



# How prepared are New Zealanders for a natural disaster?

Results from the 2010 General Social Survey



#### **Crown copyright ©**

This work is licensed under the Creative Commons Attribution 3.0 New Zealand licence. You are free to copy, distribute, and adapt the work, as long as you attribute the work to Statistics NZ and abide by the other licence terms. Please note you may not use any departmental or governmental emblem, logo, or coat of arms in any way that infringes any provision of the Flags, Emblems, and Names Protection Act 1981. Use the wording 'Statistics New Zealand' in your attribution, not the Statistics NZ logo.

#### **Liability**

While all care and diligence has been used in processing, analysing, and extracting data and information in this publication, Statistics New Zealand gives no warranty it is error free and will not be liable for any loss or damage suffered by the use directly, or indirectly, of the information in this publication.

#### **Citation**

Statistics New Zealand (2012). *How prepared are New Zealanders for a natural disaster?* Wellington: Statistics New Zealand

ISBN 978-0-478-37773-6 (online)

#### **Published in June 2012 by**

Statistics New Zealand  
Tatauranga Aotearoa  
Wellington, New Zealand

#### **Contact**

Statistics New Zealand Information Centre: [info@stats.govt.nz](mailto:info@stats.govt.nz)  
Phone toll-free 0508 525 525  
Phone international +64 4 931 4610  
[www.stats.govt.nz](http://www.stats.govt.nz)

# How prepared are New Zealanders for a natural disaster?

This report outlines preparations New Zealand households have made for a natural disaster, using information from the 2010 New Zealand General Social Survey (NZGSS). It follows a similar report using 2008 NZGSS data (see [Natural disaster preparation at home](#)).

We present findings on how natural disaster preparations have changed since 2008. The information helps us determine how prepared New Zealand homes are for future natural disasters and how fast they can recover.

## Summary of changes in disaster preparation

The 2010 NZGSS results show some improvement in household preparation for a natural disaster. For example, more homes in the Canterbury and Wellington regions, and more couples with dependent children, were prepared than in 2008. This improvement is partly due to the Canterbury earthquakes that were occurring from September 2010 to March 2011 when the survey was underway. The survey came out of the field shortly after the 22 February 2011 earthquake, so the results do not reflect the full effect of that earthquake on household preparations.

## Levels of disaster preparation

For this report, three levels of natural disaster preparations are used to assess how prepared New Zealand households are for a natural disaster. The levels, created in consultation with the Ministry of Civil Defence and Emergency Management, are shown in figure 1.

Figure 1

### Levels of preparation for a natural disaster



## Increased preparedness in New Zealand homes

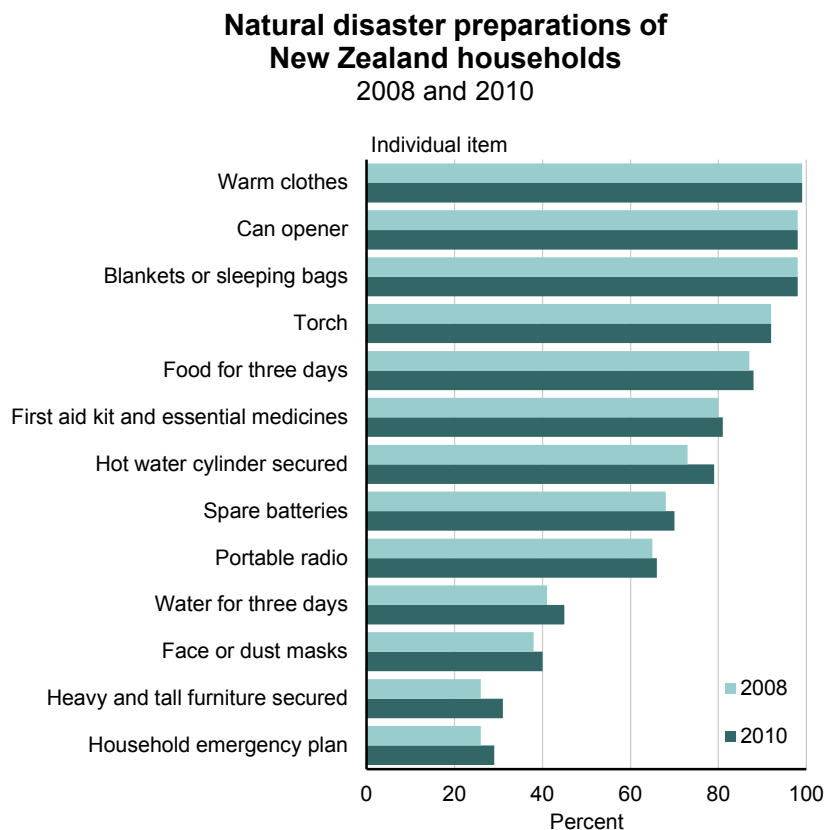
The proportion of New Zealand homes with basic or better preparation, and damage mitigation, has increased since 2008. In 2010:

- 18 percent of households (294,000 homes of 1,634,000 New Zealand homes) met all three requirements for **basic preparation** (up from 15 percent in 2008). Ten percent of households (156,000 homes) did not meet any of the requirements in 2010.
- 13 percent of households (206,000 homes) met all requirements for **better preparation** (up from 11 percent in 2008).

- most New Zealand homes (88 percent) had food for three days (87 percent in 2008), but just 45 percent had a three-day supply of water (41 percent in 2008), and only 29 percent (26 percent in 2008) had a household emergency plan
- 31 percent of homes with heavy and tall furniture had the furniture secured in 2010. Of homes with a hot water cylinder, 79 percent had the cylinder secured
- households that had developed an emergency plan with family members (29 percent or 469,000 homes) were more likely to have other preparations, including steps to mitigate damage to their homes.

Figure 2 shows the proportions of New Zealand homes that had items to help them survive a natural disaster – from the most-common items used in daily life (having warm clothes available, and a can opener) to the least common (having a household emergency plan worked out with family members).

**Figure 2**



Source: Statistics New Zealand

## Homes in Canterbury and Wellington most prepared

In 2010, changes in preparedness were most obvious in Canterbury and Wellington.

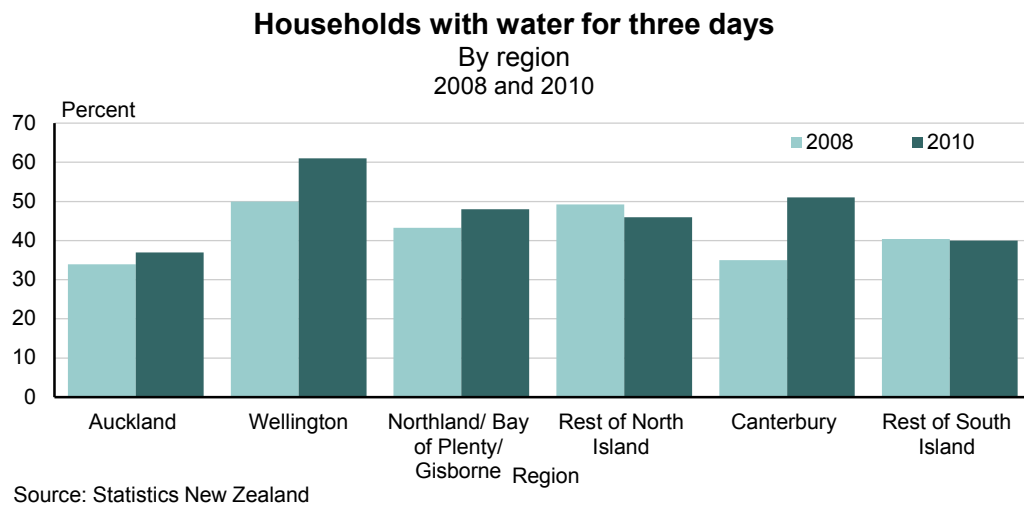
- More households in the Canterbury and Wellington regions than in other regions met all the requirements for basic preparation. The proportion of households basically prepared in Canterbury (28 percent or 62,000 homes) nearly doubled from 2008 (15 percent or 32,000 homes).
- The proportions of Canterbury and Wellington homes with better preparation also increased in 2010 (to 20 percent and 18 percent, respectively). Homes in these two regions were also more likely to have met all the requirements for better preparation than homes in other regions.

In 2010, households in the Auckland region remained less likely than households in other regions to have all the items needed for basic preparation (around one in 10 homes being prepared).

## Water storage

Figure 3 shows the proportion of homes in each region with stored water. The changes between 2008 and 2010 were only significant for Canterbury (up to 51 percent in 2010, from 35 percent in 2008) and Wellington (up to 61 percent in 2010 from 50 percent in 2008).

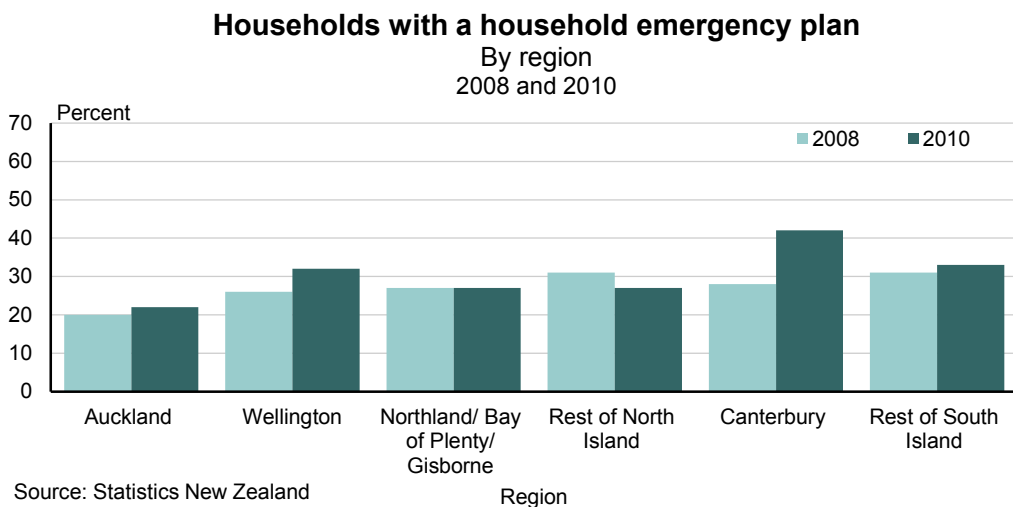
**Figure 3**



## Emergency plan

Figure 4 shows the proportion of households in each region with an emergency plan. As for stored water, Wellington and Canterbury had the only significant increases.

**Figure 4**



The proportion of households in the Canterbury region with an emergency plan showed the greatest change, increasing to 42 percent in 2010 (91,000 homes) from 28 percent (60,000 homes) in 2008.

Households in the Auckland region were least likely to have a household emergency plan – only 22 percent had developed an emergency plan in 2010.

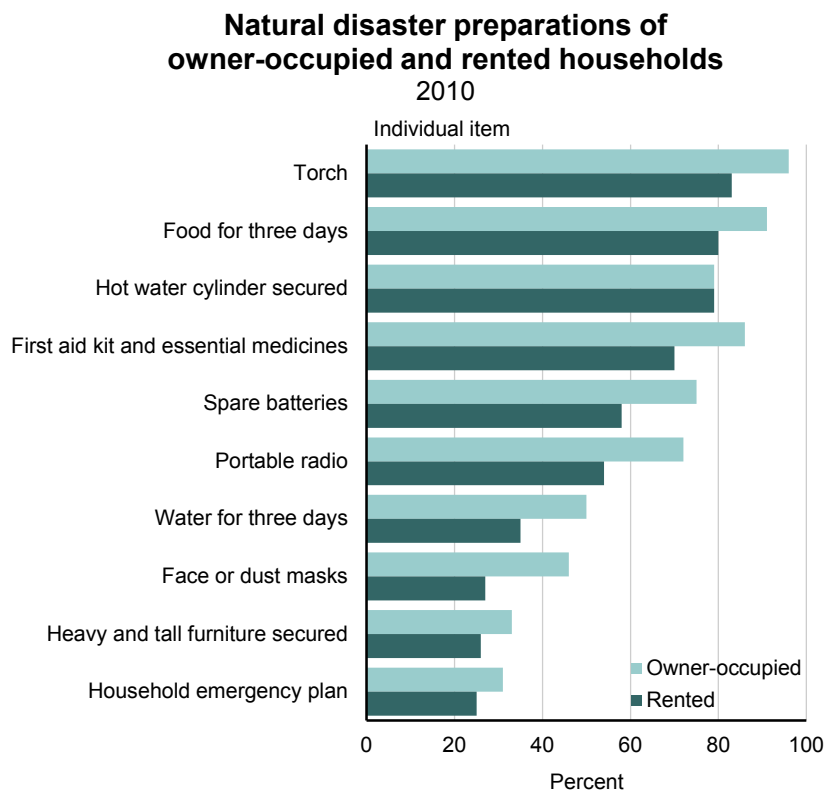
## Home owners more prepared than renters

Home owners were more prepared for a natural disaster than renters, although the 2010 results show the gap may be closing.

- Households owning their homes were about one and a half times more likely than renting households to have basic preparation (20 percent and 14 percent, respectively) and better preparation (15 percent and 8 percent, respectively) in 2010.
- The proportion of renting households with basic preparations increased to 14 percent in 2010, up from 10 percent in 2008.

Figure 5 shows the different types of preparations made by home owners and renters.

**Figure 5**



Source: Statistics New Zealand

In Wellington and Canterbury, the regions with the largest increase in basic (and better) preparation, over three-quarters of prepared homes were owned by the household.

- Of the 44,000 households in the Wellington region meeting all the requirements for basic preparation, 76 percent owned their homes.
- Of the 62,000 households in the Canterbury region meeting all the requirements for basic preparation, 77 percent owned their homes.

## Home contents insurance more likely in households with other types of preparation

Over three-quarters of New Zealand households (82 percent or 1,279,000 homes) had home contents insurance. These insured households were:

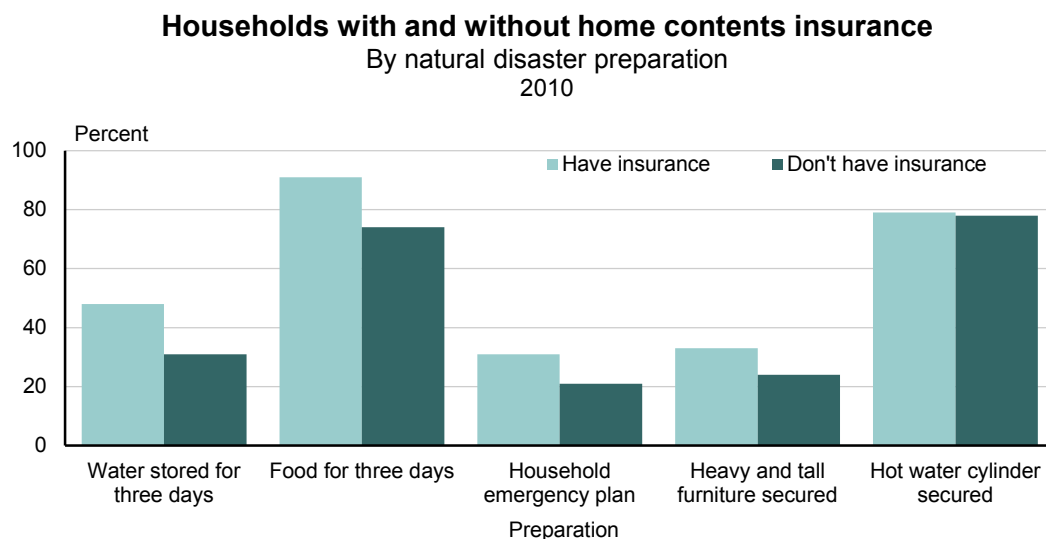
- nearly twice as likely to meet all the requirements for basic preparation than households without home contents insurance (20 percent and 11 percent, respectively)
- twice as likely to meet all the requirements for better preparation than uninsured households (14 percent and 6 percent, respectively)
- more likely to own their homes (79 percent).

The likelihood of households taking out home contents insurance increased with household income. Of households with an income of \$100,001 or more, 93 percent had home contents insurance. This compares with 86 percent of households with an income between \$70,001 and \$100,000, 78 percent of those with an income between \$30,001 and \$70,000, and 69 percent of low income households (\$30,000 or less).

The proportion of households with basic preparation and better preparation was similar across income levels in 2010. However, households with the highest incomes (\$100,001 or more) had the greatest increase in basic preparation (18 percent, up from 13 percent in 2008). Their better preparation level also increased (14 percent, up from 10 percent in 2008).

Figure 6 shows the proportion of households, with and without home contents insurance, that had made some preparations in 2010.

**Figure 6**



Source: Statistics New Zealand

## One-parent families least prepared

Most family types had improved their level of basic or better preparation in 2010. One-parent families were the exception.

- One-parent families were more likely to not have met any of the requirements for basic preparation at home (18 percent or 25,000 homes) than couples with dependent children (9 percent or 47,000 homes) or couples without dependent children (6 percent or 29,000 homes).
- This lack of preparation in one-parent families increased from 15 percent (22,000 homes) in 2008.
- Of the 25,000 one-parent families without any of the basic requirements, two-thirds (69 percent) were renting their home.
- One-parent families were also less likely to have met all the requirements for better preparation at home (8 percent) than other family types.

The proportion of couples with dependent children that met all the requirements for basic preparation increased to 17 percent (73,000 households), from 13 percent in 2008. Three-quarters (79 percent) of these couple-with-children families owned their homes.

## Methodological section

Readers should keep in mind these methodological points.

- Results were weighted to represent the number of households in New Zealand.
- The NZGSS collects information over the 12 months from April to March every second year. The 2010 survey stopped collecting in Canterbury for two weeks after the 22 February earthquake. The survey came out of the field at the end of March 2011, so the results do not reflect the full effect of that earthquake on natural disaster preparations.
- The damage mitigation results only include households that have heavy and tall furniture, and those that have a hot water cylinder.
- The regional breakdowns presented are based on regional council areas, and are grouped where necessary for analysis.
- The small number of respondents who refused to answer whether their household had an item or not, or who did not know, were considered to not have the item for 'basic and better preparation' analysis. For the analysis of individual requirements, these respondents were excluded.
- Within basic preparation, a household emergency plan covers arrangements such as where to shelter in an earthquake, flood, or storm; how and where to meet with household members during and after a disaster; and how to turn off the water, gas, and electricity in the home.

## More information

See the [data quality](#) section of the *New Zealand General Social Survey: 2010* information release for further information.

Find out more about the [NZGSS](#) on Statistics NZ's website.

More data on preparations for natural disasters is available through the Ministry of Civil Defence and Emergency Management's [Get ready get thru](#) campaign research.