

Recipes for Disaster

A comprehensive guide for preparing for an emergency

Esk Valley, Napier, February 2023



14th Edition
December 2023



Contents

Introduction and Overview	3
1. FAQs	3
2. Civil Defence vs Emergency Management	7
3. Preparation: getting started	8
3.1. One page summary – 9 things you should do	8
3.2 Connect with your neighbours	9
3.3. Make a plan	10
3.4 Things you need to think about when making a plan	10
3.5 Write your plan	11
4: Scenarios to consider when making a plan	12
4.1 What if we are stuck at home?	12
4.2 What if we can't get home?	13
4.3. What if we have to evacuate?	13
3.4 What if we don't have water?	14
4.5 What if we don't have power?	14
4.6 What if we don't have phone or internet?	15
5: Working out what supplies you need?	16
5.1 Suppliers for home	16
5.2 Supplies for your car	16
5.3 Pets	17
6: Making yourself safer	17
7: Insurance and important documents	18
8: How do I stay informed?	18
8.1 Radio	18
8.2 Emergency Mobile Alert	19
8.3 Online	19
Appendix 1: Resilience: What it is, and how you develop it	20
Appendix 2: Understanding your risk to natural hazards	29
Appendix 3: Emergency Mobile Alerts (information on your cell phone).	39
Appendix 4: –Red Cross App	40
Appendix 5: First Aid Kit	41
Appendix 6: Emergency Evacuation bag ('Grab Bag')	42
Appendix 7: Sandbags and other emergency water barriers	44
Appendix 8: Pandemic and COVID19	52
Appendix 9: Animals for emergencies	54
Appendix 10: Household emergency plan template	57
Appendix 11: Workplace emergency plan template	61
Appendix 12: Plan on a Page (One page plan to put on your fridge door)	66

Introduction and Overview

It's up to you to make sure your family, and the people you care about, know what to do in an emergency. This booklet has been designed to make emergency planning easy. It has all the information you need to prepare for an emergency arising from a natural disaster such as a flood or earthquake.



The information in this booklet is grouped in two parts:

- i Part 1 provides an overview of key things you need to consider when developing a home emergency plan.
- ii Part 2 provides a collection of resources that will help you prepare for an emergency, including
 - ✓ Understanding resilience; and learning how to become more resilient¹
 - ✓ information about what to do before, during and after an emergency event; and
 - ✓ templates for creating a household emergency plan,

Before we get into the details of the risks natural hazards present and the importance of developing a plan, we want to cover off some of the most commonly asked questions about Civil Defence and emergency planning.

1. Frequently Asked Questions (FAQs)

I know that planning for an emergency is important – but it sounds difficult and time consuming.

Planning is very important. But here's the good news. A basic plan is really simple and does not take a lot of time. All it takes is a little thought and a few conversations with your household, whanau and neighbours. At this point you might want to take a quick peek at Appendix 11 near the back of this booklet. You will find a template for a very simple one page plan. It's the condensed version of the household plan that we recommend people put on their fridge; or family noticeboard (if you have one). As is the case with nearly every plan, it is the planning process that has more value than the plan itself. You should involve everyone in your household in the planning process. This approach ensures everyone gets to contribute and everyone

¹ Resilience is an important skill that all of us can learn. You can learn more about resilience – and how to develop it in *Appendix 6 : Resilience: What it is, and how you develop it*, page 24.

knows what the plan is. Each time there is a natural disaster in New Zealand the people with the biggest regrets are the ones who knew they should have developed a household plan – but didn't. Don't be one of those people.

In the pages of this booklet you will find all of the information you need to develop an emergency plan for your household. As you read through this guide you will hear the words like "preparation" and "planning" mentioned frequently. There are good reasons for that.

Preparation and planning

1. saves lives,
2. reduces stress and
3. reduces the risk of damage to property.

The purpose of this guide is to help you understand how you can achieve those three outcomes.

What is Civil Defence?

The concept that is at the heart of Civil Defence is a very old one and pre-dates the professional ambulance, fire and police services that we now take for granted. Prior to the establishment of professional emergency services people had to rely on neighbours and others in their community to help when disaster struck.

However the difficulty is our emergency services are only resourced to cope with a few critical incidents occurring across our district at any given time. In a major event, such as the earthquake that struck Christchurch in 2011, our emergency services would be over-whelmed and unable to immediately respond to all of the calls for help. Depending on the nature of emergency, they might not even be able to access some locations. It is in that type of situation that people in neighbourhoods and communities need to support one another. This practice of ordinary people helping one another in an emergency is at the heart of "Civil Defence". When disaster strikes, we all need to work together to help one another; and that is another reason why it is important for everyone in our community to engage in some basic emergency planning.



Civil Defence is about communities supporting one another when disaster strikes.

Why is emergency planning important?

None of us know when we might be caught up in an emergency such as a flood, major earthquake or volcanic eruption. Fortunately, such events don't happen often - but when they do they are disruptive and chaotic. Although we can't stop earthquakes or severe weather events, we can minimise the impact of a future emergency by doing a little bit of planning now. It's not hard and it won't cost you any money; but if a disaster strikes, you will be really grateful that you took the time to prepare a simple plan to help get you and your whānau through and out the other side.

What is the risk of a natural disaster occurring?

New Zealand's geography places it at high risk for natural disasters. Our country straddles two major tectonic plates, making earthquakes inevitable. The North Island has 12 active volcanoes that are constantly monitored by scientists. The central North Island has very high levels of geothermal activity; and the whole country is surrounded by large oceans that are prone to generating severe weather events.

In recent years the impact of climate change is becoming more and more apparent. Severe weather events are becoming more frequent and more severe. That said, the majority of New Zealanders are at low risk of being directly impacted by a natural disaster. However, the consequences of a major event could be catastrophic. We can't stop a force of nature – but we can reduce our personal risk by making a plan.

Where do I start?

The first step is to keep reading! In this guide we will step you through the process of making an emergency plan. The small investment of time spent now in preparing for an emergency will deliver enormous benefits should an emergency occur. Some of the most significant learning from events such as the Christchurch and Kaikoura earthquakes has been **the importance of personal emergency preparedness**. People who had engaged in some basic emergency planning not only coped much better than those who didn't – they also recovered from the event far more quickly.²

Preparing a simple, well thought-out plan is the best thing you can do to prepare your household and/or whānau for an emergency event.

How do I prepare an emergency plan for my household?

This booklet has been designed to make emergency planning easy. In the pages that follow we will guide you through the process and provide you with a lot of useful information that will help you develop a simple, but very solid plan for your household. Topics covered include general advice on preparing for an emergency and how to prepare a household emergency plan.

Do I need an emergency evacuation kit?

Yes. Organising an emergency evacuation kit is one of the most important things you can do in preparing for an emergency. Why? Because if you have to leave in a hurry, you want to make sure that you don't forget anything important. By spending a bit of time and thought making up a kit now can reduce stress and save time should you need to evacuate your home quickly. In Appendix 6 you will find helpful and detailed instructions on making an emergency evacuation kit that includes all of the essential and important items you will need.

² Paton, D., Mamula-Seadon, L. & Selway, K.L. (2013). "Community resilience in Christchurch: adaptive responses and capacities during earthquake recovery." *GNS, GNS Science Report 2013/37*.

Taylor, J.E., Chang, S.E., Elwood, K.J., Seville, J., Brunsdon, D. (2012). "Learning from Christchurch: Technical Decisions and Societal Consequences in Post-Earthquake Recovery." *Resilient Organisations, Research Report 2012/08*

What is 'Emergency Management'?

In order to provide advice and support to communities to prepare for emergencies a professional discipline has been developed called "Emergency Management". There are four dimensions to the work of Emergency Management professionals. They are known as the 4 R's:

1. **Reduction:** identifying long term risks to human life and property associated with natural disasters; and developing strategies to minimise those risks. This work includes considering where and how new housing developments should be built and ensuring the right infrastructure is in place to service those homes.
2. **Readiness:** Helping the general public and agencies providing essential services to prepare for an emergency and ensuring capability and expertise are available to support any response.
3. **Response:** Coordinating the response of all agencies to an emergency occurs.
4. **Recovery:** Coordinating the holistic regeneration of a community following an emergency.

Emergency Management in New Zealand is structured at three levels - national, regional and local. At the local level, every Council (or Territorial Authority) is required by law to have an Emergency Management capability. Rotorua Lakes Council has two staff working fulltime to support the community and ensure sufficient Council staff have the capability to establish a local Emergency Operations Centre (EOC). For more information about how an EOC operates refer to the CIMS handbook, 3rd edition. You can access that document here: <https://www.civildefence.govt.nz/assets/Uploads/CIMS-3rd-edition-FINAL-Aug-2019.pdf>



Emergency Management staff perform a coordination function during an emergency. The above photograph was taken during a morning briefing in the Rotorua Emergency Operations Centre (EOC) following a major flooding event in April 2018

2. Civil Defence versus Emergency Management

Are Civil Defence and Emergency Management that same thing? The short answer is 'No'. Although there is a very close relationship between the two concepts, there are also some important distinctions. Those differences are summarised in the on the next page.

Civil Defence	Emergency Management
Who: Everyone.	Who: Trained professionals.
<p>What: ‘Civil Defence’ is the concept of ordinary people working together in community to protect themselves and their property from the impact of an emergency.</p> <p>‘Civil Defence’ is a concept – not an organisation.</p>	<p>What: ‘Emergency Management’ is the professional discipline of mitigating the risks of a civil emergency, supporting communities to prepare for an emergency, coordinating the response to an emergency and supporting recovery following a natural disaster.</p> <p>‘Emergency Management’ agencies operate at a local, regional and national level and are staffed by trained professionals.</p>
<p>Why: When a large scale emergency impacts on an entire city or region - professional emergency services such as ambulance, FENZ and police will be over-whelmed. ‘Civil Defence’ provides a framework and systems that enable communities to support themselves; and relieve the pressure on emergency services.</p>	<p>Why: Because large complex events require coordination. Emergency Management professionals have the responsibility of providing leadership, coordination and support to both the community and other agencies in an emergency.</p>
<p>How: Every household, every neighbourhood and every community should have a simple plan that provides guidance on how people can help themselves and their neighbours in an emergency.</p> <p>Emergency Management professionals provide free guidance and support to help both households and entire communities to prepare for an emergency. Those resources include this guide, ‘Community Emergency Response Plans’, and education workshops.</p>	<p>How: When responding to an emergency, Emergency Management professionals use a national framework called CIMS (Coordinated Incident Management System). CIMS is mandated by New Zealand’s National Security System, which is administered by the Department of Prime Minister and Cabinet (DPMC).</p> <p>The CIMS framework enables the coordination of multiple agencies, including Police, FENZ, ambulance, community groups, contractors and government agencies.</p>
<p>Summary:</p> <p>‘Civil Defence’ is a very old idea that precedes modern, professional emergency services such as ambulance, fire and police. Prior to the development of professional emergency services communities had to look to themselves when a public emergency occurred.</p> <p>The contemporary approach Civil Defence is to equip households and communities to enable them to survive a major disaster and keep safe through the aftermath.</p>	<p>Summary:</p> <p>‘Emergency Management’ is a specialist service that is performed by trained professionals. Every local authority is required by law to have an emergency management capability that can be immediately deployed in the event of an emergency.</p> <p>Emergency Management staff have four responsibilities, known as the 4R’s:</p> <ul style="list-style-type: none"> ▪ Reduction: Identify and mitigate risks concerning potential natural disasters ▪ Readiness: Support individuals, organisations and communities to develop resilience and prepare for an emergency. ▪ Response: Coordinate the response to a civil emergency ▪ Recovery: Support the recovery effort following a major event.

3. Preparation: getting started

The infographic below lists the nine most important things you need to do in order to prepare for an emergency. In the pages that follow we will explain why these things are important and provide advice on how to get prepared.



**Know your
neighbours**



Make a plan



**Make sure your family
knows what to do
and where to go**



Know your risks



**Store extra
supplies**



**Know where your
important documents
are and check insurance**



**Organise a
'grab bag' for
a fast exit**



**Make your
Home safe**



**Sign up for alerts
& warnings**

3.1 Connect with your neighbours

The idea of people in communities working together and helping one another is at the heart of the concept of 'Civil Defence'. The reality is that in an emergency your neighbours will probably be the first people who will be available to help you out. Connecting with your neighbours is one of the most important things you can do in respect of preparing for an emergency. In fact the experts say this is the most important thing to do in preparing for an emergency.³



Research clearly shows that people who had good relationships with their neighbours before an emergency were more resilient and recovered much more quickly from a serious event.⁴ This is not surprising. When neighbours know each other they are more likely to look after one another.

At this point some of you might be thinking, "I feel really awkward about approaching my neighbours to talk about this." You're not alone. A lot of people feel that way. The first step is always the hardest, but it's worth it. It's also pretty simple – get a great smile going and then start with a simple introduction explaining that you have been doing some thinking about planning for an emergency.

Here is a list of the specific things you should talk to your neighbours about:

- How you can work together to make sure that everyone is looked after, especially those who might need extra help
- The resources and skills you have that could be used to help one another in an emergency. For example - three families sharing one BBQ to cook a meal will use far less gas than three families cooking by themselves.

The two greatest benefits of talking to your neighbours about emergency planning are:

- ✓ You will recover faster with less chaos or duplication of effort
- ✓ You'll be helping build a friendlier, more resilient neighborhood and community.

More ideas on getting to know your neighbours:

- Organise a street BBQ
- Welcome new neighbours when they move in. Introduce yourself on moving day, take over some baking or invite them over for a meal.
- Offer support at times of extra need such as the arrival of a new baby, a death in the family – or even when they have are undertaking a big gardening project or home renovation. 'Support' could be anything from offering morning tea to watching kids for an hour; or perhaps offering to help with the clean- up.

³ Daniel Aldrich (2017). 'In Disaster Recovery, social networks matter more than bottled water and batteries.' *CityLab*, February 2017. <https://www.citylab.com/faq/>. A key finding of Aldrich's research although the "Standard advice about preparing for disasters focuses on building shelters and stockpiling things like food, water, and batteries. But resilience — the ability to recover from shocks, including natural disasters — comes from our connections to others, and not from physical infrastructure or disaster kits."

⁴ Paton, D., Mamula-Seadon, L. & Selway, K.L. (2013). "Community resilience in Christchurch: adaptive responses and capacities during earthquake recovery." GNS, GNS Science Report 2013/37.

Taylor, J.E., Chang, S.E., Elwood, K.J., Seville, J., Brunsdon, D. (2012). "Learning from Christchurch: Technical Decisions and Societal Consequences in Post-Earthquake Recovery." Resilient Organisations, Research Report 2012/08

3.2 Make a plan

Some people think you don't need an emergency plan because keeping yourself safe is simply a matter of 'common sense'. While it's true that most New Zealanders are resourceful and resilient – we also have a tendency to be casual – and that is a problem because 'she'll be right' doesn't cut it in an emergency.



The best plans are usually simple ones. The main points to cover off in an Emergency plan are things such as:

- how you will connect with your family,
- pre-arranged meeting places and
- where you will go if you have to evacuate.



Writing these things down is important because when an emergency happens, people experience stress; and when people are stressed they don't think as clearly as they normally would. That is why every emergency agency including Police, Fire and St. Johns have check-lists and detailed operating procedures to help their staff do the right thing in stressful situations. But having the lists is not enough, you also have to practice.

Being caught up in a disaster is stressful enough without creating additional stress from having no clear idea about what you should be doing. Studies carried out in both New Zealand and overseas have consistently shown that people who had an emergency plan coped much better than those who didn't. Similarly, people who have emergency plans also recover much more quickly than those who don't.

Before you sit down and write your plan – there are a few things you need to discuss with your family and neighbours.

Things you need to think about when making a plan

We said that we were going to make this easy – so we are. Planning for an emergency is as easy as having a chat with your family, flat-mates, friends and neighbours. In fact, that is the first step in the planning process.



Here is a list of some of the things you should talk about when making your plan:

1. What each person in your household will do in the event of a disaster such as an earthquake, tsunami, volcanic eruption, flood or storm.
2. How and where you will meet up during and after a disaster.
3. What each person needs to have in their emergency kit and where you will keep them. (Although there are items that you should have in every kit, such as a torch and water, there will also be items such as medication that will be need by some people, but not others,
4. Where to store emergency survival items and who will be responsible for maintaining supplies.
5. What you need to do for members of the household, family or community with a disability or special requirement.
6. What you will need to do for your pets, domestic animals or livestock.
7. How and when to turn off the water, electricity and gas⁵ at the main switches in your home or business.
8. What local radio stations to tune in to for information during an event.

Once you have the answers to the above questions, you have the starting point for your plan.

Writing your plan

There are two ways you can make a record of your plan. The first is the 'old fashioned way' – writing your plan on paper and putting it in a place where it will be easy to find – such as your fridge door. In appendices 9, 10 and 11 you will find templates making your plan including one for home, one for work and a one page checklist you can place on your fridge door.



The second option is to do your plan online using the NEMA website (National Emergency Management Agency⁶). Once you have completed your plan online, you can email it to a smartphone and store an electronic copy of the plan on your phone using 'notes' or one of the other document storage applications that all smartphones have.

The link for making a plan online is: <https://getready.govt.nz/prepared/household/plan/>

Your plan should cover two general scenarios:

1. An emergency occurring when you are at home.
2. An emergency occurring when you are at work.

For each of those two general scenarios, your plan should cover the following:

- What you would do if you had to leave home in a hurry?
- What you would do if you were stuck at home? (known as 'sheltering in place')
- What you would do if you couldn't get home? What you would do if you did not have a water supply?
- What you would do if you did not have power?
- What would you do if the internet and mobile telephone networks stopped working?

⁵ **Note:** You should only turn off your gas if you suspect a leak, or if you are instructed to do so by authorities. If you turn the gas off you will need a professional to turn it back on and it may take them weeks to respond after an event.

⁶ Previously known as the Ministry of Civil Defence and Emergency Management.

In the steps that follow, we will provide advice on how to develop a plan for all of the scenarios outlined above. In addition to this general advice you will find specific advice for each of the six most common natural events that will trigger an emergency in Appendix 2. (Severe weather, flooding, earthquake, volcanic activity, landslides and tsunamis).

If you have children of school age you should include them in the planning process so they understand what they need to do. The trick is to be honest without being scary. Explain what might happen in an emergency. Just as importantly, provide them with reassurance by explaining what they can do to keep safe. The more involved they are in the planning process, the more confident they will be if an emergency occurs.

Remember, both your home and work plans should cover off how you will meet up with your children.

Finally, if you are confronting an emergency – stay calm! Your brain works better when you are in a calm state. Think of the disaster as a problem to be solved and work out a solution in a calm and methodical way. Start where you are, use what you have, and do what you can.

4. Scenarios to consider when making your plan

4.1. What if we are stuck at home? kāore e taea te wehe i te kāinga

Being stuck at home is one of the better scenarios. In fact, in most emergency situations the advice authorities will be giving is to stay at home – providing of course it is safe to do so. Emergency experts call this “sheltering in place.”

The experts also tell us that we should plan on being ‘stuck’ at home for up to three days after an emergency. You might also be without power, internet connection and fresh water supply – so you need to make sure that you have enough food (for both people and pets) and drinking water for at least three days.



Top tips for ‘stuck at home’

- ☆ **Know your neighbours:** Get to know your neighbours. In an emergency they may need your help or you may need their help, and you may be able to band together to get through.
- ☆ **Stay informed:** Keep up to date with emergency information by listening to a radio — get one with batteries — and checking your local council and/or civil defence group’s websites and social media. Follow the instructions of civil defence and emergency services.
- ☆ **Light up.** Your emergency supplies don’t have to be in a kit, but you might have to find them in the dark. Make sure everyone knows where the torches and batteries are.
- ☆ **Work out what supplies you need;** and make sure everyone knows where they are kept. The easiest way to do this is to simply make sure that you always have at least three days extra food in the kitchen cupboards.
- ☆ **Fridge first.** If the power goes out, eat the food from your fridge first, then your freezer, before you eat the food in the cupboard or your emergency kit.

4.2. What if we can't get home? Kāore e taea te hoki ki te Kāinga?

In an emergency, trains and buses may not be able to operate, roads may be closed and streets or neighbourhoods may be blocked off. If you can't take your normal route home, you need to think about how you will get there? Who will you go with? And where you will meet up with family or friends if your street is a no-go zone?

Top tips for 'can't get home'

- ☆ **Second meeting place:** Agree on a meeting place if you can't get home. It might be a school, a friend's place or with whānau.
- ☆ **Travel together:** If you work away from home, find workmates who live in your area. In an emergency you could travel together.
- ☆ **Pack a 'grab bag':** Have a grab bag at work or in your car. It should have walking shoes, warm clothes, some snack food and a bottle of water. A torch, some batteries and a radio are useful too. (In appendix 6, page 42) you will find a full list of things to consider when packing a 'grab bag.')
- ☆ **School pick up:** Give the school or day care a list of three people who can pick the kids up if you can't get there.



4.3. What to do if you have to evacuate Me wehe

In an emergency some houses, streets and neighbourhoods may not be safe to stay in and you may have to leave home in a hurry. Your home plan should include a section on what you would do if you had to evacuate:

- Where would you go?
- What would you take?
- What about pets?
- Would your neighbours need your help?



Top tips for 'have to evacuate'

- ☆ **Pack a grab bag:** See appendix 6 (page 42) for a list of what to pack.
- ☆ **Decide where you will go:** Decide where you will go - and make sure everyone in your family knows, in case you're not all together when you evacuate your home. Most people choose the home of friends or family as a meeting point.
- ☆ **Don't forget your pets:** If you have to leave home, take your pets with you. If it's not safe for you, it's not safe for them. Make sure your evacuation place will take your pets or have the contact details for kennels, catteries and pet friendly motels.
- ☆ **Check your zone:** If you live or are visiting a tsunami evacuation zone, make sure you are familiar with the recommended evacuation route and the location of a safe assembly point outside of the evacuation zone.

4.4 What if we don't have water? (Kāore he wai)

Imagine having no water for three days or more. How would you wash, cook, clean? What would you drink?

Water supplies, including drinking water, could be affected in an emergency, so it is essential to have a supply of stored water. It is also handy to have some water purification tablets in your home emergency kit.



Store enough drinking water to last three days. You should allow a minimum of three litres of drinking water per person per day. (Nine litres for one person for the three days). It is recommended that you store more water if possible. Hot environments and intense physical activity can double the amount of water required. Children, nursing mothers and ill people will also need more water.

If you have pets, you need to make an allowance for them as well. The amount needed will depend on the size of your pet – and environmental conditions. Remember that pets often drink more water than usual when under stress.

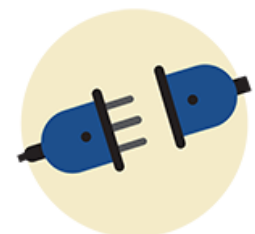
In addition to drinking water, you should also consider storing additional water for washing, cooking and /or cleaning. Remember that some parts of New Zealand could be without water for longer than three days during a significant emergency.

Top tips for 'no water'

- ☆ **Bottling water:** Keep your empty water, juice and fizzy drink bottles, give them a good clean and fill them with water — you need three litres of water for each person for each day that you are without water. Don't use milk bottles; they are hard to clean and could make you sick. Don't forget to store water for babies and pets too.
- ☆ **Long-term water storage:** You can keep stored drinking water for up to a year if you add non-scented household bleach (use half a teaspoon for every ten litres of water and don't drink it for at least half an hour after mixing). Label each bottle with the date it was filled. Store bottles in a cool, dark place.
- ☆ **Stay fed and washed:** Remember to store water for cooking and cleaning as well. You can use the water in your hot water cylinder, but store some extra in large plastic containers.
- ☆ **Freeze it:** You can also fill plastic ice cream containers with water and keep them in the freezer. These can help keep food cool if the power is off and can also be used for drinking.

4.5 What if we don't have power? Kāore he hiko

What would you do if the power was out for days? How will you see, cook, keep warm?



Power cuts could affect EFTPOS and ATM machines, so make sure you have some cash at home, or enough supplies to see you through three days or more. r

Top tips for 'no power'

- ☆ **Light up:** Make sure you have torches and batteries, either in your grab bag or somewhere everyone can find them in the dark.
- ☆ **Stay tuned in:** Have a solar or battery powered radio so you can keep up with the latest news and alerts. Know which radio stations to tune in to for information during an emergency.

- ☆ **Use a battery or 'wind-up' radio to stay informed**
- ☆ **Work out what supplies you will need – and stock up:** Have a stock of food that doesn't need to be cooked. Alternatively, a gas BBQ or camp stove can be used for cooking. And remember to have food for babies and pets.
- ☆ **Fridge first:** If the power goes out, eat the food from your fridge first, then your freezer, before you eat the food in the cupboard or your emergency kit.
- ☆ **Talk to your neighbours:** You might find your neighbours have a gas BBQ and you have enough food to share (or the other way round).

4.6 What if we don't have phone or internet?

Kāore he waea, ipurangi rānei

If the phone and internet lines were down how would you keep in touch, arrange to meet up or keep up with news and weather alerts?

In most emergencies, it's best to stay in your own home, so make your home your meeting place and have an alternative in case you can't get there.



Top tips for 'no phone or internet'

- ☆ **Plan a meeting point:** Talk to your family about how you will get in touch and where you will meet in an emergency if the phone lines and/or internet are down.
- ☆ **If you have kids:** Make sure you know your school / day care's emergency plans and give them names of three people who could pick the kids up if you can't get there.
- ☆ **Stay tuned in:** Have a solar or battery powered radio so you can keep up with the latest news and alerts. Know which radio stations to tune in to for information during an emergency.
- ☆ **Out-of-town contact:** Have an out-of-town contact that everyone knows about (sometimes when local phone lines are down you can still reach people outside your area). Get everyone to check in with your out of town contact by text or online messaging in an emergency if you can.
- ☆ **Keep a list:** Keep a written list of important phone numbers.
- ☆ **Text or message:** In an emergency, phone lines can become overloaded quickly. Keep them clear so emergency calls can be made and, if you can, use text or online messaging to keep in touch.

5. Working out what supplies you need

Whiriwhiria ngā rawa ka hiahiatia

In an emergency, you may be stuck at home for three days or more, so you need to figure out what supplies you need and make a plan to work out what you need to get your family through.

5.1 Supplies for home

This sounds like a big job, but you might be surprised how quickly you can get this organised. You probably already have most of the things you need. You don't need to have them all stored in one place, but you do have to know where they are all are in case you need to find them in a hurry and/or in the dark. We also recommend having an emergency evacuation kit. You can learn more about evacuation kits in Appendix 6.



If you are having to shelter in your home, eat the food in your fridge before you eat dry or canned items from the cupboard. The reason for this is because the food that will quickly spoil if you lose power. Next eat food in the freezer. Although frozen food will also spoil if the power is cut, it does last longer than the food in the fridge.

In addition to the evacuation kit, you should also have the following things stored in your house:

- ✓ **Drinking water** for three days or more. As a guide, you should store 3 litres of water per person per day. For example, if you are part of a family of four people, you should store at least 36 litres of water. (18 x 2 litre drinking bottles). An easy and inexpensive way to store this water is in used juice or soft drink bottles. It is important to remember to change the water every 6 months to keep it fresh.
- ✓ **Long lasting food** that doesn't need cooking (unless you have a BBQ or camping stove). Also make sure you have plenty of food for babies and pets
- ✓ **Toilet paper**; and large plastic buckets that could be used as emergency toilets.
- ✓ **Dust masks and heavy duty work gloves**. Three of the most sort after pieces of equipment following the Christchurch earthquake were leather work gloves, yard brooms and dust-masks.

5.2 Supplies for your car

Plan ahead for what you will do if you are in your car when an emergency happens. A flood, snow storm or major traffic accident could leave you stranded in your vehicle for some time. Make sure you keep some essential emergency survival items in your car. If you are driving in extreme winter conditions, add a brush; shovel; tire chains; windshield scrapers; and warm clothing to your emergency kit.



Other items that are really useful to keep in your car are:

- ✓ A pair of strong walking shoes
- ✓ waterproof jacket
- ✓ first aid kit
- ✓ snack food
- ✓ Drinking water and
- ✓ a torch

5.3 Pets

If you have to evacuate from your home - take your pets with you. If it's not safe for you to be at home, it's not safe for them.

It's important you prepare essential items for your pet or pets in case an emergency happens.



Top tips for taking care of your pets

- Attach a permanent disc to your pet's collar that displays your name, contact number and address
- Get your pet microchipped. This will greatly increase the chance of you being reunited with your pet if they get lost.
- Keep a photo of your pet/s in your emergency kits in case you need help to find them if they get lost.
- Make an emergency getaway kit for your pet. It should include food, fresh water and any medications they need to take. If you own a dog, also pack a lead and muzzle.
- We also suggest packing your pets favourite toy or blanket as those familiar items help reduce stress when they are in unfamiliar surroundings.
- Ensure you have a carry box or crate (with your name, contact number and address on it) along with a towel and blanket
- Keep a list of 'pet-friendly' accommodations and their contact details in case you need to evacuate from your home
- Before an emergency event happens, it's a good idea to check which paddocks will be safe areas for your livestock or domestic animals like horses, pigs or poultry, in the event of flooding, landslides or fallen power lines
- Create a plan for your animals and where they can be safe on your property in case you need to evacuate the area

6. Make your home safer

Te whakarite i tō whare kia haumaruru ake

Making your home safer will reduce the risk of damage during an emergency.

The first step is to think about the disasters that are most likely to impact you and your home. For example, if you live in Rotorua history tells us that that flooding is the most cause of an emergency - which might come as a surprise to some people. If you live near the beach you will be at higher risk of a Tsunami than someone living further inland.



Similarly, if you live on an active fault-line you will be at greater risk of an earthquake. If you live near a forestry plantation, bush fires will be a risk.

Damaged utilities such as water supply and gas supply can create danger. Make sure you know where your main gas valve, main power switch and water tap are; and learn how to turn them off.

Fix, Fasten, Forget! Secure heavy items of furniture (such as bookcases and dressers) to the floor or wall. Visit the EQC website to get more information on how to 'quake safe' your home. <https://www.eqc.govt.nz/>

If you want additional information on emergency planning you can:

- Visit the Civil Defence website at <https://www.civildefence.govt.nz/get-ready/> . This site provides access to a range of resources and tools to help you prepare for an emergency. You can also access specific information and guidance for schools, early childhood centres and people with disabilities
- Contact one of the Civil Defence Emergency Officers at Rotorua Lakes Council on 07 348 4199.

7. Insurance and important documents

Most New Zealanders are underinsured, so one of the first things to do is to make sure you have adequate insurance for both your home and its contents.

You should also keep all the important documents that you would want to take if you had to leave your home in a hurry in one place so they are easy to find. For example, passports, insurance policies and prescriptions for medication – and some cash.



8. How do we stay informed?

Me rapu mōhiohio

It's important to know the different ways you can stay informed during an emergency.

8.1 Radio

The easiest way to get reliable information during an emergency is by listening to public radio broadcasts. If you don't have a portable radio, you can access public radio using:

- your internet connection on your computer by searching for one of the radio stations listed below
- an app on your mobile telephone (learn how to do this here <https://www.rnz.co.nz/listen/app>)
- the radio in your car



We recommend that you use one of the following radio stations to get information during an emergency event:

National Radio 1188 AM and 101.5 FM; or https://www.rnz.co.nz/audio/player?audio_id=2018780454

Newstalk ZB 747 AM; or <https://www.newstalkzb.co.nz/>

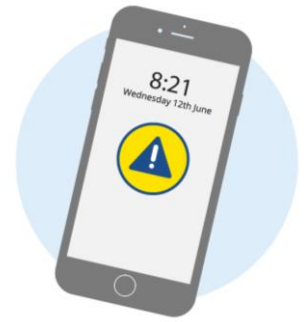
Magic Talk 95.1FM or 98 FM; or <https://www.magic.co.nz/home.player.music.html>

More FM 95.9 FM or <https://www.morefm.co.nz/home.player.html>

Classic Hits 97.5 FM and 90.9 FM or
<https://www.thehits.co.nz/umbraco/surface/iheartlistenlive/getembed?url=http%3A%2F%2Fwww.heart.com%2Ffive%2FThe-Hits-Auckland-6197%2F%3Fautoplay%3Dtrue>

8.2. Emergency Mobile Alert

Emergency Mobile Alert is a way of receiving information about emergencies in your area. If your life, health or property is in danger, Emergency Mobile Alerts can be sent to your mobile, without needing to sign up or download an app.



You can learn more about the national emergency alerting system here:

<https://www.civildefence.govt.nz/get-ready/civil-defence-emergency-management-alerts-and-warnings/emergency-mobile-alert/>

In addition to the emergency alert system, the Red Cross has an app that provides information about how to get through an emergency. This is very helpful if you find yourself away from your home or office when an emergency occurs. More information on the Red Cross app can be found in Appendix 3 on page 19.

8.3 Online

For local updates, check your council's website, as well as your local Civil Defence Emergency Management Group website and social media. National updates will be available on the

- Ministry of Civil Defence & Emergency Management's website
- Twitter channel - @NZGetThru NZ
- FaceBook - Civil Defence

Appendix 1

Resilience

(Aumangea)

- What is it?
- How do you develop it?



What is resilience?

Resilience has been defined as “successfully adapting to difficult or challenging life experiences.” In the context of emergency management resilience is often discussed in three different, but related categories. They are:

- i. Resilience of infrastructure
- ii. Community resilience
- iii. Personal resilience

Resilience of infrastructure concerns the enhancement and future proofing civil infrastructure so that it can withstand an emergency event (such as an earthquake or flood). Water supply, power supply, communication technology and dealing with waste are all considered to be “critical infrastructure services” and accordingly providers of those services are required take steps to minimize disruption to those services in an emergency.

Community resilience is defined as “the ability of a community to use available resources (energy, communication, transportation, food, etc.) to respond to, withstand, and recover from adverse situations.” Community Resilience has four components

1. Self-reliance
2. Healthy engaged people who are willing to take the initiative
3. Links to others within and outside of the community
4. Inclusive culture

Benefits of having a resilient community include:

- Increased social cohesion which has a positive impact on health, education, and employment
- economic and environmental sustainability, sense of place and leadership in a community, which results in a better community led response to emergency events
- Reduces the environmental and economic costs of an emergency to a community
- Reduces the demands on emergency response resources during an emergency response
- Recover more quickly after an emergency event

Personal resilience concerns the ability of an individual in respect of their “mental, emotional, and behavioural flexibility and ability to adjust to both internal and external demands” (American Psychological Association). Other sources describe personal resilience as a person’s “ability to withstand adversity and bounce back and grow despite life’s challenges.”

When a disaster strikes the first responders will most often be people in the community – neighbours, friends and family. There are several reasons for this. Firstly, emergency services such as Fire and

Emergency, ambulance and police will be over-whelmed and unable to respond to every situation requiring their attention. Depending on the nature and impact of the emergency, access roads may be blocked or rendered unusable. In those situations it is you – or your neighbours, workmates or whoever else is with you at that time – who must step up and become the ‘first responders’.

A wonderful example of what this looks like in practice was provided by three Napier men - Rikki Kihi, Mikey Kihi and Morehu Maxwell – when Cyclone Gabrielle struck the Hawkes Bay in the early hours of 14 February 2023. You can read their story below.

Stories of Resilience – Part 1

Esk Valley Flooding, February 2023



Flooding of the Esk Valley, February 2023

Chris Barber and his family were among the numerous people rescued by the trio. When they pulled up alongside the roof of the Barber family home in their inflatable boat, Chris asked, “Are you guys the Navy?” The wetsuit-clad rescuers responded with perhaps the most quintessential Kiwi reply ever uttered: “Nah, we’re just three Māori boys with a boat”.

Background

Cyclone Gabrielle caused significant harm across northern and eastern regions of the North Island of Aotearoa New Zealand (NZ) in February 2023. Eleven people died, making it one of New Zealand’s worst mass fatality events. It was only the third time in history that the Government declared a National State of Emergency. The storm caused an estimated \$14.5 billion in property damage and much human suffering.

The Hawkes Bay was one of the regions to experience the worst of the storm, with some areas receiving 540 mm of rain and wind gusts up to 131 kph at coastal areas.

When Cyclone Gabrielle struck many parts of the North Island were still sodden from the heavy rains that had fallen in late January. The MetService began tracking Cyclone Gabrielle in early February as it moved south after forming in the Coral Sea near the Solomon Islands. On 9 February 2023 the MetService began issuing weather 'watches'. On 11 February the watches were upgraded to 'warnings' – first orange, then red. On 13 February the storm reached New Zealand. Northland, Auckland and the Coromandel were the first regions to be struck before the cyclone began to spread over most of the North Island.

Whanau as First Responders

As the storm raged in the early hours of Tuesday, 14 February 2023, Napier resident Rikki Kihi became increasingly concerned about whanau living in the Esk Valley after receiving a message that the valley was flooding and they were climbing onto the roof of their house to avoid the flood waters. Shortly after receiving that message he lost contact. Rikki decided he had to take action and raced to the house of his cousin, Mikey. The following is a lightly edited version of what happened next, as provided to a news reporter by Mikey.

“Honestly it all just happened so fast. Rikki showed up at my house at roughly 5.00 am on Tuesday morning saying to gear up in my wetsuit as we had a family staying in Esk Valley who had lost contact after saying they were climbing onto the roof.

We raced down to (our friend) Morehu's house, as he owns an inflatable boat. Next thing we were powering up Hill Road in a fully loaded 4x4, driving through road slips and fences. Luckily, there were locals around to help us as we had to cut our way through trees which had blown over.

Once we reached the top of the road daylight was breaking and the full impact of what was happening started to sink in. The river stretched from hillside to hillside - spanning almost 700 metres. The water was raging. It took my breath away. Everything from houses to cars were floating down stream with the current. They were covered in silt and mud.

We made our way down and launched the boat just below Eskdale School. Once we took off we hit two problems. Firstly, navigating a path. There was shit everywhere. Power lines were toppled in all directions and the water was thick with silt making it impossible to gauge depths. The man (Morehu) had to make split second decisions about which way to steer the boat

Secondly, the engine intake kept getting blocked. It seemed like every 20 seconds we had to cut the engine to clear it by hand. While Morehu was doing that, me and Rikki had to cling onto trees and signposts so we weren't swept away in the current.

After a while we got a bit of rhythm going and we were away. That was when we started to take in the full severity of what was going on. As we were making our way to the house where the family was – we kept coming across all these people on the roofs of houses. We were not really expecting to see anyone – but



The 4 x 4 vehicle used by Rikki, Mikey and Morehu negotiating a road covered in mud and debris

there they all were. We saw others in trees and on the top of caravans. All of them were completely stranded, with the river in flood all around them.

We came across a mother and father with their daughter, holed up in the high end of a house. They were standing on top of drawers that they had put on top of their beds. We also rounded up four dogs who were there.

Once we had everyone on board we had to find a high place to get them to, which happened to be the Linden Estate Winery. When we got there we were greeted by other locals who lived on the hillside. They offered to help by getting the family warmed up and sheltered. The rain was still thundering down. It took us a couple of minutes to unload them all and then we powered back out into the highway – which was now a river.

Next we were waved down by a couple of older guys who were stranded on top of their caravan. It was on it's side and had floated quite a way downstream. Both of them were exhausted. We managed to latch onto the caravan and help them onto the boat. Once we had secured them onboard we motored over to the estate, unloaded them and then headed back out again to search.

Next we saw a guy in orange hi-viz standing on top of a large truck, waving out. So we started weaving a path – through all the wreckage and floating debris – towards him. Another guy in hi-vis was stranded in a tree and yelled out. By the time we managed to drag him on board he wasn't far off from being washed away. They were both road workers and had been helping with the evacuation but got caught out when the river burst its banks. They told us they had seen people being swept away.



The two relieved road workers rescued by Rikki Kihi, Mikey Kihi and Morehu Maxwell

As we began making our way back to the estate we saw a truck with two passengers trapped inside. So we picked them up as well and then got all four back to the estate. After dropping them off we decided to push up the highway. We had limited options for a path through. The river was moving fast and there was a lot of debris. It was just carnage. It was also really difficult to hear anyone over the engine so visual spotting was our main way to identify people in need.

We saw a man out on his deck waving out to us. The river was raging all around him. He was right in the thick of it and it took a bit to manoeuvre in to where he was. We yelled out and told him to climb on board with his partner. But he refused, saying he had a brother with his family, who he feared the worst for. He yelled: 'No, get them please! They have young kids!' So we made the call to power over to that house and pick them up."

The story didn't end there. Rikki, Mikey and Morehu spent hours on the flooded river that morning. It is estimated they rescued over 50 people. All three were later formally recognised by the Napier City Council for their initiative and bravery at a special awards ceremony in September 2023.

Stories of Resilience – Part 2

Lake Ōhau Bush Fire, 2020



The following narrative is based on the FENZ (Fire and Emergency New Zealand) operational report on the Lake Ōhau wildfire and news media reports. You can read the full FENZ report here: <https://fireandemergency.nz/assets/Documents/Research-and-reports/lakeOhau/Lake-Ohau-Operational-Review.pdf>

At about 3.00 a.m. on 4 October 2020 Fire and Emergency New Zealand received the first 111 call about a bush fire near Lake Ōhau in the Mackenzie Basin, South Canterbury. Severe winds fanned the fire that quickly spread into the Lake Ōhau Village, destroying 48 homes and buildings, and damaging 5043 hectares of land; making it one of New Zealand's most significant wildfires in history.

It took nine days to completely extinguish the fire. At the peak of the fire there were 11 helicopters and more than 100 people deployed to support the response.

Fortunately, no lives were lost thanks to quick actions from residents of the Lake Ōhau Village who enacted the community's wildfire plan. FENZ incident controller Graeme Still is convinced the community's wildfire plan saved lives. "Because of that plan there was no loss of life or injuries to humans," he said.

The plan had been developed well before the fire. Commander Still said that a number of factors contributed to the success of the plan including:

- the whole community had been involved in developing the plan
- the plan was regularly reviewed every year by local residents and updated, resulting in a high level of community awareness of the plan

- as part of the review of the plan, community members conducted training exercises to test the plan for effectiveness
- every household in the Lake Ōhau village has a copy of the plan

“All of that preparation came together on Sunday and the plan was perfectly executed. They could not have done it better” said Commander Still.

The operational review conducted by staff from FENZ national headquarters not only endorsed the comments of Commander Still, but also acknowledged the swift response and operational effectiveness of the Twizel and Omarama Volunteer Fire Brigades and local Police stating, “Their bravery and actions undoubtedly saved lives and several properties that would otherwise have been destroyed”.

Once the fire had been extinguished an investigation determined the fire was accidental and caused by an electrical short circuit on a power pole several kilometres upwind of the village, which ignited dry vegetation below the powerline.

Stories of Resilience – Part 3

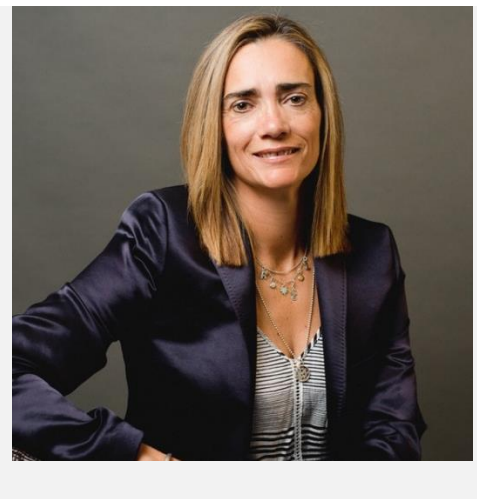
Building Personal Resilience

The article that follow is a transcript of a presentation titled “The three secrets of resilient people’ presented by Dr. Lucy Hone at TEDx Christchurch in August 2019. You can watch her TED-X talk on You Tube at <https://www.youtube.com/watch?v=NWH8N-BvhAw>

Her first book is *Resilient Grieving: How to Find Your Way Through a Devastating Loss* (2017) is an international best-seller.

Dr Lucy Hone is a resilience expert. In this powerful and courageous talk she shares the three strategies that got her through the trauma of her 12-year-old daughter Abi being killed in a car crash. Lucy suddenly found herself having to apply all of her learnings from professional practice, study and research to develop resilience in very personal circumstances. Dr Hone is a director of the New Zealand Institute of Wellbeing & Resilience, a research associate at AUT University, a published academic researcher, and author.

TED^xChristchurch
x = independently organized TED event



Dr. Lucy Hone – The three secrets of resilient people

So I would like to start, if I may, by asking you some questions.

If you have ever lost someone you truly love, if you ever had your heart broken, if you have ever struggled through an acrimonious divorce or been the victim of infidelity – please stand up. If standing up is not accessible to you – please raise your hand.

Please stay standing, or keep your hand raised.

If you have ever lived through a natural disaster, been bullied or made redundant – stand up.

If you have ever had a miscarriage, or an abortion, or struggled through infertility – please stand up.

Finally, if you – or anyone you love – has had to cope with mental illness, dementia, some form of physical impairment – or cope with suicide – please stand up.

Look around you. (Everyone in the room is either standing or has a hand raised). Adversity does not discriminate. If you are alive – you are going to have to deal with – or have already had to deal with – some tough times. Thank you everyone. Take a seat.

I started studying resilience research a decade ago, at the University of Pennsylvania in Philadelphia. It was an amazing time to be there, because the professors who trained me had just picked up the contract to train all 1.1 million American soldiers to be as mentally fit as they always have been physically fit. As you can imagine, you don't get a much more skeptical and discerning audience than the American drill sergeants returning from Afghanistan. So for someone like me, whose main quest in life is trying to work out how we take the best of scientific findings out of academia and bring them to people in their everyday lives, it was a pretty inspiring place to be.

I finished my studies in America, and I returned home here to Christchurch to start my doctoral research. I'd just begun that study when the Christchurch earthquakes hit. I decided to put my research on hold and I started working with my home community to help them through that terrible post-quake period. I worked with all sorts of organisations from government departments to building companies, and all sorts of community groups, teaching them the ways of thinking and acting that we know will boost resilience. I thought that was my calling. My moment to put all of that research to good use. But sadly, I was wrong.

For my own true test came in 2014 on Queen's Birthday weekend. We and two other families had decided to go down to Lake Ohau and bike the 'Alps to Ocean' cycle trail. At the last minute, my beautiful 12-year-old daughter Abi decided to hop in the car with her best friend, Ella, also 12, and Ella's mom, Sally, a dear, dear friend of mine. On the way down, as they travelled through Rakaia on Thompsons Track, a car sped through a stop sign, crashing into them and killing all three of them instantly.

In the blink of an eye, I find myself flung to the other side of the equation, waking up with a whole new identity. Instead of being the resilience expert, suddenly, I'm the grieving mother. Waking up not knowing who I am, trying to wrap my head around unthinkable news. My world had been smashed to smithereens.

Suddenly, I'm the one on the end of all this expert advice. And I can tell you, I didn't like what I heard one little bit. In the days after Abi died, we were told we were now prime candidates for family estrangement; and that we were likely to get divorced and we were at high risk of mental illness. "Wow," I remember thinking, "*Thanks for that, I thought my life was already pretty shit.*"

We were given leaflets that described the five stages of grief: *anger, bargaining, denial, depression, acceptance*. Victim Support arrived at our door and told us that we could expect to write off the next five years to grief. I know the leaflets and the resources meant well. But in all of that advice, they left us feeling like victims. Totally overwhelmed by the journey ahead, and powerless to exert any influence over our grieving whatsoever.

I didn't need to be told how bad things were. Believe me, I already knew things were truly terrible. What I needed most was hope.

I needed a journey through all that anguish, pain and longing. Most of all, I wanted to be an active participant in my grief process. So I decided to turn my back on their advice and decided instead to conduct something of a self-experiment. I'd done the research, I had the tools, I wanted to know how useful they would be to me now in the face of such an enormous mountain to climb.

I have to confess at this point, I didn't really know that any of this was going to work. Parental bereavement is widely acknowledged as the hardest of losses to bear. But I can tell you now, five years on, what I already knew from the research. You can rise up from adversity, there are strategies that work and it is utterly possible to make yourself think and act in certain ways that help you navigate tough times.

“You can rise up from adversity, there are strategies that work, and it is utterly possible to make yourself think and act in certain ways that help you navigate tough times.”

There is a monumental body of research on how to do this stuff. Today, I'm just going to share with you three strategies. These are my go-to strategies that I relied upon and saved me in my darkest days. They're three strategies that underpin all of my work, and they're pretty readily available to us all, anyone can learn them, you can learn them right here today.

Number one, resilient people get that shit happens. They know that suffering is part of life. This doesn't mean they actually welcome it in, they're not actually delusional. Just that when the tough times come, they seem to know that suffering is part of every human existence. And knowing this stops you from feeling discriminated against when the tough times come. Never once did I find myself thinking, “Why me?” In fact, I remember thinking, *“Why not me? Terrible things happen to you, just like they do everybody else. That's your life now, time to sink or swim.”* The real tragedy is that not enough of us seem to know this any longer. We seem to live in an age where we're entitled to a perfect life, where shiny, happy photos on *Instagram* are the norm, when actually, as you all demonstrated at the start of my talk, the very opposite is true.

Number two, resilient people are really good at choosing carefully where they select their attention. They have a habit of realistically appraising situations, and typically, managing to focus on the things that they can change, and somehow accept the things that they can't. This is a vital, learnable skill for resilience. As humans, we are really good at noticing threats and weaknesses. We are hardwired for that negative. We're really, really good at noticing them. Negative emotions stick to us like Velcro, whereas positive emotions and experiences seems to bounce off like Teflon.

Being wired in this way is actually really good for us, and served us well from an evolutionary perspective. So imagine for a moment I'm a cavewoman, and I'm coming out of my cave in the morning, and there's a saber-toothed tiger on one side and a beautiful rainbow on the other. It kind of pays for my survival for me to notice this tiger. The problem is, we now live in an era where we are constantly bombarded by threats all day long, and our poor brains treat every single one of those threats as though they were a tiger. Our threat focus, our stress response, is permanently dialed up. Resilient people don't diminish the negative, but they also have worked out a way of tuning into the good.

One day, when doubts were threatening to overwhelm me, I distinctly remember thinking, *“No, you do not get to get swallowed up by this. You have to survive. You've got so much to live for. Choose life, not death. Don't lose what you have to what you have lost.”* In psychology, we call this ‘benefit finding’. In my brave new world, it involved trying to find things to be grateful for. At least our wee girl hadn't died of some terrible, long, drawn-out illness. She died suddenly, instantly, sparing us and her that pain. We had a huge amount of social support from family and friends to help us through. And most of all, we still had two beautiful boys to live for, who needed us now, and deserved to have as normal a life as we could possibly give them. Being able to switch the focus of your attention to also include the good has been shown by science to be a really powerful strategy.

“Choose life, not death. Don't lose what you have to what you have lost.”

In 2005 Dr. Martin Seligman and colleagues conducted an experiment. All they asked people to do was think of three good things that had happened to them each day. What they found, over the six months course of this study, was that those people showed higher levels of gratitude, higher levels of happiness and less depression over the course of the six-month study. When you're going through grief, you might need a reminder, or you might need permission to feel grateful. In our kitchen, we've got a bright pink neon poster that reminds us to “accept” the good. In the American army, they framed it a little bit differently. They

talked to the army about hunting the *good stuff*. Find the language that works for you, but whatever you do, make an intentional, deliberate, ongoing effort to tune into what's good in your world.

Number three, resilient people ask themselves, "Is what I'm doing helping or harming me?" This is a question that's used a lot in good therapy. And boy, is it powerful. This was my go-to question in the days after the girls died. I would ask it again and again. "Should I go to the trial and see the driver? Would that help me or would it harm me?" Well, that was a no-brainer for me, I chose to stay away. But Trevor, my husband, decided to meet with the driver at a later time. Late at night, I'd find myself sometimes poring over old photos of Abi, getting more and more upset. I'd ask myself, "*Really? Is this helping you or is it harming you? Put away the photos, go to bed for the night, be kind to yourself.*"

This question can be applied to so many different contexts. Is the way I'm thinking and acting helping or harming you, in your bid to get that promotion, to pass that exam, to recover from a heart attack? So many different ways. I write a lot about resilience, and over the years, this one strategy has prompted more positive feedback than any other. I get scores of letters and emails and things from all over the place of people saying what a huge impact it's had on their lives. Whether it is forgiving family ancient transgressions, arguments from Christmases past, or whether it is just trolling through social media, whether it is asking yourself whether you really need that extra glass of wine. Asking yourself whether what you're doing, the way you're thinking, the way you're acting is helping or harming you, puts you back in the driver's seat. It gives you some control over your decision-making.

Three strategies. Pretty simple. They're readily available to us all, anytime, anywhere. They don't require rocket science. Resilience isn't some fixed trait. It's not elusive, that some people have and some people don't. It actually requires very ordinary processes. Just the willingness to give them a go.

I think we all have moments in life where our life path splits and the journey we thought we were going down veers off to some terrible direction that we never anticipated, and we certainly didn't want. It happened to me. It was awful beyond imagining. If you ever find yourselves in a situation where you think "*There's no way I'm coming back from this,*" I urge you to lean into these strategies and think again. I won't pretend that thinking this way is easy. And it doesn't remove all the pain. But if I've learned anything over the last five years, it is that thinking this way really does help. More than anything, it has shown me that it is possible to live and grieve at the same time. And for that, I would be always grateful.

Thank you.

Appendix 2

Understanding your risk to natural hazards

There is an old saying: “If you live near a river, get know the crocodile.” In other words, we need to be aware of the risks that hazards present and learn how to mitigate them. That is the purpose of Appendix 4.



Storms (Ngā Waipuke)

Storms can happen any time of the year. They can bring strong winds, heavy rain or snow, thunder, lightning, tornadoes and rough seas. Storms can affect wide areas, damaging property and disrupting services.

Get ready before a storm

- ✓ Bring inside or tie down anything that can be broken or picked up by strong winds and turned into a ‘missile’. If you have a trampoline, turn it upside down to minimise the surface area exposed to wind – and tie it down.
- ✓ Keep up to date with MetService weather forecasts.
- ✓ Work out what supplies you might need and make a plan together. Have materials and tools ready to repair windows, such as tarpaulins, boards and duct tape.
- ✓ Identify a safe place in your home for household members to gather during a thunderstorm. This should be a place where there are no windows, skylights, or glass doors, which could be broken by strong winds or hail and cause damage or injury.
- ✓ Know which paddocks are safe if you have livestock. Move livestock away from floodwaters, landslides, power lines and isolated trees to prevent risks from lightning.
- ✓ Be aware that floods and landslides can be triggered by storms. Make sure you know how to respond.

During a storm

- ✓ Stay inside. Don't walk around outside and avoid driving unless absolutely necessary.
- ✓ Close exterior and interior doors and windows. Pull curtains and blinds over windows. This could prevent injury from flying glass if the window is broken.
- ✓ Stay informed by listening to the radio or by following your local Civil Defence Emergency Management Group online. Follow the instructions of Civil Defence and emergency services.
- ✓ Unplug small appliances that may be affected by electrical power surges. If power is lost, unplug major appliances to reduce the power surge and possible damage when power is restored.
- ✓ Avoid bathtubs, water taps, and sinks because metal pipes and plumbing can conduct electricity if struck by lightning. Use your water from your emergency supplies.

What to do after a storm

- ✓ Keep listening to the radio or following your local Civil Defence Emergency Management Group online for information and instructions.
- ✓ Check for injuries and get first aid if necessary.
- ✓ Check on your neighbours and anyone who might need your help.

- ✓ Contact your local council if your house or building has been severely damaged. Ask your council for advice on how to clean up debris safely.

If your property is damaged:

- Contact your insurance company as soon as possible.
- If you rent your property, contact your landlord and your contents insurance company as soon as possible.
- Take photos of any damage. It will help speed up assessments of your claims.
- Do not do anything that puts your safety at risk or causes more damage to your property.



Flood (Waipuke)

Floods happen frequently and can cause a lot of damage. Floods are usually caused by heavy rain or thunderstorms. They can cause injury and loss of life, damage property and pollute our water and land. People often under-estimate the dangers of flood waters, which is one of the reasons why flooding events cause more deaths in the USA than other weather hazard, including hurricanes and tornados.⁷

Weather experts predict that the dangers presented by flooding are going to get worse due to the impact of climate change.

Floods become dangerous if the water is very deep or travelling very fast or the water has risen very quickly, or if they contain debris like tree branches and sheets of iron.

Get ready before a flood

Find out from your local council if your home or business is at risk from flooding and how they'll alert you if you need to evacuate. Ask about:

- Evacuation plans and local public alerting systems
- How you can reduce the risk of future flooding to your home or business
- Work out what supplies you might need and make a plan together
- Practise your emergency plan and your evacuation route to higher ground.
- Take measures to reduce potential flood damage and make sure your insurance policy covers you for flood damage
- What to do with your pets and livestock if you have to evacuate

What to do if weather conditions make a flood possible

- Stay informed by listening to the radio or following your local Civil Defence Emergency Management Group online.
- Be prepared to evacuate, and keep your grab bag near.
- Move valuable and dangerous items, including electrical equipment and chemicals, as high above the floor as possible. Use watertight containers to store important items.
- Lift curtains, rugs and bedding off the floor.
- Look out for your neighbours and anyone who may need your help.
- Move pets to a safe place and move stock to higher ground.
- If you have to leave, take your pets with you — if it's not safe for you, it's not safe for them.

⁷ Live Science Staff. "What's the Deadliest Natural Phenomenon?" *Live Science*, January 2013. <https://www.livescience.com/32410-whats-the-deadliest-natural-phenomenon.html>

- Turn off water, electricity and gas if advised to.

What to do during a flood

- Put safety first. Don't take any chances - do not wait for an 'official' warning. Act quickly if you see rising water.
- Move valuable or dangerous items as high as you can off the floor
- Do not try to walk or drive through flood water. The most common cause of death or injury in floods is people trying to drive, swim or walk through flood water.
- Always assume that all flood water is potentially contaminated with farm run-off — faecal matter from animals and sewage. Ensure hands, clothes and property are thoroughly cleaned after contact with flood waters.
- Listen to the radio and follow the instructions of emergency services

What to do after a flood

Only return home after Civil Defence and emergency services have told you it is safe to do so. It may not be safe to return home even when the floodwaters have receded.

- **Stay away from damaged areas.** Your presence might hamper rescue and other emergency operations and put you at further risk from the residual effects of floods.
- **Look before you step.** After a flood, the ground and floors may be slippery or covered with debris, including broken bottles and nails.
- **Take extreme care when handling items that have been contaminated by flood water.** Throw away any wooden spoons, plastic utensils, and baby bottle teats and dummies if they have been covered by floodwater. There is no way to safely clean them.
- **Disinfect metal pans and utensils by boiling them in clean water.**

If your property is damaged:

- Contact your insurance company as soon as possible.
- If you rent your property, contact your landlord and your contents insurance company as soon as possible.
- Take photos of any damage. It will help speed up assessments of your claims.
- Do not do anything that puts your safety at risk or causes more damage to your property.

Help others if you can, especially people who may require special assistance.



Earthquake (Rū)

Each year NZ has over 150 earthquakes that are large enough to be felt. A large earthquake could happen any time. Large earthquakes are usually followed by aftershocks. Aftershocks may continue for a long time and may be almost as strong as the first earthquake.

Most earthquake-related deaths and serious injuries are caused by collapsing walls, falling glass and objects moving caused by the shaking. In a major earthquake, masonry and glass can fall off buildings and into the streets.

What to do during an earthquake

- If you are inside - the moment you feel an earthquake you should **drop** to the floor, find **cover** and **hold** onto something rigid and strong. Holding onto your cover is important, as things move during an earthquake and you don't want your cover to move away from you.
- **Do not run outside during an earthquake!** It is frightening to stay in a building immediately after an earthquake, but it is much safer than going outside where you will be at a higher risk of being struck by falling objects.
- Stay inside until the shaking stops.
- If you are outside, move away from buildings, trees, streetlights, and power lines, then *Drop, Cover and Hold*
- If an earthquake is very strong and/or long and you are near the beach or coast, move quickly to higher ground in case a tsunami follows the quake.



What to do after an earthquake

- Check yourself for injuries and get first aid if necessary.
- Do not run outside. It is frightening to stay in a building immediately after an earthquake but it is much safer than immediately going outside. An earthquake is not like a fire. You do not have to evacuate a building straight away unless it is showing obvious signs of distress.
- Look quickly for damage around you, particularly in buildings where furniture and fittings may have become hazardous.
- Look for small fires and, if possible and safe to do so, extinguish them.
- If you smell gas or hear a blowing or hissing noise, open a window, get everyone out quickly and turn off the gas if you can.
- If you see sparks, broken wires or evidence of electrical system damage, turn off the electricity at the main fuse box if it is safe to do so.
- If available, put on long trousers, a long-sleeved top, sturdy shoes and heavy duty gloves to protect yourself from injury by broken objects.
- If you are in a store, unfamiliar commercial building or on public transport, follow the instructions of those in charge.
- Expect aftershocks. Each time you feel one, Drop, Cover and Hold. Aftershocks can occur minutes, days, weeks, months and even years following an earthquake.
- Watch out for fallen power lines or broken gas lines, and stay out of damaged areas.
- Use social media or text messages instead of calling to keep phone lines clear for emergency calls.
- Keep control of your pets; protect them from hazards and protect other people from your animals.
- When you eventually evacuate, take your wallet, coat, bag and grab bag. You are more vulnerable if you leave these things behind.
- Gather in a large open area with no tall buildings, power lines or other hazards near the area.

If your property is damaged:

- Contact your insurance company as soon as possible.
- If you rent your property, contact your landlord and your contents insurance company as soon as possible.
- Take photos of any damage. It will help speed up assessments of your claims.
- Do not do anything that puts your safety at risk or causes more damage to your property.



Volcanic activity (Hūnga)

Volcanic activity can include hazards such as ashfall, falling rocks, very fast moving mixtures of hot gases and volcanic rock, lava flows and massive mudflows.

Get ready before volcanic activity

Find out about the volcanic risk in your community. Talk to your local Civil Defence Emergency Management Group and find out how they will warn you of a volcanic eruption. Areas in New Zealand that are at highest risk from volcanic ash fall are Bay of Plenty, Waikato, Auckland, Gisborne, Hawkes Bay and northern Manawatu.

If you live in an area that is at high risk of volcanic activity, you should obtain the following protective equipment:

- Certified disposable dust masks (rated P2 or N95) and goggles
- Plastic wrap or plastic sheeting (to keep ash out of electronics)
- Cleaning supplies including an air duster (available at hardware stores), a broom, a shovel, and a vacuum cleaner with spare bags and filters
- Heavy-duty plastic bags to dispose of ash
- You could be stuck in your vehicle, so remember to store emergency supplies there too.

What to do if Ash Fall has been forecast for your region

- Put your Emergency Plan into action!
- Stay indoors as volcanic ash is a health hazard, especially if you have respiratory difficulties such as asthma or bronchitis.
- Close all doors and windows and shut down heat pumps in order to prevent ash damaging equipment and being pumped into your home. Likewise, place damp towels at the base of doors to prevent ash entry; and ash being tracked into the house on footwear.
- Cover and protect sensitive electronic equipment, such as computers. Do not remove the covers until you are satisfied your home is completely ash free.
- Cover vehicles, machinery and spa pools to avoid ash causing damage by corroding metal surfaces and causing abrasion damage to windscreens and paintwork.
- Disconnect drainpipes/downspouts from gutters to stop drains clogging. If you use a rainwater collection system for your water supply, disconnect the tank.
- Do not attempt to clear ash from your roof while ash is falling.
- Keep pets indoors and find shelter for stock and ensure they have access to clean drinking water and food. Be aware that Ash ingestion is hazardous to livestock.
- Do not drive when there is ash on the road.
- Avoid unnecessary exposure to ash until it has settled.
- If you have to go outside, wear protective clothing: a properly-fitted P2 or N95-rated mask, goggles, strong footwear, gloves and long clothing.

- Do not wear contact lenses because trapped ash can scratch your eyes. Wear glasses instead.

What to do during volcanic activity (including Ashfall)

- Listen to the radio for updates. Follow instructions of Emergency Services and the Ministry of Civil Defence & Emergency Management.
- Put your Emergency Plan into action!
- Stay indoors as volcanic ash is a health hazard, especially if you have respiratory difficulties such as asthma or bronchitis.
- Do not attempt to clear ash from your roof while ash is falling.
- Keep pets indoors.
- Do not drive when there is ash on the road.
- Avoid unnecessary exposure to ash until it has settled.
- If you have to go outside, wear protective clothing: a properly-fitted P2 or N95-rated mask, goggles, strong footwear, gloves and long clothing.
- Do not wear contact lenses because trapped ash can scratch your eyes. Wear glasses instead.

What to do after volcanic activity (including Ashfall)

- Continue to follow official advice provided by your local Civil Defence Emergency Management Group, local authorities and emergency services.
- If you have evacuated, do not return home until told it is safe to do so.
- Keep children indoors and don't allow them to play in the ash.
- Keep animals indoors until ash is cleaned up or washed away. If pets go outside, brush them before letting them back indoors!

Cleaning up ash

It is important to clean up ash promptly, as it is a health hazard. It can also cause serious damage to buildings and machinery. When cleaning up, follow advice and instructions from your local council and Civil Defence Emergency Management Group.

Be aware that:

- Ash clean-up is physically demanding and time-consuming;
- Ash is much heavier than people often expect;
- Repeated cleaning or multiple clean-ups may be necessary; and
- Water restrictions are likely after ash fall. Use water very sparingly to avoid depleting water supplies.

Wear protective clothing (long clothing, heavy footwear, a properly-fitted P2 or N95 mask and goggles). If you are sight impaired, wear eyeglasses. **Do not wear contact lenses** because trapped ash can scratch your eyes.

Clean up ash indoors first

Any ash indoors should be cleaned up promptly to protect indoor air quality. Ash is much more abrasive than ordinary house dust. The best cleaning methods to prevent scratching damage are vacuuming and rinsing (using water sparingly). If possible, clean electronic equipment such as televisions, phones and tablets with an air duster, available at hardware stores, to avoid scratching delicate surfaces.

Once you have cleaned inside, you can move outside. It is important to make sure the ash has stopped falling before you attempt to clean up outside.

- Clean ash off the roof. Roof clean-up must be carefully planned as it is highly hazardous. Use safe working methods.
- For driveways and other hard surfaces, lightly wet the surface of the ash then use a broom to sweep up. Avoid dry sweeping as this creates high levels of airborne ash.
- Remove ash from car paintwork and windscreens with water, but use water sparingly. Avoid rubbing as this can cause abrasion damage.
- Follow official instructions about ash collection and storage. Contact your local council and your local Civil Defence Emergency Management Group for more information.
- Where possible, dispose of small amounts of ash on your own property by spreading thinly over lawns and digging ash into vegetable gardens.
- Do not dispose of ash into drains as it can cause blockages and be difficult to remove.



Landslides (Horohoro)

A landslide is the movement of rock, soil and vegetation down a slope. Landslides can range in size from a single boulder in a rock fall to a very large avalanche of debris with huge quantities of rock and soil that spreads across many kilometres. Landslides are a serious geological hazard in many parts of New Zealand.

Heavy rainfall or earthquakes can cause a landslide. Human activities, such as removal of trees and vegetation, steep roadside cuttings or leaking water pipes can also cause landslides. Be aware of the warning signs. New Zealand's mountainous land, loose volcanic soil and frequent earthquake activity make landslides common in many parts of the country. It's important to recognise the warning signs and act quickly.

Get ready before a landslide

Read your home emergency plan and use as a checklist to make sure you are fully prepared.

- Find out from your local Civil Defence Emergency Management Group if there have been landslides in your area before and where they might occur again
- Know the warning signs so you can act quickly if you see them.
- Regularly inspect your property for:
 - small slips, rock falls and subsidence at the bottom of slopes;
 - sticking doors and window frames;
 - gaps where frames are not fitting properly;
 - outside fixtures such as steps, decks, and verandas moving or tilting away from the rest of the house;
 - new cracks or bulges on the ground, road, footpath, retaining walls and other hard surfaces; and
 - tilting trees, retaining walls or fences.

- Be alert when driving, especially where there are embankments along roadsides. Watch the road for collapsed pavements, mud and fallen rocks.

What to do during a landslide

- Move quickly to get out of the path of the landslide
- Evacuate if your home or the building you are in is in danger — take your grab bag and pets with you - if you can do so quickly and safely.
- Warn neighbours and help others if you can.
- Contact emergency services and your local council.

What to do after a landslide

- Stay alert for future landslides.
- Stay away from affected sites until they have been properly inspected and authorities give the all clear.
- Report broken utility lines to appropriate authorities.
- Re-plant damaged ground as soon as possible because erosion caused by the loss of ground cover can lead to flash flooding.



Tsunami (Ngaru Taitoko)

A tsunami is a wave or series of waves caused by the sudden displacement of water by an earthquake, volcanic eruption, landslide or even a meteorite impact. They can travel many thousands of kilometres across the oceans at speeds of up to 800 kilometres per hour. Tsunami waves contain considerable energy, so travel much further compared to ordinary coastal waves and even small tsunami can be dangerous to those in or near the water.

New Zealand's entire coastline and some of our larger lakes are at risk of tsunami. Tsunami can violently flood our shores, causing devastating property damage, injuries and loss of life.

The biggest tsunami in New Zealand are likely to be caused by events close to our shore and may strike our coastline within minutes of an event occurring. That is why it is so important to quickly go to high ground if you are near the coast and feel a major earthquake.

If you are at the coast and experience any of the following:

- Feel a strong earthquake that makes it hard to stand up, or a weak rolling earthquake that lasts a minute or more
- See a sudden rise or fall in sea level
- Hear loud and unusual noises from the sea

Move immediately to the nearest high ground, or as far inland as you can.

During a tsunami warning:

- Move immediately to the nearest higher ground, or as far inland as you can. Walk or bike if possible
- Do not go sightseeing. Never go to the shore to watch for a tsunami
- Listen to the radio and follow the instructions of emergency services
- Stay away from at-risk areas until the official all-clear is given

There are three different types of tsunami, depending on where they start.

- **Distant:** Distant tsunami are generated from a long way away, such as from across the Pacific in Chile. In this case, we will have more than three hours warning time for New Zealand and we will have time to issue official warning messages.
- **Regional:** Regional tsunami are generated between one and three hours travel time away from their destination. An eruption from an underwater volcano in the Kermadec Trench to the north of New Zealand could generate a regional tsunami. We will have time to issue official warning messages.
- **Local:** Local tsunami are generated very close to New Zealand. In this case, we probably won't have time to issue an official warning, so people in coastal areas need to take immediate action. Remember — *Long or Strong, Get Gone* — if you feel an earthquake that makes it hard to stand, or lasts more than a minute, move immediately to higher ground, out of all tsunami evacuation zones or as far inland as possible.

All of New Zealand's coastline is at risk of tsunami. Knowing the warning signs and the right action to take can help save lives. Find out what to do before, during and after a tsunami.

Get ready before a tsunami

- Work out what supplies you may need and make a plan together.
- Know your **tsunami evacuation zones**. Make sure you know where to go, whether you are at home, at work or on holiday.
- Understand the different types of warnings: Natural, Official and Unofficial.
- Regularly practise your tsunami evacuation by signing up for New Zealand ShakeOut, our national earthquake drill and tsunami hīkoi
- **What to do during a tsunami or when a tsunami warning is issued**

Know the natural warning signs and take action

For a local source tsunami, which could arrive in minutes, there won't be time for an official warning. It is important to recognise the natural warning signs and act quickly.

If you are near a shore and experience any of the following, take action. Do not wait for official warnings.

- Feel a strong earthquake that makes it hard to stand or a long earthquake that lasts more than a minute
- See a sudden rise or fall in sea level
- Hear loud or unusual noises from the sea

Walk, run or cycle if at all possible to reduce the chances of getting stuck in traffic congestion.

Take your animals with you only if it will not delay you. Do not spend time looking for them and if you are not at home, do not return to get them.

While evacuating, avoid hazards caused by earthquake damage, especially fallen power lines. Do not return until an official all-clear message is given by Civil Defence.

Tsunami Warnings

A warning about a Tsunami may come as an 'official' warning; or an 'informal' (unofficial) warning.

Official warnings are issued by the Ministry of Civil Defence and Emergency Management.

- Tsunami warnings are published on www.civildefence.govt.nz and Twitter [@NZCivilDefence](https://twitter.com/NZCivilDefence).
- Tsunami warnings will also be broadcast on radio and television.
- An Emergency Mobile Alert may also be issued
- Warnings may also be broadcast through siren, phone, mobile text, loud hailer or other local arrangements. (Contact your local Civil Defence Emergency Management Group to find out about the warnings you can expect to receive in your community.)

Informal or unofficial warnings might come from a wide variety of sources including:

- warnings from friends, other members of the public,
- international media
- the internet.

If you receive a warning, **do not** attempt to verify the warning, unless you can do that very quickly. When a Tsunami warning is given it is critical that you act quickly.

What to do after a Tsunami

- Only return home once you are told it is safe to do so.
- Keep listening to the radio or following your local Civil Defence Emergency Management Group online for information and instructions.
- If there was an earthquake, expect aftershocks. Aftershocks may generate another tsunami. Be prepared to evacuate.
- Stay away from coastal water, tidal estuaries, rivers and streams for at least 24 hours after any tsunami or tsunami warning, as even small waves create dangerous currents.
- Avoid areas impacted by the tsunami. Your presence might hamper rescue and other emergency operations and put you at further risk from the residual effects of tsunami flooding, such as contaminated water, crumbled roads or other hazards.

Appendix 3

Emergency Mobile Alerts

If your life, health or property is in serious danger, an *Emergency Mobile Alert* could be sent to your mobile phone.

The alerts are sent using cell broadcast technology, so there is no need to sign up or download an app. They can also be targeted to affected areas, so you will only get them if the emergency is in your area. Emergency Mobile Alert messages can only be sent by the Ministry of Civil Defence & Emergency Management, Civil Defence Emergency Management Groups, NZ Police, Fire and Emergency New Zealand, the Ministry of Health and the Ministry for Primary Industries.

If your phone is on, capable of receiving them and inside the targeted area, you should get the alerts. You can find out whether your phone can receive the alerts at civildefence.govt.nz.

Emergency Mobile Alert messages do not replace other emergency alerts. They are an additional way of warning you, along with other channels.

Please note that not all phones are capable of receiving the alerts, so if you receive an alert, let others know. If you think your life might be in danger, don't wait for an official warning.

How does Emergency Mobile Alert work?

Emergency Mobile Alerts use a dedicated signal, so they are more reliable in an emergency when mobile phone and internet traffic could overload the network.

It doesn't matter which network you are on. Any capable phone entering the area during the broadcast period will receive the alert.

Can I opt out of receiving Emergency Mobile Alerts?

As Emergency Mobile Alert is about keeping you safe, you won't be able to opt-out of receiving Emergency Mobile Alert. Your phone may show optional settings used in other countries, but in New Zealand we will use a special broadcast channel that is permanently on.

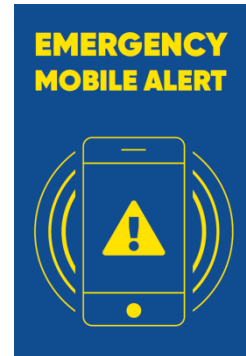
What should I do if I receive an Emergency Mobile Alert?

Stop what you're doing and follow the instructions. Emergency Mobile Alert messages are only sent by authorised emergency agencies, and only if there is serious threat to life, health or property (and one or two tests per year), so if you receive an alert take it seriously and do what it says.

Emergency Mobile Alert does not replace other channels

Emergency Mobile Alert is another channel used for keeping you safe if there is an emergency. Other channels, such as radio, TV, websites and social media will still be used. The alerts do not replace other alerting systems, or the need to take action after natural warnings. You should still be prepared for an emergency, and you shouldn't wait to get an alert before you act. If you feel your life is in danger, don't wait for an official warning. Take immediate action.

Find out more about Emergency Mobile Alerts at www.civildefence.govt.nz



Appendix 4



Red Cross Hazard App

What is the Hazard App?

The Hazard App is designed to help people prepare for and respond to emergencies. It is a free application that can be downloaded onto Apple or Android smart phones or tablets.

The Hazard App provides you helpful information to help you during and after an emergency. The preloaded content means you have instant access to this information, even when you do not have cell phone reception or an internet connection – anytime, anywhere. The App is designed to operate in large-scale emergencies when communication networks are under pressure.

Once loaded onto your phone, the Hazard App will:

- Send you official emergency warnings and alerts.
- Enable you to send an 'I am safe' message (with your location) to your friends, family and social media accounts following an emergency.

The Hazard App was developed for New Zealand Red Cross as part of a global project by the Red Cross' Global Disaster Preparedness Centre in United States. New Zealand agencies such as the Ministry of Civil Defence, MetService, GNS, Ministry of Health and Ministry of Primary Industries have contributed to app content with Civil Defence Emergency Management Groups also participating in the Hazard App working group.

How can I download the Hazard App?

Firstly, you must have mobile phone or tablet that has one of the following operating systems:

- Android OS - 4.0.3 or later.
- iPhone OS – iOS 8.0 or later (compatible with iPhone, iPad and iPod touch)

If you have a phone that meets the abovementioned specifications, you should go to the following website and follow the instructions provided at;

<https://www.redcross.org.nz/what-we-do/in-new-zealand/disaster-management/hazard-app/>

Identify hazards, reduce risk and stay informed when you need it most

New Zealand Red Cross Hazard App, a free comprehensive pocket guide to hazard preparedness and response.

FREE TO DOWNLOAD

Google play

Download on the App Store

Take Action

Find out what could happen. Stay informed.

Early warning systems

Make a Household Emergency Plan, considering everyone in your household.

Make a plan

Appendix 5

First Aid Kit



If someone you care for is injured in a disaster, your knowledge of first aid will be invaluable. Many organisations provide first aid training courses. Consider taking a first aid course, followed by regular refresher sessions. You can buy ready-made first aid kits or make up your own.

You can either purchase First Aid Kit from a range of suppliers including safety equipment stores, pharmacy, office supplies store, outdoor & camping store or hardware store.

If you choose to make up your own kit, St. John recommend that following as a minimum for a 'family' first aid kit.

- Triangular bandages (2)
- Roller bandages- 50mm (1 roll) and 75 mm (1 roll)
- Sterile gauze- 7.5 x 7.5 (2)
- Adhesive wound dressing- 6 cm wide x 1 metre long (1 strip)
- Plaster strip dressings (1 packet)
- Adhesive tape- 25mm hypoallergenic (1 roll)
- Sterile non-adhesive pads – 3 large and 2 small
- Sterile eye pad
- Eye wash container
- Eye wash solution- Saline Steritube 30ml
- Antiseptic solution- Chlorhexidine Steritube 4 x 30ml
- Safety pins (1 card)
- Scissors (1 pair)
- Splinter forceps (1 pair)
- Disposable gloves (2 pairs)
- Accident register and pencil
- First Aid Manual

Appendix 6

Emergency Evacuation Bag ('Grab Bag')

In addition to having supplies for staying at home for 3 days, you should also have a pre-packed emergency evacuation bag in case you need to leave in a hurry.

Ideally, Every member of your household should have their own 'grab bag'.

The first step in making an evacuation kit is finding a bag that is easy to carry. You can buy ready-made kits from most hardware stores or protective equipment retailers. Or you might prefer to make up your own kit. Using an old day-pack is a practical and inexpensive option.

Regardless of whether you are purchasing a 'ready made' kit or making your own – you should personalise the kit to make sure it has all the things that are important for you.

You should pre-pack your kit with most of the things you need to take – but there might be some items such as medication or important documents that you don't want to store in your emergency bag. That is fine – as long as you have a list of the additional things you need to grab **and** you know exactly where they are kept so you can grab them in a hurry. We suggest you keep a check-list on your fridge door so you don't forget anything.



It is also important for everyone in the family to know about both the checklist and where the emergency kit is kept. We also suggest keeping at least one torch (and spare batteries) in a special place so you and your family can get yourselves organised if you have to move out in the dark.

Your evacuation kit should contain:

- Torches and batteries. (We recommend a good quality head torch so your hands are free).

- Radio and spare batteries.
- First aid kit and prescription medicines. (refer to Appendix 2 for a list of items to have in your First Aid kit.
- Hand cleaner/sanitiser
- Gloves – both latex and heavy working gloves (for clearing broken glass and other debris)
- Face and dust masks (very important in earthquakes or following a volcanic eruption).
- Toiletries – towel, soap, toothbrush, sanitary items, toilet paper
- Emergency blanket (the small compact ones you can buy at a pharmacy or emergency supplies store).
- Emergency rain poncho
- Drinking water (at least two litres)
- Snack food (remember to cater for babies and pets too).
- A copy of your home and work emergency plans
- Important documents, or copies of those documents. (e.g. your passport, financial documents (e.g. insurance policies and mortgage information)
- Plastic bags (assorted sizes for waste and important documents)
- Water purification tablets
- Whistle
- Light sticks
- Paper and pencil
- If you have infants or young children – pack essentials such as formula, food, nappies and a favourite toy

Additional items you might want to have in your bag include:

- Power pack for mobile phone
- Pocket knife and/or multi-tool
- Playing cards
- Water-proof matches
- Small gas burner and gas canister
- Food utensils, such as a metal cup, food bowl, camping cutlery Duct tape
- Rope
- Change of clothes (wind/waterproof clothing and strong outdoor shoes and a hat)
- Hi Vis vest

Appendix 7

Sandbags and other emergency water barriers

Introduction

Sandbags and other forms of water barrier are options for creating an **emergency** barrier to hold back flood water, but they should be considered an option of last resort. Sandbags and other types of emergency water barrier system also require a high level of preparedness as the water barrier needs to be erected before the flood waters begin encroaching on your property. For most sites it will be a near impossible task to build an effective barrier using sandbags once water levels start to rise. You simply won't have enough time to get everything in place.

As mentioned at the beginning of this booklet, two of the fundamental principles of Civil Defence are 'reduction' and 'readiness'. 'Reduction' is about finding ways to eliminate or avoid the risk of being affected by a hazard. Hazard risk **reduction** occurs at many levels. Public sector agencies have a responsibility to factor hazard reduction into town planning and infrastructure renewal initiatives. However individual's also have a personal responsibility to take action in order to safeguard themselves and their family.

If you are living in a property that is prone to flooding you should be seeking professional advice to find a solution. Unfortunately there are many houses throughout New Zealand that were built decades ago and are now at increased risk of inundation due to flooding. There are many reasons for this, but the primary one is climate change. Severe weather events are now occurring more regularly and with greater ferocity than was the case 10 to 20 years ago. People who know that their home is at high risk of suffering inundation from surface water in a severe weather event should seek advice from a water engineer or other expert to find a solution that will reduce that risk. That approach is far more effective and much less stressful than the alternative – which is having to hurriedly set up a temporary water barrier whenever heavy rain is forecast.

Options for emergency water barriers

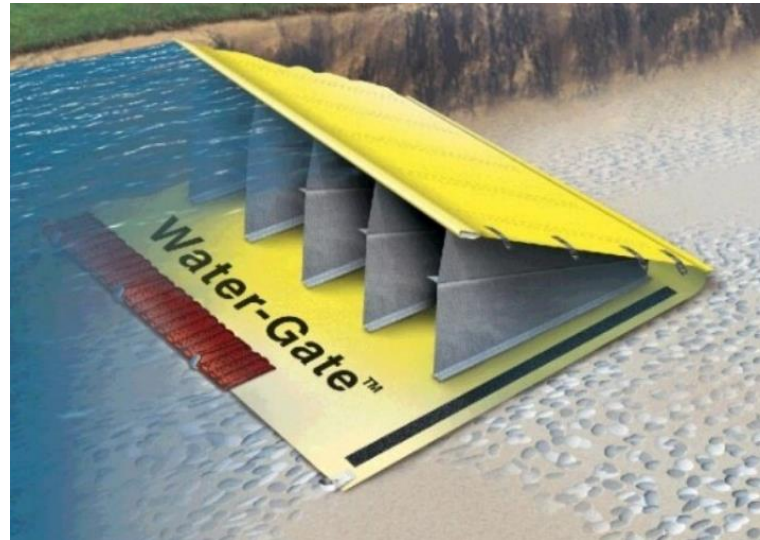
The two main options for a temporary water barrier are:

- Inflatable water barriers
- Sandbags



'Hydrabarrier Supreme'. 7 metres long, 300 mm high. Filled with water from garden hose. Photograph courtesy 'Homeloft' New Zealand.

Inflatable water barriers have a number of advantages over traditional sandbags. They are lighter and faster to deploy than sandbags. They are also easier to store, more durable and come in a range of heights and lengths. However they are they are more expensive to purchase. There are a number of New Zealand based companies who manufacture temporary water barrier systems in a range of sizes and designs. Some examples are shown in the photographs below. Providers can be found on the internet.



"Water-gate" system. Photo courtesy Hydro Response, Kaiapoi, New Zealand



"Aqua barrier" deployed in Fernside, North Canterbury, July 2008. Photo courtesy Hydro Response, Kaiapoi, New Zealand



*HydrabARRIER Supreme'. 7 metres long, 300 mm high. Filled with water from garden hose.
Photograph courtesy 'Homeloft' New Zealand.*

Sand-bagging

Building an effective water barrier using sandbags is both time consuming and really hard work. As per the comments made earlier in this appendix, sand-bagging also requires a high level of preparation and the barrier needs to be constructed before a severe weather event strikes. If you live in a flood prone area you need to keep a close eye on the weather forecasts.

Nevertheless sand-bags can provide an effective water barrier providing it is erected in a timely manner and correctly constructed. Like most things in emergency planning, preparation is the key. If you know that your property is at risk of flooding in a severe weather event you should organise all the equipment and materials you need to create an effective water barrier before it starts raining.

There are three critical elements to preparedness for an effective water barrier using sandbags.

1. **Maintain awareness about weather.** There is an old saying that if you live near a river, you need to get to know the crocodile. Although we don't have crocodiles in New Zealand, we are frequently affected by severe weather systems. Your first line of defence is to get into the habit of checking the weather forecast for heavy rain.
2. **Calculate the size of the barrier you will need to build.** The barrier should be at least 300 mm higher than the expected final water height. Once you know how high the barrier needs to be, you need to calculate the length of the barrier. In other words, the distance it needs to cover. Next calculate the width of the barrier. In all cases the barrier must be wider at the base than it is at the top. Ideally it should be at least three times as wide at the base as the top. The minimum is twice as wide. So a water barrier that is 1 metre height should no less than 2 metres wide. Once you know how high, how long and how wide the barrier needs to be – you can calculate how many sand bags and other items such as tarpaulins that you will need. There are several different methods for constructing a water barrier and they require varying amounts of material. An outline of those three methods and

the ‘pros and cons’ of each one are outlined later in this article. Regardless of which technique you use, the base of the barrier **must always** be wider than the top. The table below is useful in estimating how many sand-bags you will need.

3. **Assemble the materials.** Once you have calculated the size of the barrier you need, and the amount of material you will need to construct the barrier – you should then gather all of those materials and put them in a covered dry place so they are ready to use. As a minimum you will need:
 - ✓ Sand, silt or clay fill. Do not use gravel or rocky material as it will let the water through.
 - ✓ Shovel
 - ✓ Sand-bags⁸
 - ✓ Polyethelene plastic sheeting or tarpaulin⁹ (

Number of sandbags required per 3 lineal metres (Estimated <u>only</u>)	
Height in mm	Number of bags required
300 mm	50 bags
600 mm	100 bags
900 mm	210 bags
1200 mm	360 bags
1500 mm	550 bags

Filling Sandbags

Fill bags with sand, silt or clay fill. It’s easiest if two people are involved in the process- one to hold the bag and the other to use a small shovel to fill the bag with sand.

It is very important to only half-fill the bag. Two-thirds full should be considered the absolute maximum. This is important for several reasons. First, it makes the bags easier to shape and form. Second, it provides for expansion of the sand - which will happen when it begins absorbing water. Third, it reduces the risk of the bag splitting.

Don’t tie or seal the bag. Instead, fold the top flap of the bag into a triangle and position the flap under the bag when you place it in position in the wall. This technique greatly reduces the risk of the bag opening up and the sand being washed away.

3 techniques for building a sand-bag wall

There are number of techniques you can use when building a water barrier with sand bags. If the barrier is more than 400 mm high it is recommended to use a pyramid shape in order to better stabilise the barrier against the force of flowing water. You should also consider positioning additional clusters of

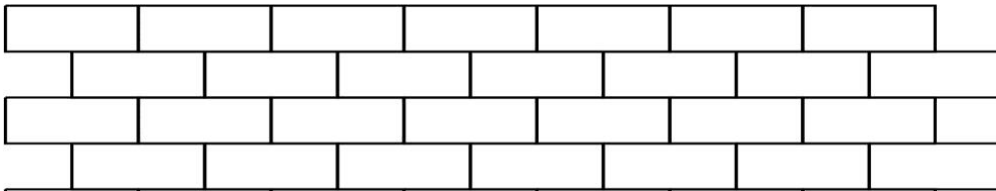
⁸ The two best materials for sand bags are Woven Polypropylene (WPP) and traditional hessian cloth. WPP is a cheaper alternative to hessian and is more robust (less likely to tear). The benefit of hessian is that it is more pliable and is bio-degradable and therefore has less impact on the environment when disposed of.

⁹ The stronger the better. The strength of a tarpaulin is measured in three ways, **thickness, GSM and mesh count**. The **thickness** of a tarpaulin can range from about 0.10 mm to approximately 0.40 mm. The thicker the tarpaulin, the more robust it will usually be. **GSM** (Grams per Square Metre) refers to the weight of whatever material the tarpaulin is made from. The higher the GSM value, the stronger the tarpaulin will be. Finally, **‘mesh count’**. The strength of the tarpaulin can also be determined by its “mesh count” (also known as a “weave count”). Mesh count indicates how many threads per metre are used when constructing the tarpaulin. The higher the count, the more threads used, and the more robust the tarpaulin is likely to be.

sandbags every 2 metres along the length of the barrier to aid in stabilizing it against the force of flowing water.

The three most effective approaches are illustrated in the graphics on the next page. They are the 'pyramid' method, the 'back board' method and 'back to structure' method.

Whichever method you use it is important to lay the sandbags in pattern that tilers refer to as the 'subway pattern.'" (see illustration below). The benefit of 'lapping' the sandbags in the 'subway' pattern is the inter-locking of the bags makes the wall more resistant to water forcing bags apart and breaching the barrier.



Sand bags should be stacked in what tilers refer to as a 'sub-way' pattern'. Every layer has a 50% offset to the one below. The benefit of this 'lapping' approach is that by inter-locking the bags storm water is less likely to split sections of the wall and create a breach.

3 Methods for constructing a water barrier with sandbags

The three best methods for construction a water barrier using sand-bags are illustrated on the following pages. They are:

1. The pyramid (most effective – but also the most time consuming to build)
2. Timber backing board; and
3. Stacked against a structure

Method 1: Sand bag pyramid

Notes for 'Pyramid' method

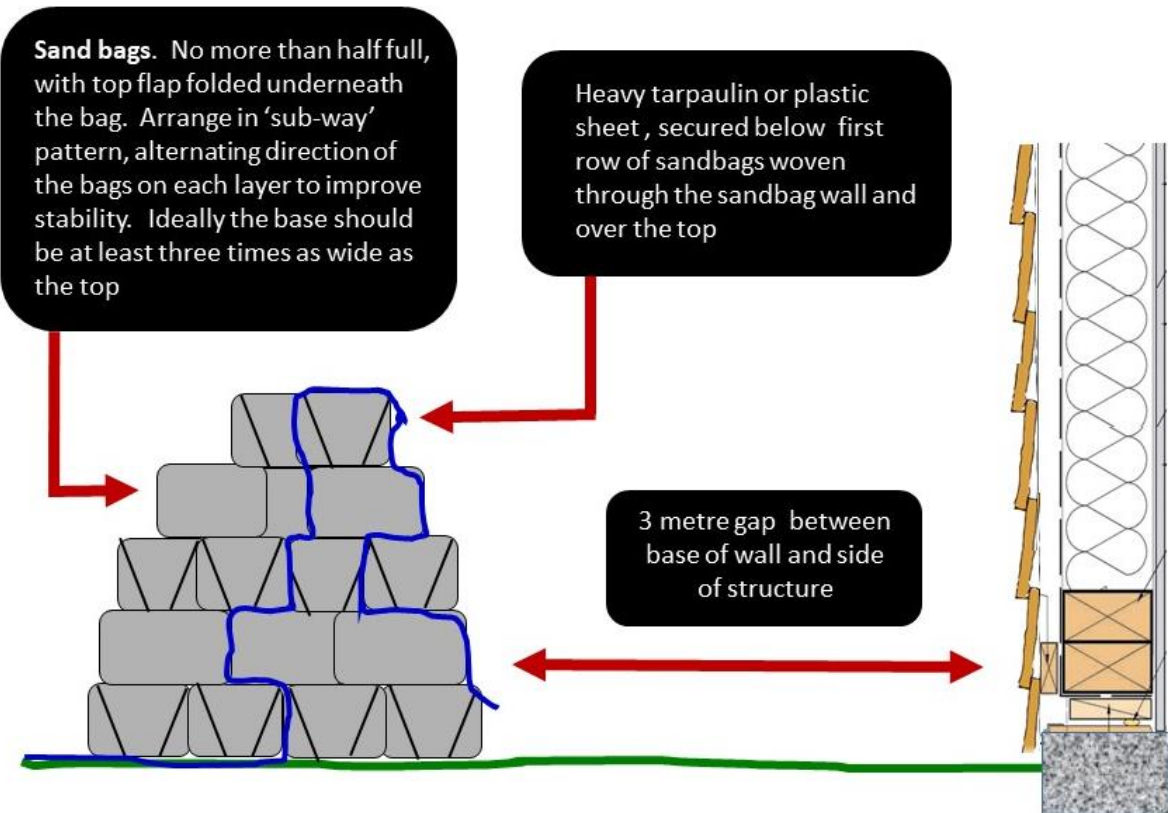
The 'pyramid' method is the strongest and most effective technique for creating a water barrier using sandbags.

In addition to providing the strongest wall, this method has the added benefit of reducing the risk of flood water under-mining the foundations of the structure it is protecting.

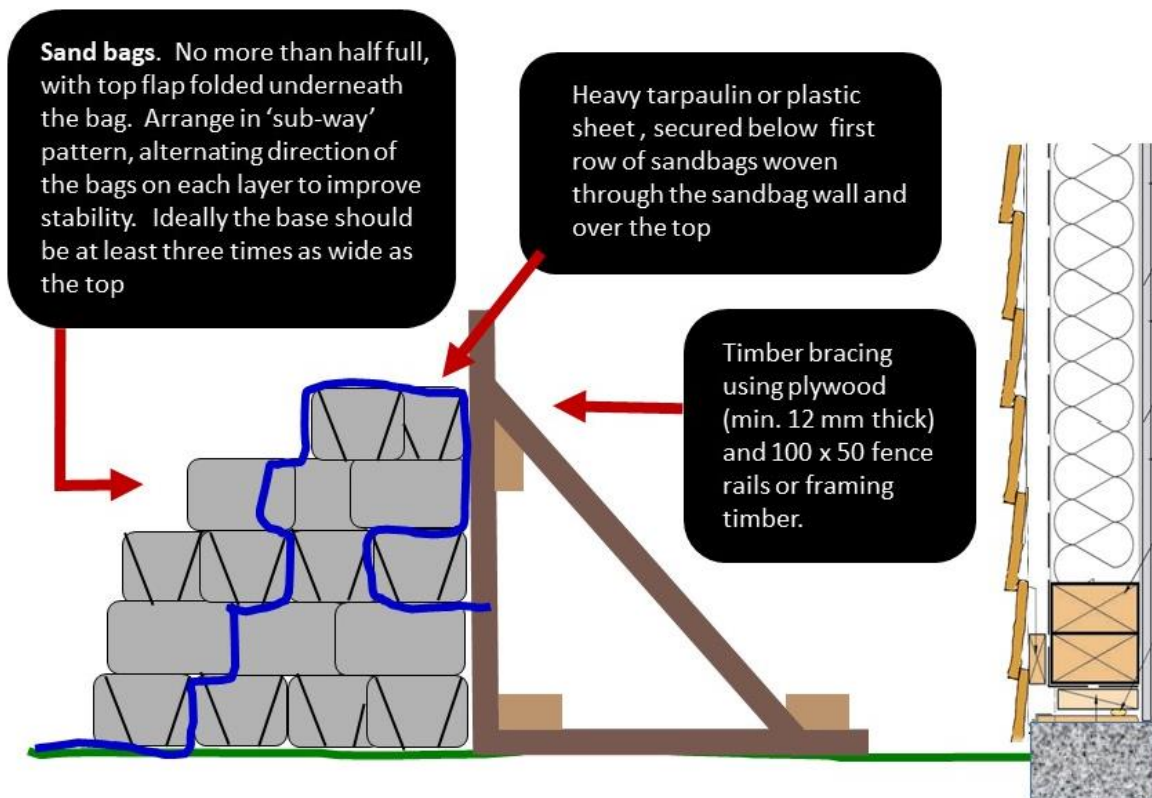
However it requires a lot of sandbags, is more time consuming to construct and needs a lot of space.

A pyramid sandbag wall should be set about 3 metres away from the side of the structure it is protecting; consequently it is not an appropriate solution for properties that are close together.

Method 1: Pyramid



Method 2: Backing board method



Notes for 'Backing Board' method:

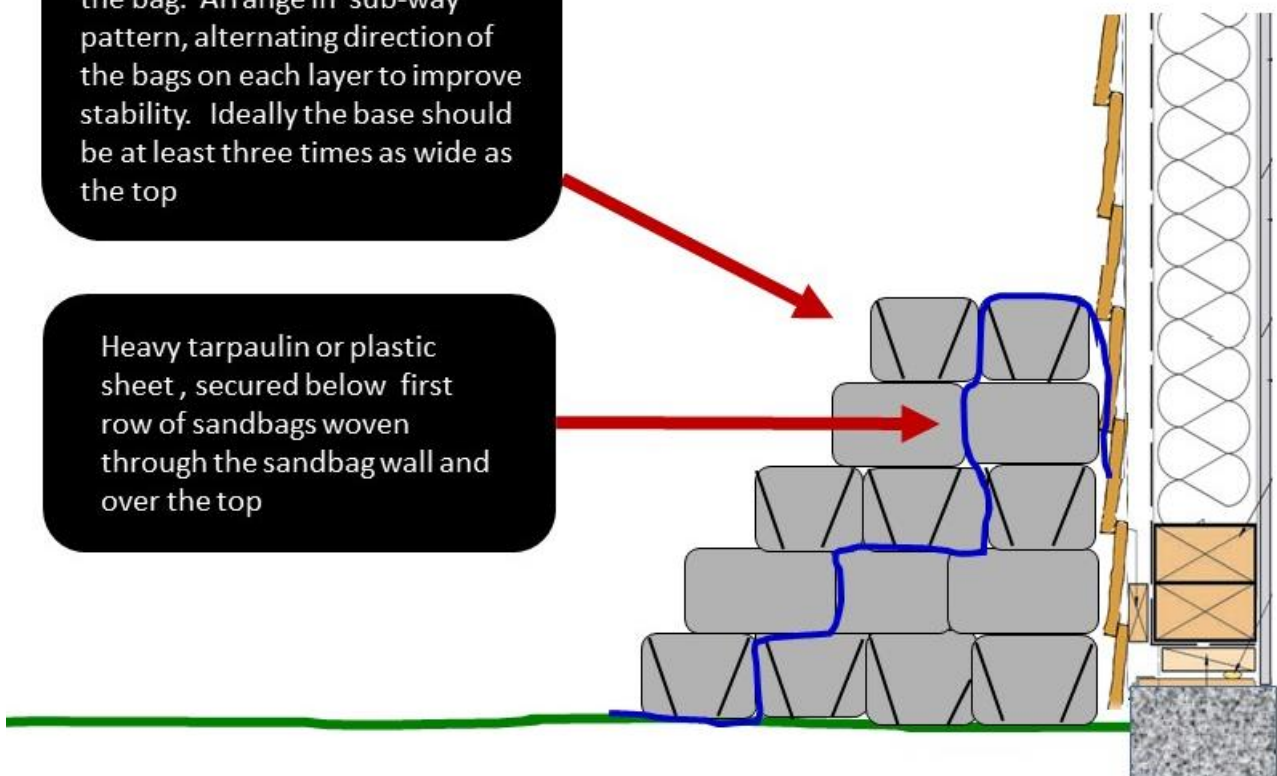
If you are placing the sand-bag wall away from a structure, you can reduce the width of the base and the number of sandbags required by building a timber frame on the side of the barrier that will **not** be facing the flood water.

The benefit of this method is that it does not require as many sandbags as the pyramid method. However it is not quite as strong and also needs a reasonable amount of space – so is often not appropriate for use when buildings are close together.

Method 3: Sand bag wall against structure

Sand bags. No more than half full, with top flap folded underneath the bag. Arrange in 'sub-way' pattern, alternating direction of the bags on each layer to improve stability. Ideally the base should be at least three times as wide as the top

Heavy tarpaulin or plastic sheet, secured below first row of sandbags woven through the sandbag wall and over the top



Notes for 'Sandbags against structure' method:

This approach is the best solution when you do not have enough space to use Methods 1 or 2. It is also the quickest to construct of the three. However it does risk 'pressure damage' occurring to the walls of the structure it is protecting. This method is also much less effective in preventing flood water undermining the foundations of the structure.

Constructing the wall

The basic steps in constructing a wall follows. This process applies to all three methods - 'pyramid' 'back board' and 'back to structure'.

1. Lay a tarpaulin and/or plastic sheeting along the entire length of the area you intend to construct the wall. The sheets needs to be large enough to cover both the entire height of the side of the wall that will be facing the water; and with a little extra margin to allow for tucking under the base of the wall and over the top.
1. Next lay the first (bottom) layer of sand bags. Position the bottom layer of sandbags lengthwise and parallel to the flow of water. Overlap the filled portion of each new sandbag onto the unfilled end of the previous sandbag. Position subsequent rows so that the joints of the previous rows are off-set from the row below.
2. The sand bags should be at least two bags wide. All of the bags in the bottom layer should be touching.
3. Walk over each layer of sandbags to compact the fill, strengthening and stabilizing the barrier while creating tight seals between the joints and layers.
4. Place a row of sandbags on the end of the sheeting to hold it down where it lies on the fill along the water side of the barrier. Place a horizontal row of sandbags on the sheeting along the top of the barrier to hold it in place.
5. Lay the next course on top of the first, with the sand bags laying across the two below as if laying a brick pattern. The sand bags will touch bottom to top as they are laid down.
6. Continue laying three more courses of double bags, alternating the direction of the bags for each layer. Stack single sandbags one on top of another, aligned in the centre of your double width bags until you have reached 300 mm past the height of the expected or existing water.

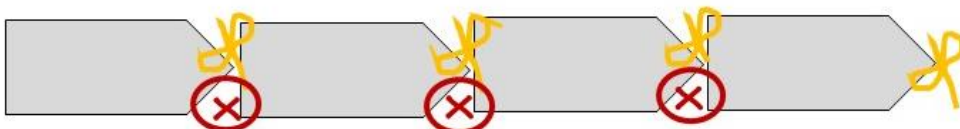


- ✓ Bags are only half to two-thirds full
- ✓ The top section of the bag has been folded over and lapped underneath the bag
- ✓ Bags have been gently trampled to compress and flatten



Wrong

- ✗ Bags are too full – creating gaps and rendering them less pliable
- ✗ Ties are exposed and therefore less secure
- ✗ Bags have been tied instead of folded and lapped



Appendix 8

Pandemic (Mate Urutā)

If a pandemic strikes it is more likely that you will be required to 'shelter in place' – which means staying at home. For this reason it is very important that you have enough food, water and general supplies to survive at least three days without leaving home.



What is a Pandemic?

'Pandemic' is the word used to describe the situation when an infectious disease becomes prevalent over a whole country or the world. Pandemics have been a regular occurrence throughout human history. The most fatal pandemic in recorded history was the Black Death (also known as The Plague), which killed an estimated 75–200 million people in the 14th century.

Prior to the current pandemic (COVID-19), the last world-wide pandemic was the 1918 influenza pandemic (known as the Spanish flu). However there have a number of more regionalised pandemics over the last century, including:

- **SARS CoV-1:** More commonly known as SARS, this outbreak occurred in 2003. Rapid action by national and international health authorities such as the World Health Organization helped to slow transmission and eventually broke the chain of transmission, which ended the localized epidemics before they could become a pandemic. However, the disease has not been eradicated and could re-emerge.
- **H5N1 (Avian flu).** In February 2004, avian influenza virus was detected in birds in Vietnam. It was feared that if the avian influenza virus combined with a human influenza virus (in a bird or a human), the new subtype created could be both highly contagious and highly lethal in humans. By November 2007, numerous confirmed cases of the H5N1 strain had been identified across the world. However Avian flu cannot be categorized as a "pandemic" because the virus cannot yet cause sustained and efficient human-to-human transmission. Cases so far have only involved bird to human transmission.
- **Zika virus.** This pandemic occurred 2015 – 2016. There were more than 1.5 million cases in more than a dozen countries in the Americas. The World Health Organization warned that Zika had the potential to become an explosive global pandemic if the outbreak had not been controlled.

What should you do during a pandemic?

Follow the advice of health professionals, which will be widely broadcast in a pandemic. Standard safety pre-cautions when facing any type of pandemic are:

- Limiting the spread of germs and prevent infection. The best ways of doing this are by regular handwashing (at least 20 seconds), maintaining physical distance between you and others and wearing a face mask.
- Avoid close contact with people who are sick.
- When you are sick, keep your distance from others to protect them from getting sick too.
- Cover your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick.
- Avoid touching your eyes, nose or mouth.
- Practice good health habits. Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food.

You can access the latest information on COVID19 at the following website:

https://covid19.govt.nz/?utm_source=google&utm_medium=cpc&utm_campaign=uac_sem_activity&gclid=EAlaIqobChMI6rfD3JSz7AIV0sDACH1pkwaIEAAYASAAEgKOpPD_BwE

The COVID19 website also provides information on alert levels, travel, health & wellbeing and business & work. It also provides access to resources such as information sheets and posters on COVID19 related matters.

Appendix 9

Animals in Emergencies

Hanga mahere mō ō mōkai me ērā atu kararehe



There are three key components to your animal emergency plan:

1. Include your pets and/or livestock in your emergency planning
2. Prepare an emergency kit for your pets
3. Practice your plan

Step 1: Include pets in your emergency survival plan

It's important to plan for how you will relocate your pets to a safer place and also what you will do if you can't relocate and need to manage pets at home or on the property (for example, if an emergency happens unexpectedly).

To ensure you're prepared:

- Ensure that cats and dogs are microchipped and have an ID tag including their name and your mobile phone number. Ensure that contact details are up-to-date on the microchip register.
- Get pets accustomed to car trips.
- Train your pets to be settled in a cage / carrier / crate / horse float.
- Pets may be relocated to a family member, friend, pet boarding facility, pet day care facility or pet-friendly accommodation located in a safe area. Keep in mind that the premise may have specific requirements – for example, boarding facilities require that pets are up-to-date with vaccinations.
- Keep vaccinations up-to-date and keep the certificate in a safe place.
- If you rely on an assistance animal for support, think about what you might do if your assistance animal becomes confused or is separated from you – are there other ways you can be supported?

Step 2: Prepare an emergency plan

Preparing a pet emergency kit is an essential part of your planning process. It will ensure that you have everything you need in order to activate your plan quickly. Items you will need in your kit will vary depending on the particular needs of your pet or livestock.

The following is a list of suggested items you assemble as part of your emergency planning for your animals:

- Food and water for at least three days
- Photograph of your pets (including names) in sealed plastic bags. In that same bag you should also have a list with the details for your vet, local animal shelter, local council and alternative animal accommodation facility.
- Ensure all collars, leads, harnesses, saddles etc. have your pets name and your contact phone number
- Registration certificates and vaccination certificates.
- Transportation equipment (cages / carriers / crates / horse floats, etc).
- Poo bags for dogs. Cat litter and tray.
- Food and water bowls, and at least one week's supply of non-refrigerated food.
- Medications and clear instructions for treatment of any medical conditions.
- Blankets / bedding / nesting material.
- Toys / enrichment devices.

Step 3: Practice your plan

Your Pet Emergency Plan should form a key part of your overall survival plan. Practicing your emergency plan is a vital part of your preparation. Practicing your plan will help you to refine your plan, and prevent panic in the event of a real emergency.

Resources and Support

The Ministry of Primary Industries (MPI) is the lead agency for the welfare of all animals in the event of a civil emergency. MPI have created a number of resources to assist people prepare for an emergency plan for their animals, including specific guides for:

- Pets www.mpi.govt.nz/getpetsthru
- Lifestyle blocks - www.mpi.govt.nz/getlifestylethru
- Horses - <https://www.mpi.govt.nz/dmsdocument/45328-Animals-in-Emergencies-Horses-Fact-sheet>
- Stock - <https://www.mpi.govt.nz/dmsdocument/45334-Animals-in-Emergencies-Livestock-Fact-sheet>

If you are unable to find the answers to the questions you have about animals in emergencies in the above brochures, you can contact MPI staff at **0800 00 83 83** or awem@mpi.govt.nz

A guide for preparing a First Aid kit for animals can be found on the next page. This document is also available as a PDF are the following link: - www.mpi.govt.nz/dmsdocument/18824-Protect-your-Animals-in-an-Emergency-First-Aid-Kit-for-Animals



Protect your Animals in an Emergency

First Aid Kit for Animals

Your household First Aid Kit may already contain medical supplies needed for animals. If not, the checklist below is a helpful guide. Essential items are highlighted in orange.

- | | | | |
|--------------------------|---|--------------------------|--|
| <input type="checkbox"/> | Adhesive tape (hypoallergenic) | <input type="checkbox"/> | Material to make a splint |
| <input type="checkbox"/> | Antiseptic wipes | <input type="checkbox"/> | Muzzle |
| <input type="checkbox"/> | Baby dose syringe or eye dropper | <input type="checkbox"/> | Non-adherent sterile pads |
| <input type="checkbox"/> | Clean cloth | <input type="checkbox"/> | Nylon leash |
| <input type="checkbox"/> | Compact emergency blanket (available from camping stores) or bubble wrap | <input type="checkbox"/> | Penlight with batteries (AA) |
| <input type="checkbox"/> | Cotton-tipped swabs | <input type="checkbox"/> | Petroleum jelly |
| <input type="checkbox"/> | Cotton wool | <input type="checkbox"/> | Plastic card (e.g. old credit card) to scrape away stingers |
| <input type="checkbox"/> | Diphenhydramine (if approved by your vet) to treat allergies | <input type="checkbox"/> | Rubbing alcohol |
| <input type="checkbox"/> | Gauze roll, 50mm width (could also be used as a dog muzzle) | <input type="checkbox"/> | Safety pins (medium size) |
| <input type="checkbox"/> | Gauze sponges (variety of sizes) | <input type="checkbox"/> | Self-adhesive bandage |
| <input type="checkbox"/> | Glucose paste or syrup | <input type="checkbox"/> | Small scissors |
| <input type="checkbox"/> | Grooming clippers or safety razor | <input type="checkbox"/> | Sterile eye lubricant |
| <input type="checkbox"/> | Iodine solution or chlorhexidine wound wash | <input type="checkbox"/> | Sterile saline wash |
| <input type="checkbox"/> | Hoof pick and shoe pullers (for horses) | <input type="checkbox"/> | Styptic powder or pencil (for dogs eg. to stop bleeding from nails when clipped too close) |
| <input type="checkbox"/> | Insect sting stop pads | <input type="checkbox"/> | Topical antibiotic ointment |
| <input type="checkbox"/> | Latex gloves | <input type="checkbox"/> | Towel |
| <input type="checkbox"/> | List of emergency phone numbers, including for your animals' vet, an afterhours emergency vet hospital and money to make a phone call | <input type="checkbox"/> | Tweezers |
| <input type="checkbox"/> | Magnifying glass | <input type="checkbox"/> | Washing detergent |
| | | <input type="checkbox"/> | Water-based sterile lubricant |

Appendix 10

Household Plan



Contact details for the people in my household

Name	Contact Numbers

Special requirements

Will anyone in your household need assistance to evacuate, or while stuck at home during an emergency? Does anyone rely on mobility or medical devices or other special equipment? Does anyone rely on prescription medicine? Do they have supplies to last three days or more or alternatives if power is not available?

If you have babies or young children, do you have nappies, formula, etc. to last three days or more if shops and roads are closed?

If you have pets, your animals are your responsibility, so make sure you include them in your emergency planning. Do you have food and water to last three days or more? Do you have cages or carriers to transport them and keep them safe? Do you have someone to collect and look after your animals if you can't get home?

If we can't get home...

If we can't get home our meeting place will be... *(Provide two options – one local and one out of town)*

Local Meeting Point:

Out of town meeting point:

Who will pick up the kids?

Name	Contact Numbers

If we can't get hold of each other...

If we can't get hold of each other we will leave a message with... (We suggest choosing someone from out of town , just in case your local phone lines are down).

Name	Contact Numbers

We will get updates by...

Where to get updates: List of radio stations, websites, social media pages where we can get updates on what is happening

--

Who might need our help...

Think about friends and neighbours who may need our help or who can help us

Name	Contact Numbers

People we need to contact		Always dial 111 if someone is in immediate danger
<i>Think about council emergency hotline, medical centre/doctor, landlord, insurance company, power company, day care/school, work, family members</i>		
Name	Contact Numbers	

If we are stuck at home	
<i>Do we have emergency supplies? Food and drink for three days or more (for everyone including babies and pets)? Torches and radio with batteries?</i>	
<i>First aid/medical supplies? They don't all need to be in one big box, but you may have to find them in the dark. Do we know how to turn off water, power and gas.</i>	
Item	Notes
<i>Location of food and drink for everyone in our household for three days (including pets)</i>	
<i>Torches, radio and spare batteries are kept...</i>	
<i>First Aid kit and medication is kept...</i>	
<i>Instructions for turning off water</i>	
<i>Instructions for turning off gas supply</i>	

What we will do if we have no power

Make notes in the space below on what you will do if you have no power. Think about how you will cook and how you will keep warm at night.

What we will do if we have no water

Make notes in the space below on what you will do if you have no water. What will you cook and clean with? What will we use for a toilet?

Important: *Make sure that you have at least 3 litres of drinking water for each person in your household stored for an emergency.*

What we will do if we have to leave in a hurry

Make notes on following:

- 1. Location of evacuation checklist (we suggest you keep it on the fridge door)*
- 2. Location of emergency 'getaway' kits. (A getaway kit is a bag – ideally a small day pack – filled with warm clothes, a torch, radio, first aid kit, snack food and water.)*

Appendix 11

Workplace Emergency Plan

GET READY

Introduction

We suggest that once you have completed this plan you give a copy to your manager and everyone on your emergency contact list so that others will be aware of your intentions.

We also recommend that you set a contact list on your mobile phone called 'ICE' (in Case of an Emergency). You should make a printed copy of that list just in case you can't access your phone during an emergency.

Personal and family information

We suggest that you set up a contact list on your mobile phone called 'ICE' (In Case of an Emergency). However, we also suggest that you have that list printed out just in case you can't access your phone.

<i>Name</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>
<i>Name</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>
<i>Name</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>
<i>Name</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>

Dependants

Child/dependant	Location (name of school or rest home)	Contact Numbers

The person responsible for picking up the children is:

Name	
Mobile Number	
Other contact number	

My 'Get Home' plan**Travelling home**

I normally travel home by:

If I have to walk home, the route I take is...

Primary Route

Estimated travel time

Secondary Route

Estimated travel time

Meeting places

If I can't get home or contact my family, I will meet them at:

Primary Meeting Place

Secondary Meeting Place

My 'Get Home' group

The safest way to get home in an emergency is in groups. Identify at least three people who live in your area and make a plan to get home together. The people in your 'get home' group might be people you work with; or friends, family, neighbours who work nearby.

<i>Name 1</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>
	<i>Work address</i>	
	<i>Usual method of transport</i>	

<i>Name 2</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>
	<i>Work address</i>	
	<i>Usual method of transport</i>	
<i>Name 3</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>
	<i>Work address</i>	
	<i>Usual method of transport</i>	
<i>Name 4</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>
	<i>Work address</i>	
	<i>Usual method of transport</i>	

To get home together, we will contact each other by/will meet at:

<i>Primary Meeting Point</i>	
<i>Secondary Meeting Point</i>	

My work teams contact details

<i>Name</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>
<i>Name</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>
<i>Name</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>
<i>Name</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>

<i>Name</i>	<i>Work Mobile</i>	<i>Personal Mobile</i>
	<i>Work landline</i>	<i>Work landline</i>

Name	Work Mobile	Personal Mobile
	Work landline	Work landline
Name	Work Mobile	Personal Mobile
	Work landline	Work landline

**Tip:**

- ✓ Text "I am at (location) and OK" rather than phone friends and relatives.
- ✓ Consider changing your voice mail message with information about where you are and/or where you are going.

My workplace 'Get Home' kit

A 'Get Home' kit is a bag of essential supplies you keep at work that will help you get home. Build on the list below and check the contents regularly to make your 'Get Home' kit suitable to your personal needs. Store it under your desk so that you can access it quickly if you need to leave in a hurry.

My workplace 'Get Home' kit contains:

- Comfortable walking shoes, a waterproof coat and a hat.
- Gloves (strong leather AND latex rubber)
- Dust masks
- Torch (Head-torch recommended)
- First Aid kit
- Medication
- A copy of your 'home' and 'work' emergency plans
- Note pad and pencil
- Water (at least two litres)
- Food e.g. muesli bars, chocolate
- Small battery-powered radio; or 'wind-up' radio
- Spare batteries
- Mobile phone power pack
- Foil blanket
- Whistle

If the building you are in is on fire, you should evacuate immediately.

My 'Get Home' checklist

If the building you are in is on fire, you should evacuate immediately. For all other types of emergency you should consider the following before leaving the building:

- Immediate Environment. Is it safer to stay where I am, or do I need to leave?*
- Possible further developments of the event (e.g. – flood waters continuing to rise, fires or a tsunami following an earthquake)*
- How I will get home, based on the circumstances of the event?*
- What is the safest means of getting home?*
- What hazards I may encounter on the way home?*
- How congested might the routes away from my location be?*
- Time of day. – will I be home before dark?*
- What advice are emergency Services providing? (Check radio stations, the Civil Defence website and/or social media for information)*

When leaving the building, check off the following list:

- I have my 'Get Home kit' and essential personal belongings*
- I have told someone what I am doing, where I am going, how I am travelling and with who I am travelling*
- I have made contact with my family/household. Note: it is better to text rather than phone – keep phone lines clear for emergency services*

Remember....


- ! Surroundings may have been changed by the emergency event.
 - o Be careful of hazards such as debris, unstable ground, loose masonry, broken glass, floodwater, etc.
 - o Hazards may be above you – be alert for hazards from above as well as around you.
 - o In an earthquake, expect aftershocks.

- ! You may have a long walk so remember to take food and water with you – or find some along the way.

Appendix 12

Household Emergency Plan (Short Version – put this on your fridge)





Our household contact numbers:

Name: _____ Number: _____

Name: _____ Number: _____

Name: _____ Number: _____

Name: _____ Number: _____

Name: _____ Number: _____

Name: _____ Number: _____



If we cannot get home, our meeting places are:

1. _____
2. _____

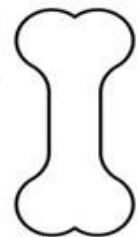


If we can't get hold of each other, we will leave a message with:

1. _____
2. _____



If our kids are at school...



Our plan for our pets is...



If we have to leave in a hurry...

Include notes on how to turn off water, power & gas; location of "grab & go" bags. Remember to take passports, medication, cash & insurance documents. (Refer Appendix 6 in Recipes for Disaster)



If we have to shelter in place...

Include notes on location of food and water, torches & batteries First Aid kit, instructions for turning off water, gas and electricity, what you will do if there is no power.

Tick box if more notes overleaf

Notes

This document was produced by the Emergency Management Team at Rotorua Lakes Council.
The content was developed from a range of sources, including material developed by the
National Emergency Management Agency (NEMA)

