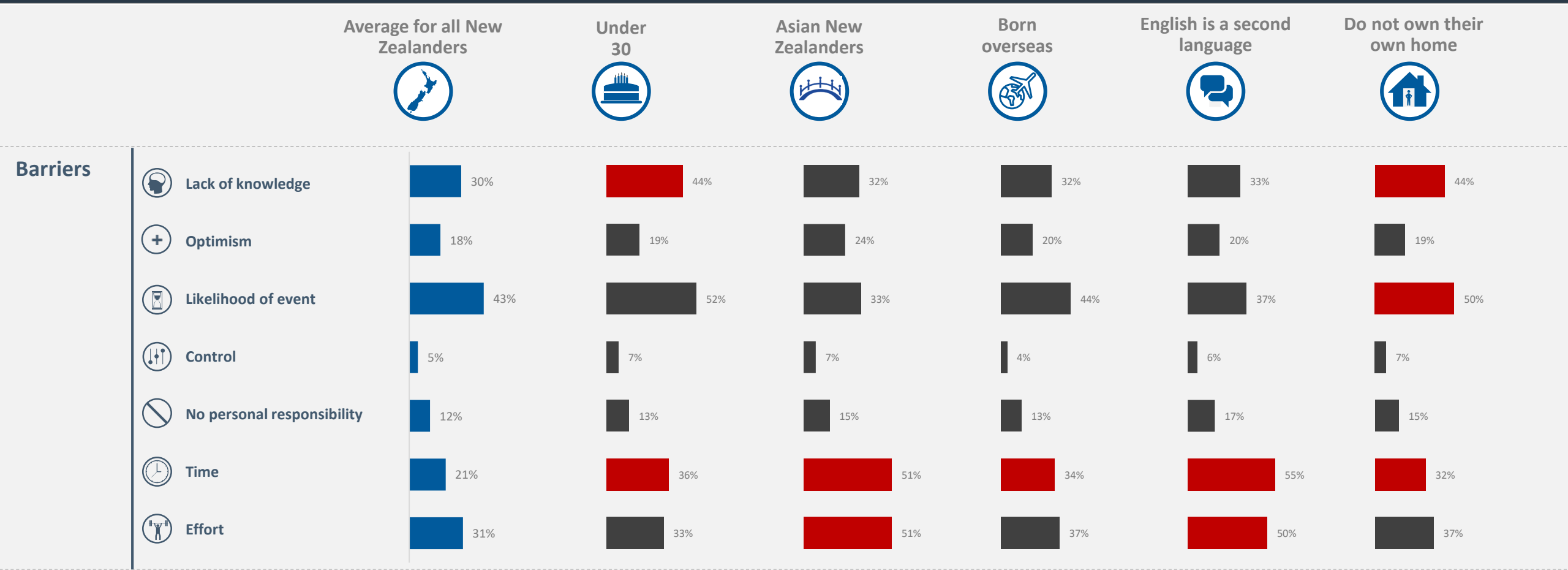


Discussed or planned with household what to do in a disaster

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 effort tend to be significantly larger barriers for these groups.






■ | Significantly more of a barrier than average

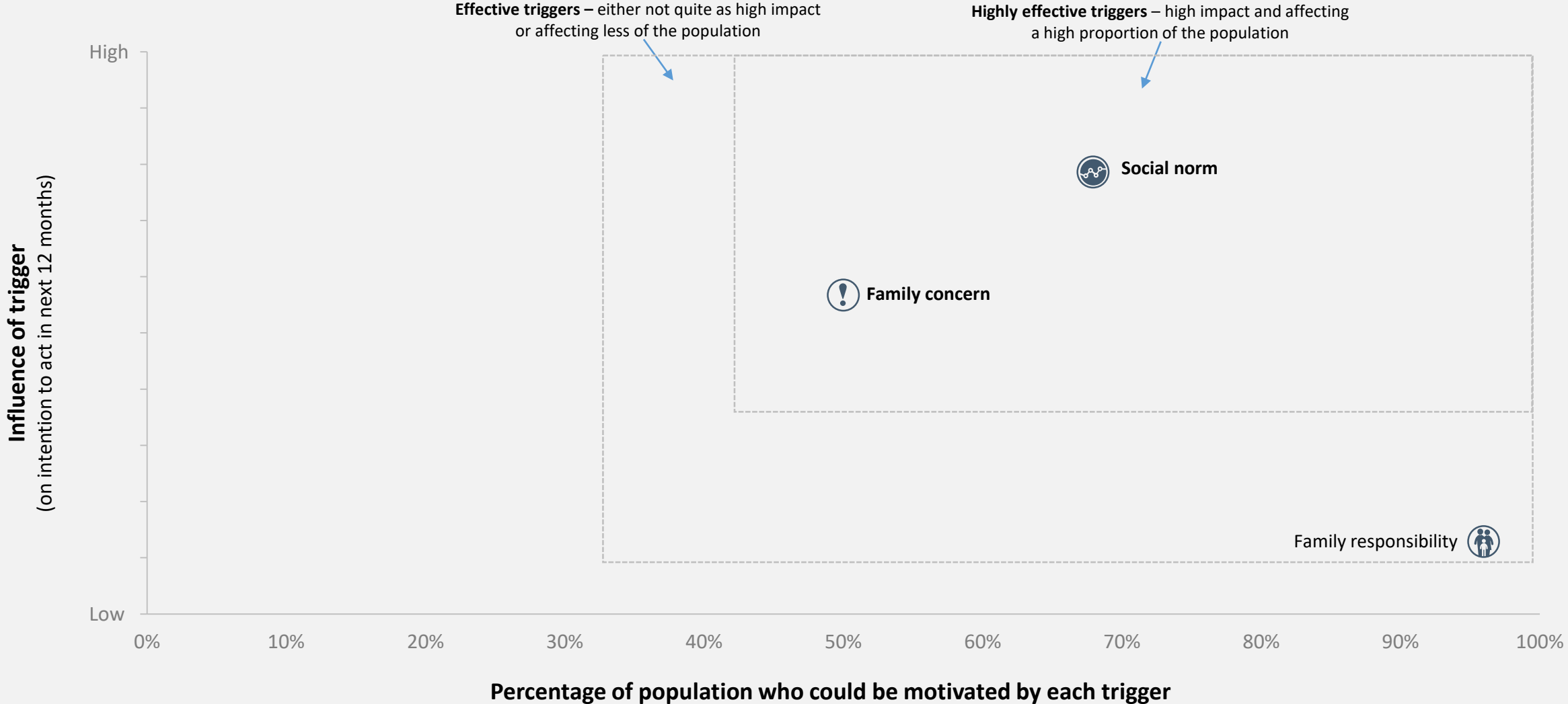
TRIGGERS



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

Triggers	 Social norm	<i>My friends and family think it's very important to be prepared for a disaster (Q6a_6)</i>
	 Family concern	<i>I often worry about what might happen to me or my family if there's a disaster (Q6a_8)</i>
	 Family responsibility	<i>It is my responsibility to look after myself and my family in a disaster (Q6a_4)</i>

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

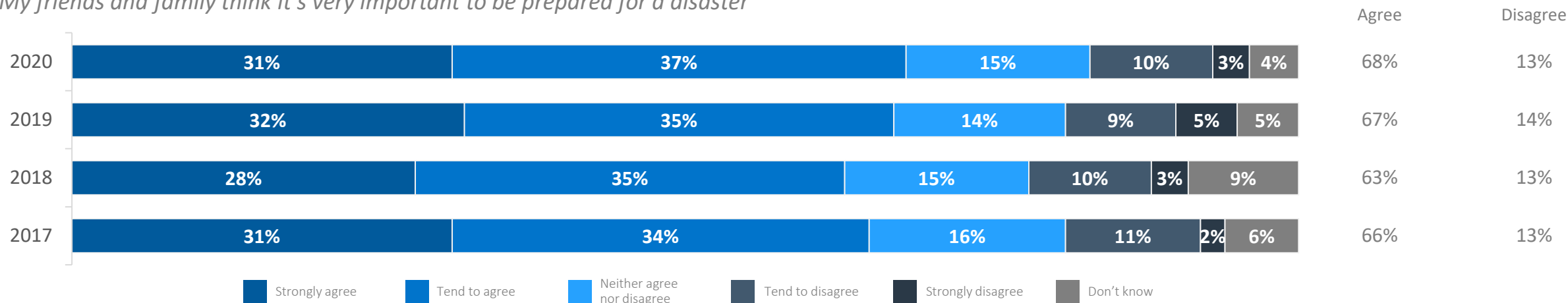




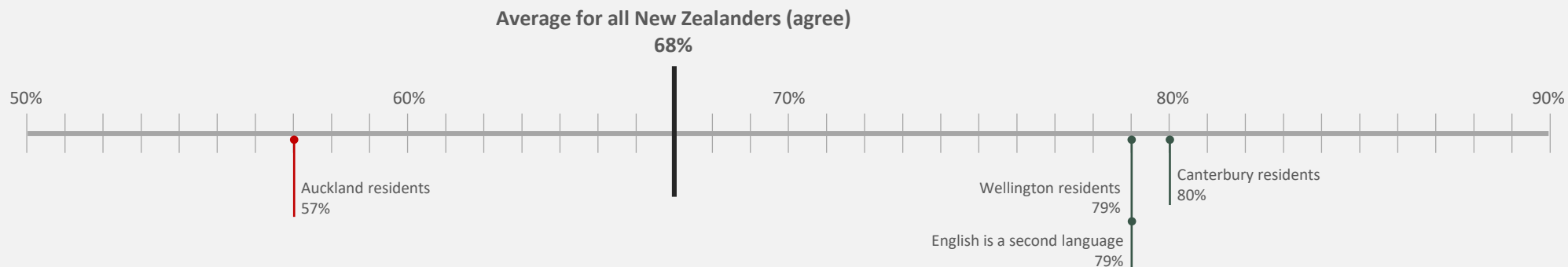
Social norm

What friends and family think has a big impact on how likely New Zealanders are to prepare for a disaster. New Zealanders who speak English as a second language are particularly likely to say their friends and family think it's important, which may be effective motivator to use to get this group prepared for a disaster.

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

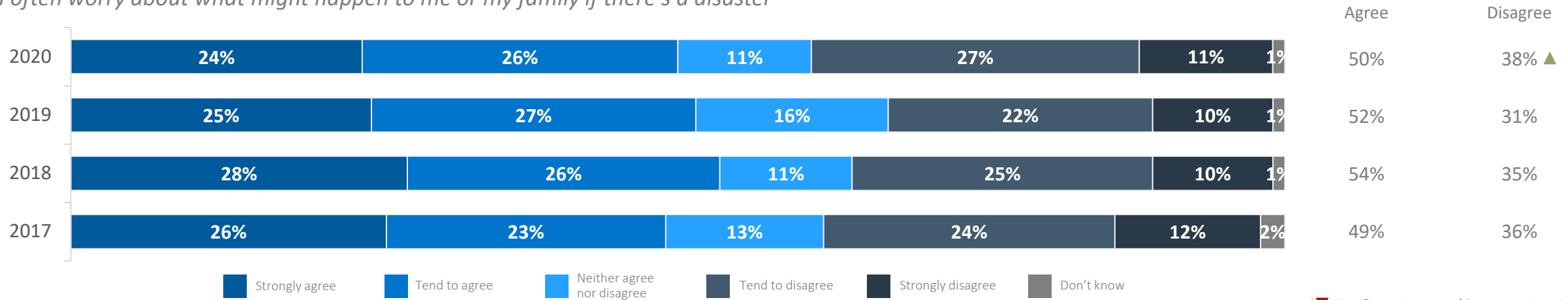
Base: All respondents (2016, 2017, 2018, n=1,000; 2019 n=1,031; 2020 n=1,001)



Family concern

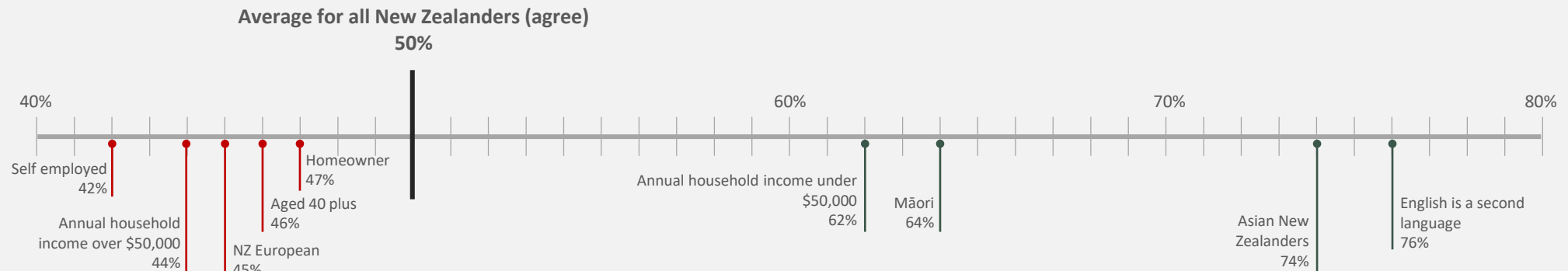
Concern for family is another strong trigger. New Zealanders who speak English as a second language and Asian New Zealanders are particularly likely to worry about what might happen to themselves and their family in a disaster.

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



▲▼ Significant increase/decrease since 2019

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



Source: Q6a_8 How much do you agree or disagree with each of the following statements... I often worry about what might happen to me or my family if there's a disaster

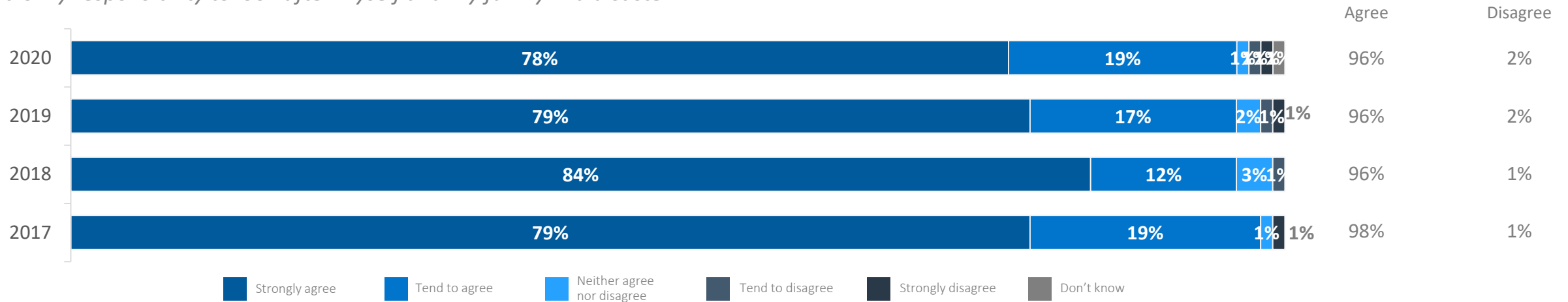
Base: All respondents (2016, 2017, 2018, n=1,000; 2019 n=1,031; 2020 n=1,001)



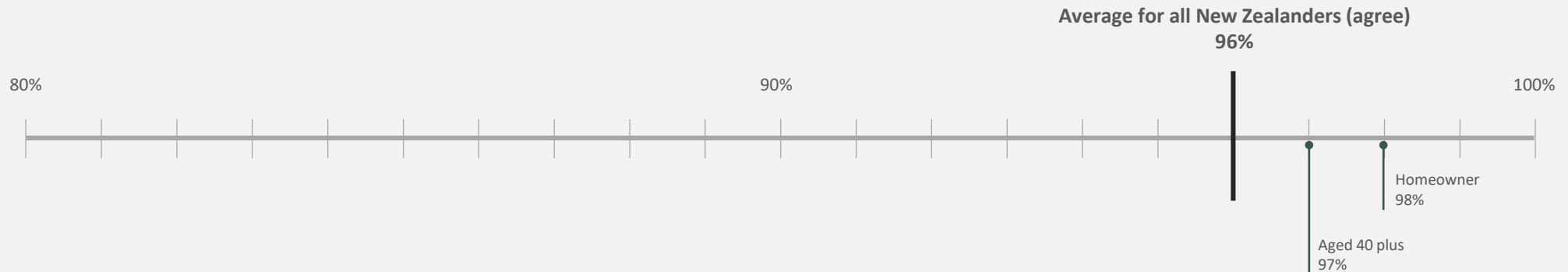
Family responsibility

The majority of New Zealanders have a strong sense 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:

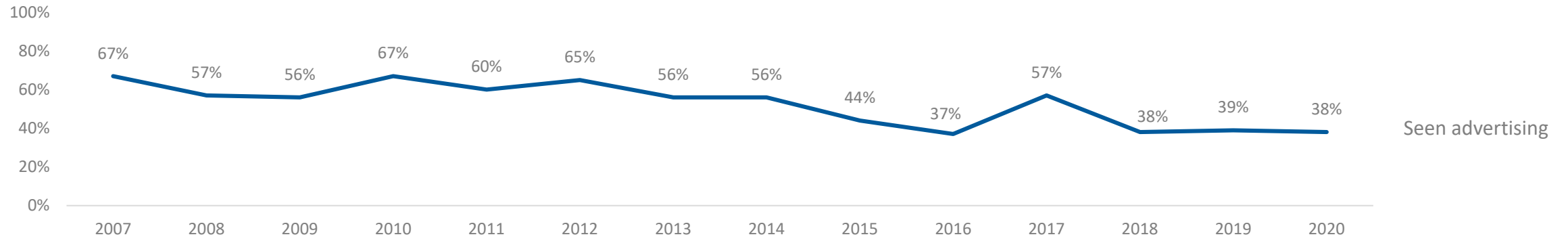


Communications

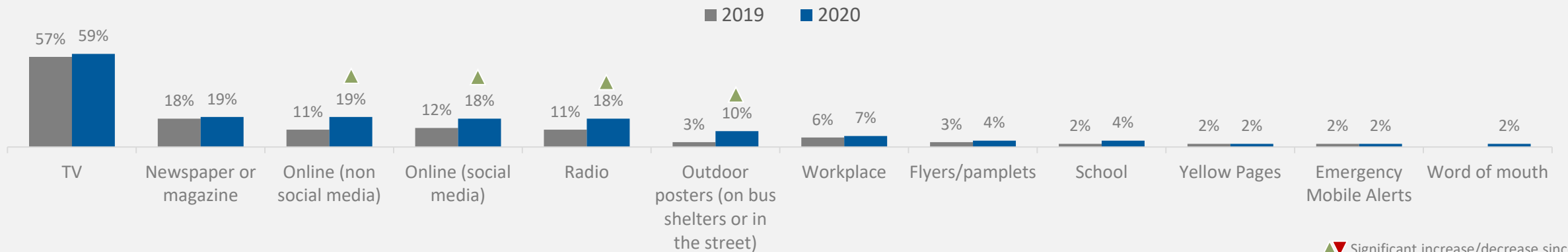


Advertising

Advertising awareness has been steady since 2018. This year more New Zealanders are seeing or hearing advertising online, on the radio, and on outdoor posters.



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



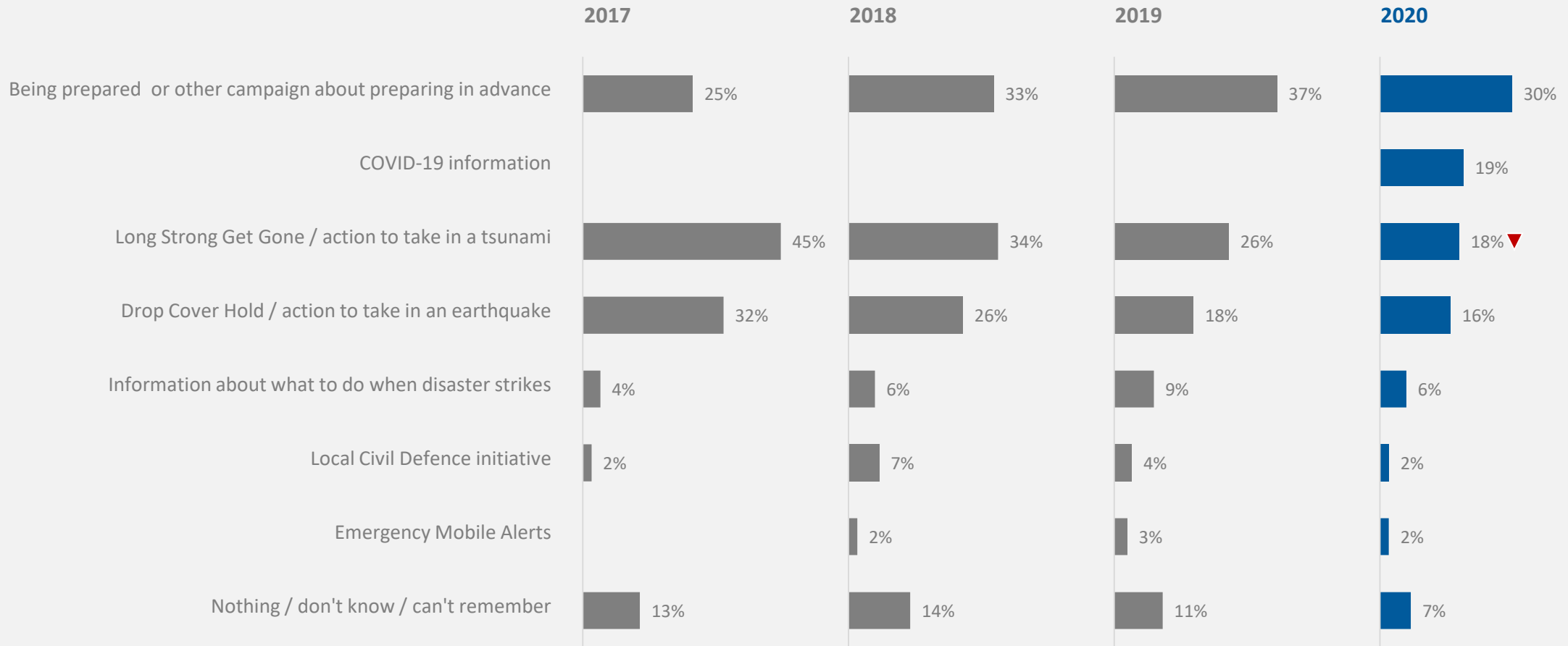
▲ Significant increase/decrease since 2019



Note: Results 1% and under in 2020 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 (2016, 2017, 2018 n=1,000; 2019 n=1,031; 2020 n=1,001), those seen, heard of read ads (2019 n=421; 2020 n=382)

Advertising

This year 1 in 5 say the advertising they saw was COVID-19 related.



▲▼ Significant increase/decrease since 2019



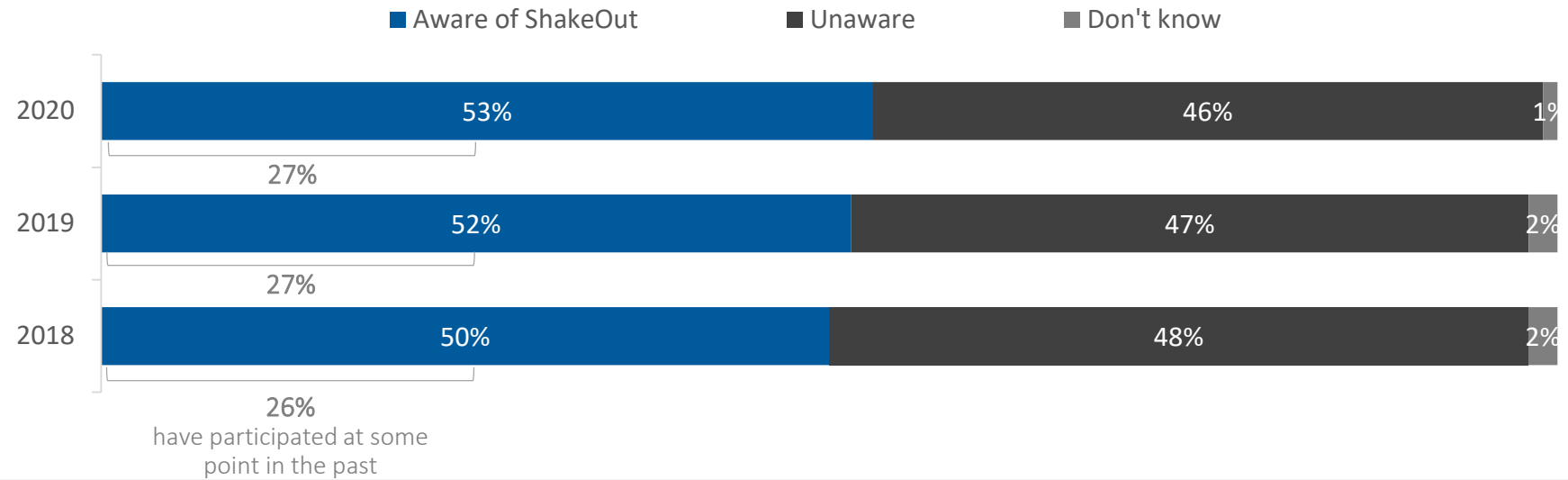
Note: Results 2% and under in 2019 are not shown
 Source: Q5ai What do you remember about the ads?
 Base: Those seen, heard of read ads (2017 n=616; 2018 n=385; 2019 n=421; 2020 n=382)

Shake Out and Tsunami Hīkoi

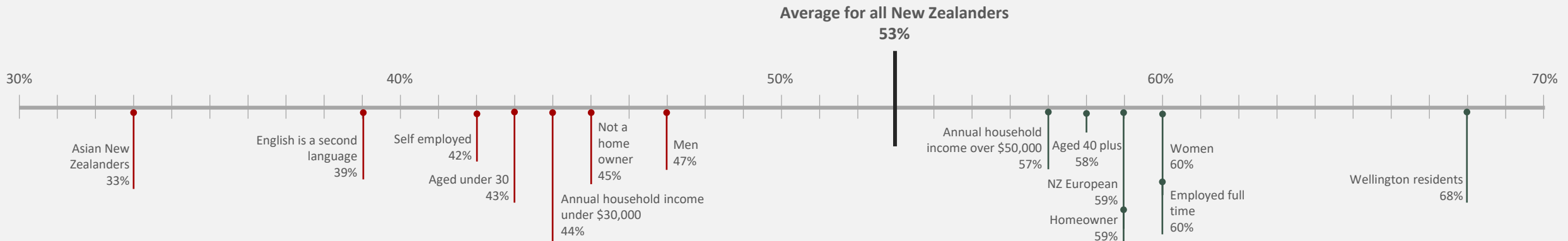


ShakeOut

More than a quarter of all New Zealanders have participated in ShakeOut at some point in the past.



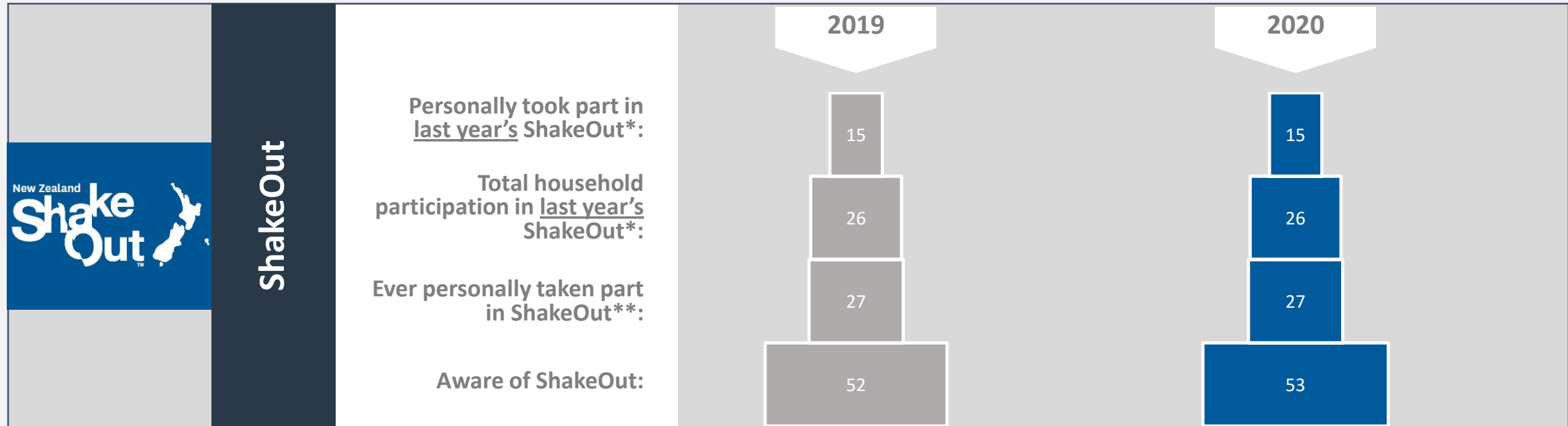
The following groups are significantly less likely or significantly more likely than average to have heard of ShakeOut:



Source: Q5h Before today have you heard of a national earthquake drill called ShakeOut? During the drill New Zealanders are asked to Drop, Cover, and Hold at a specific time on a specific day. Q5i Have you personally taken part in a ShakeOut drill by doing the Drop, Cover and Hold action at any time in the past?
 Base: All respondents (2018 n=1,000; 2019 n=1,031; 2020 n=1,001)

ShakeOut

Fifteen percent of New Zealanders personally took part in last year's ShakeOut drill.



**Q5i – new question wording in 2019; *Q5j & Q5k new questions in 2019.

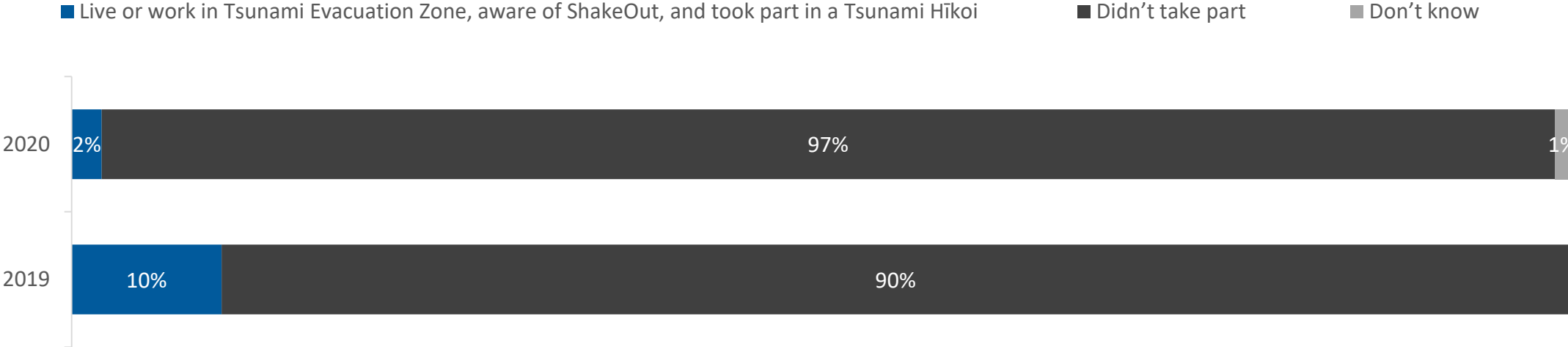
Source: Q5h Before today have you heard of a national earthquake drill called ShakeOut? Q5i Have you ever taken part in a ShakeOut drill by doing the Drop, Cover and Hold action? Q5j Did you take part in last year's ShakeOut drill?

Q5k Aside from you, did anyone else in your household take part in last year's ShakeOut drill?

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

Tsunami Hīkoi

Just two percent of people who live or work in a tsunami zone took part in last years Tsunami Hīkoi



Source: Q5I Do you live or work in a Tsunami Evacuation zone? Q5m Did you take part in a tsunami evacuation hikoi or walk as part of ShakeOut last year
Base: Those who live in a Tsunami Evacuation Zone and have heard of ShakeOut (2019 n=161, 2020 n=146)

Information sources



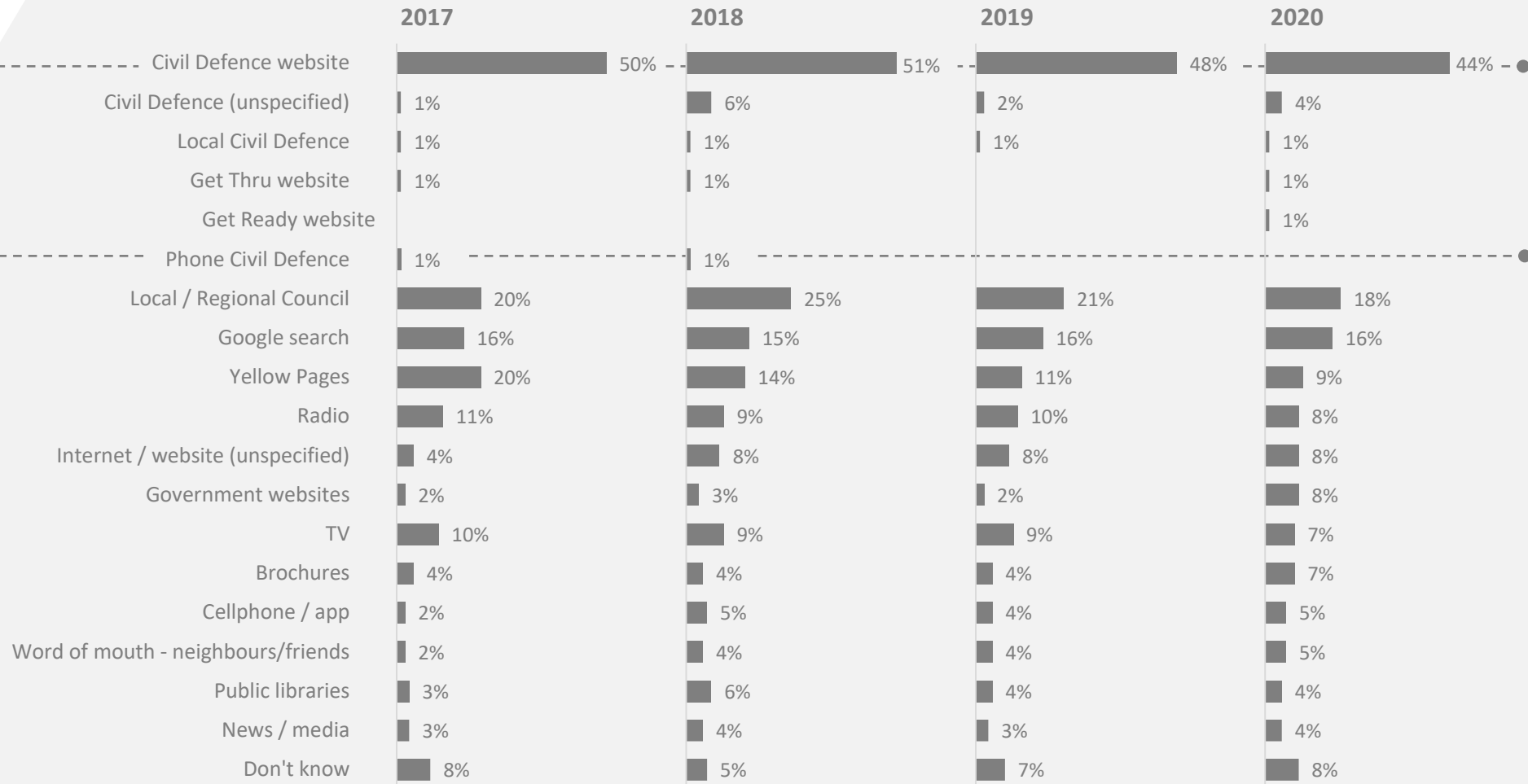
Sources of information before a disaster

Civil Defence channels continue to be the go-to sources for information about disasters before they occur.

Mention Civil Defence
in some form

49%

(51% in 2019)
(58% in 2018)
(53% in 2017)



Source: Q4f Before a disaster, where can you get information about how to prepare?

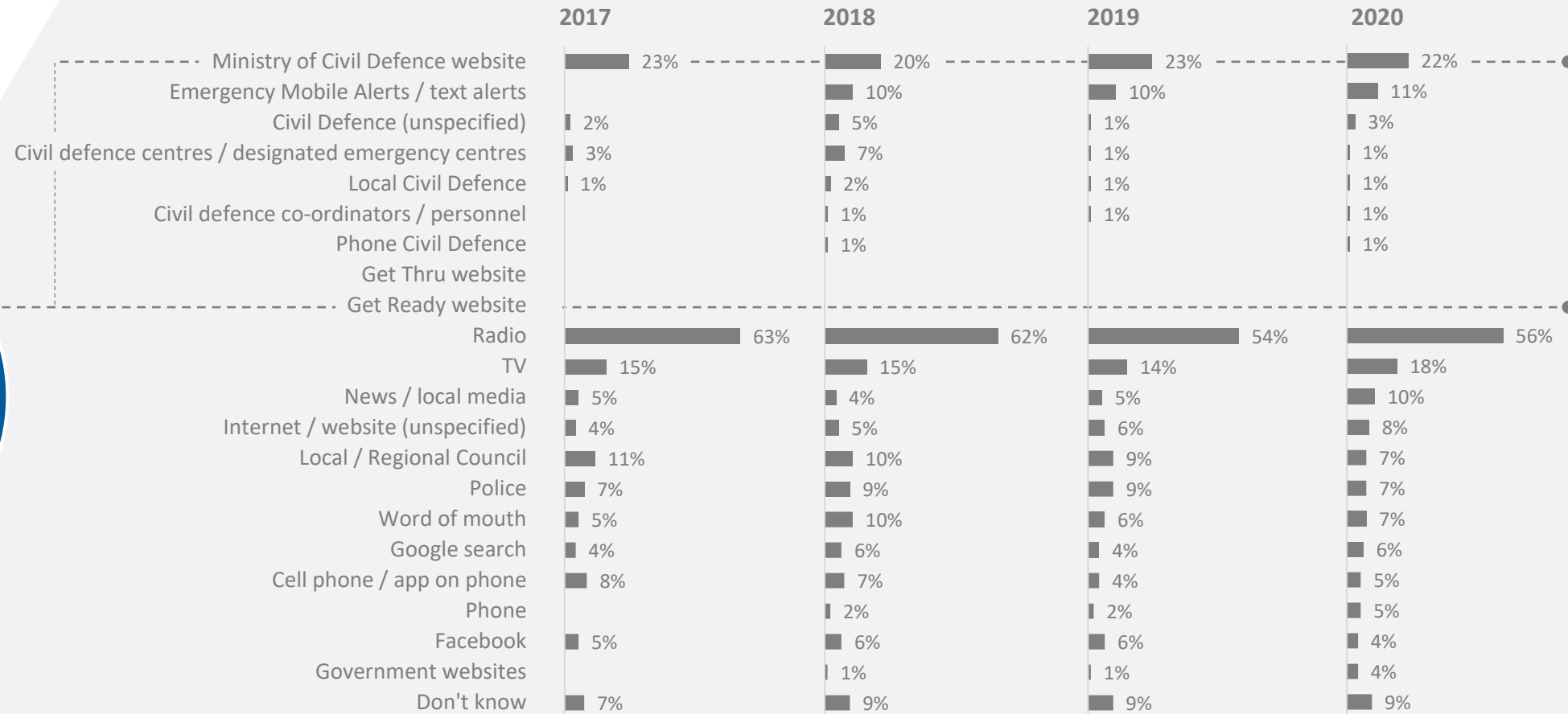
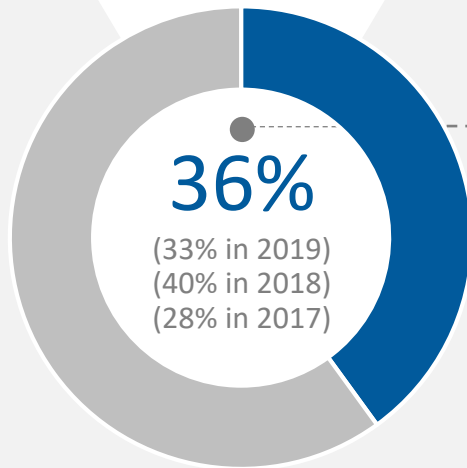
Base: All respondents (2017, 2018 n=1,000; 2019 n=1,031, 2020 n=1,001)

Results 3% and under in 2020 are not shown

Sources of information during or immediately after a disaster

A third of New Zealanders say they would utilise Civil Defence during or immediately after a disaster.

Mention Civil Defence in some form



Source: Q4g During or immediately after a disaster, where can you get information about what to do?

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

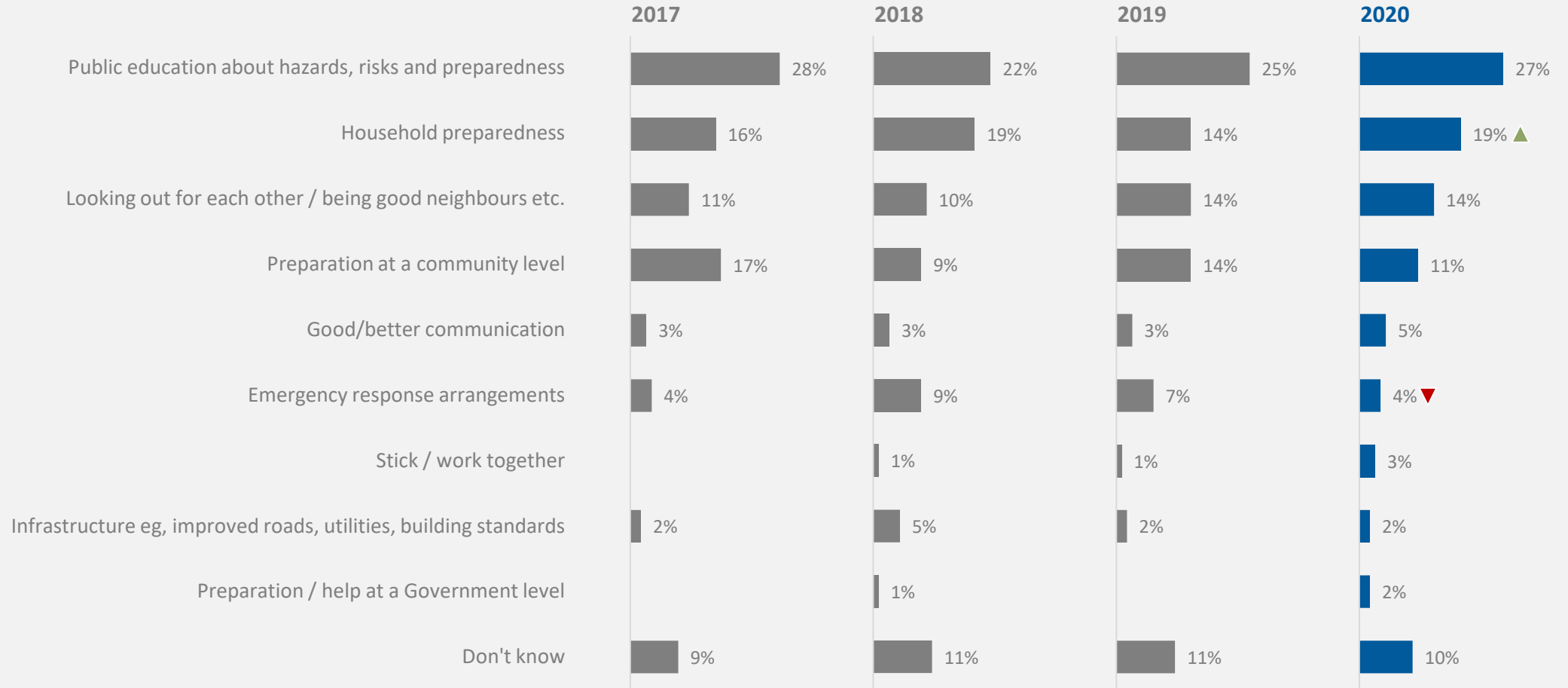
Results 3% and under in 2020 are not shown

Ensuring resilient communities



Ensuring resilient communities

Compared to 2019, more New Zealanders now believe household preparedness is the key to ensuring resilient communities.



▲▼ Significant increase/decrease since 2019



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?

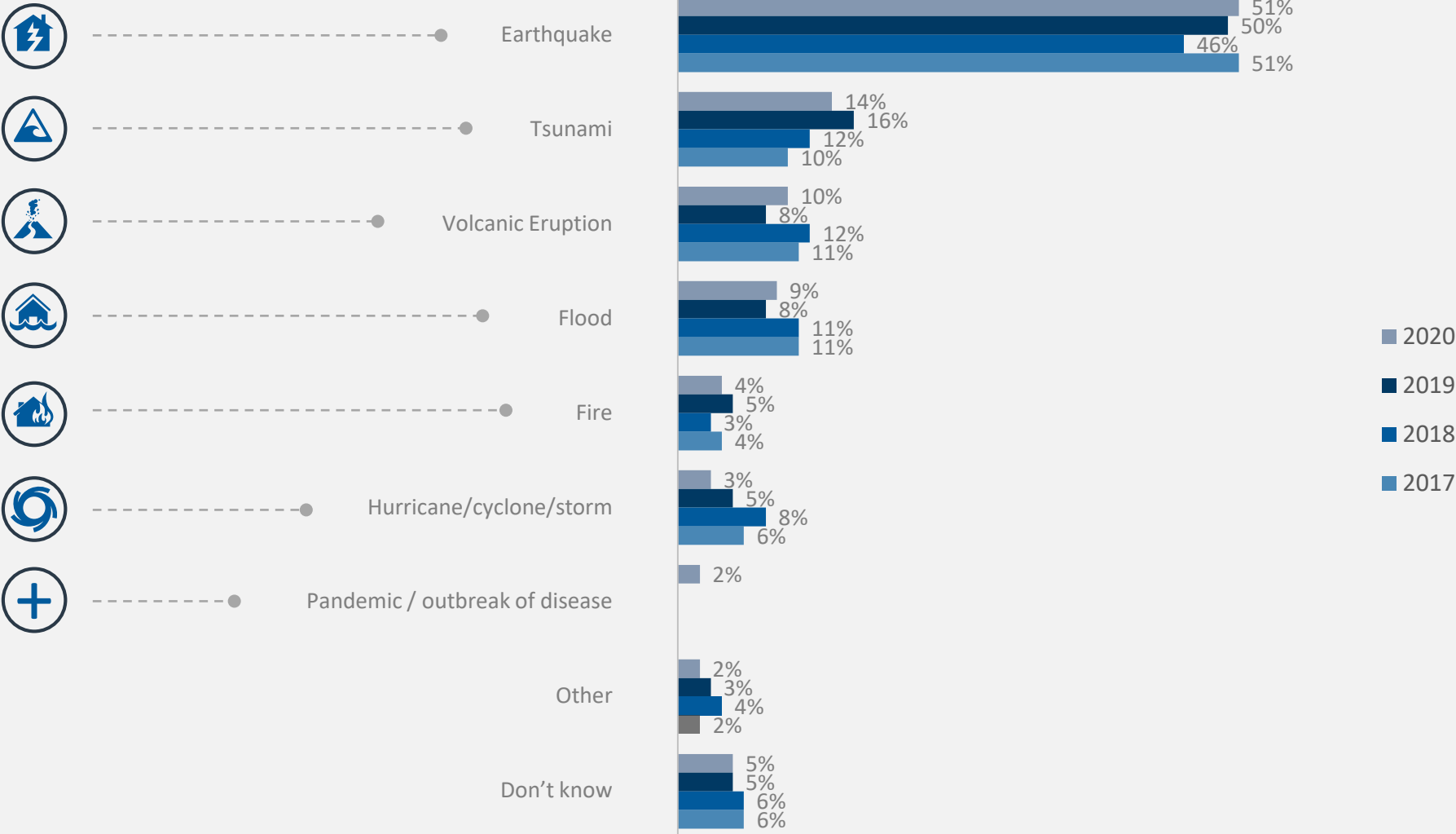
Base: All respondents (2017, 2018 n=1,000; 2019 n=1,031; 2020 n=1,001)

Results 1% and under in 2020 are not shown

What do people think when they think 'disaster'?



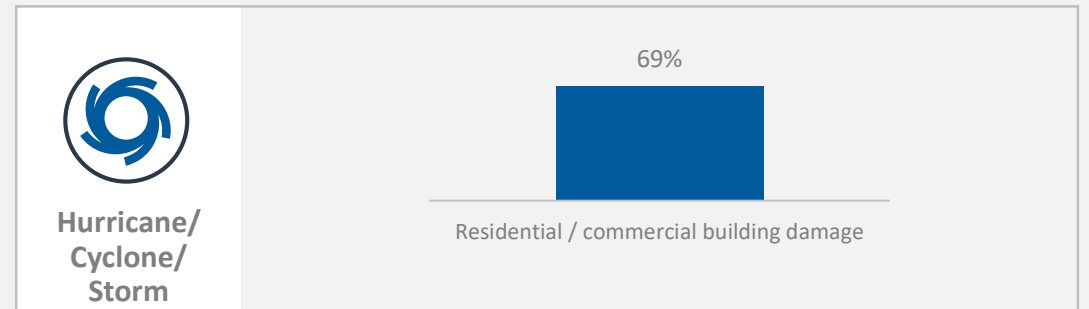
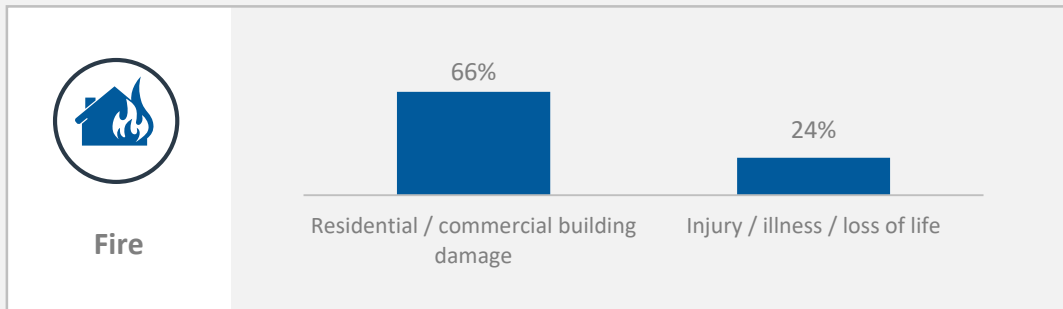
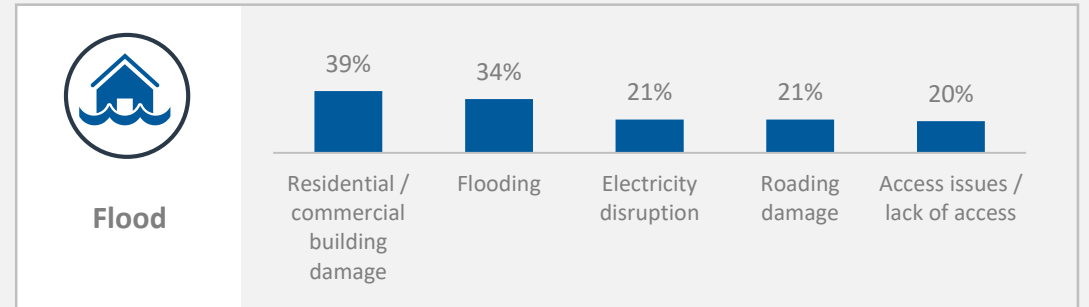
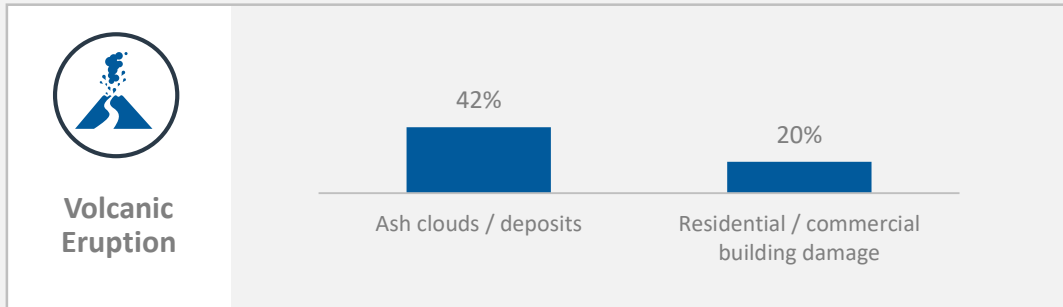
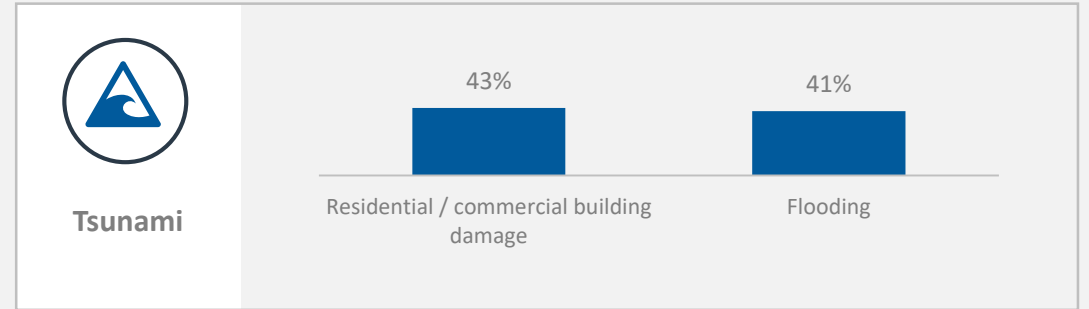
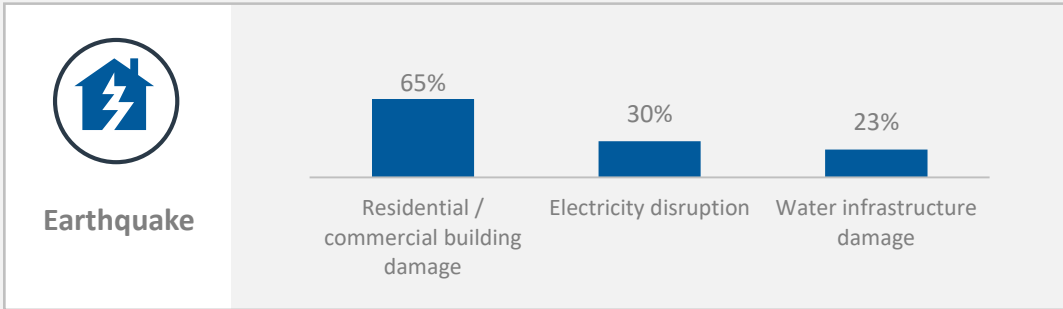
To New Zealanders 'disaster' means earthquake



Source: Q4a Thinking about where you live, which type of disaster would have the most impact or cause the most disruption for your household?
 Base: All respondents (2016, 2017, 2018 n=1,000; 2019 n=1,031; 2020 n=1,001)



Awareness of consequences



Appendix – Preparedness continuum



Preparedness continuum

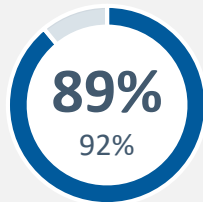
Understand the risk

Have taken action to prepare

2020

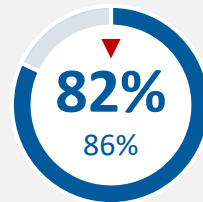
2019

Aware



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

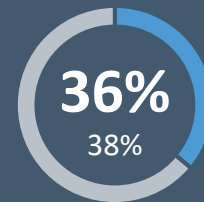
Understand



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

▲▼ Significant increase/decrease since 2019

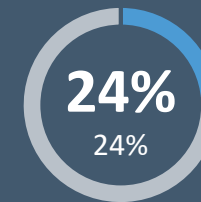
Committed



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



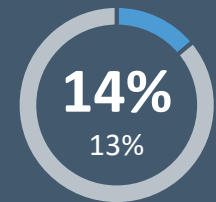
Household discussed or planned what to do in a disaster*

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



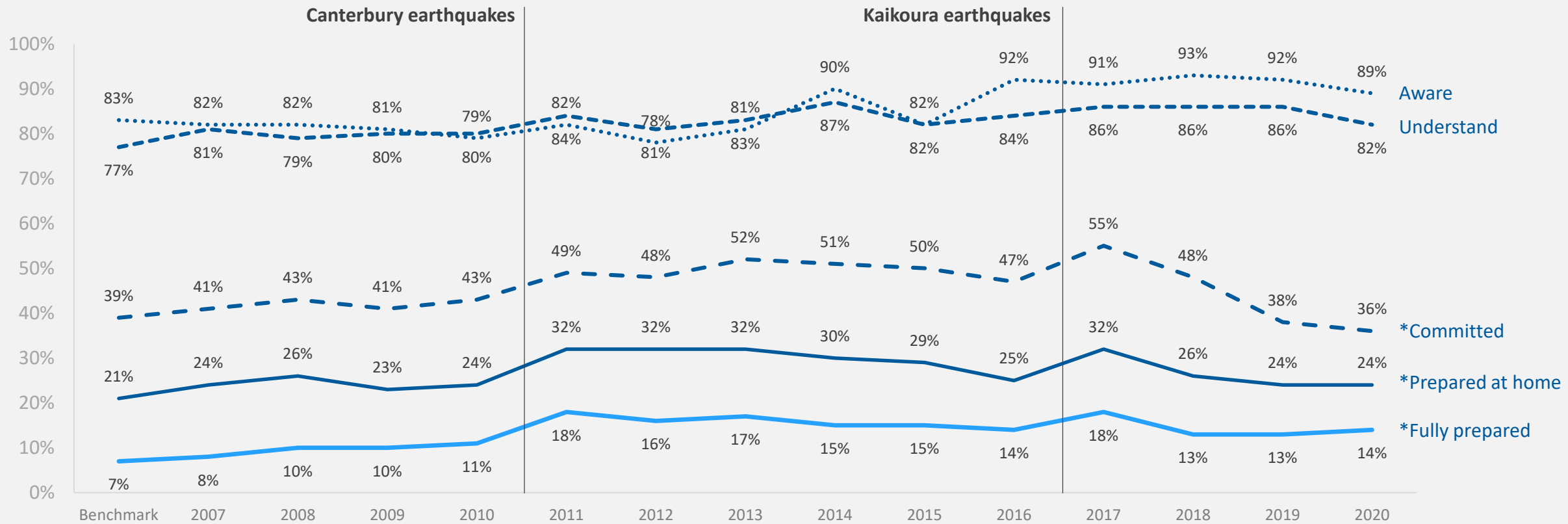
Household emergency plan or discussion includes what to do when not at home*

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*

Preparedness continuum – time series



*Caution: changes have been made to these questions/statements in 2019 so results 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 (2020 n=1,001)

Appendix – Māori



Māori have very similar levels of preparedness and knowledge to all New Zealanders.



The barriers for Māori are similar to those for all New Zealanders, with the exception of Time – Māori are more likely to say there will be adequate warning before a disaster strikes.



FOR FURTHER INFORMATION PLEASE CONTACT:

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