# GET READY

# Taupō District

**EMERGENCY PLANNING GUIDE** 





For more information visit: www.civildefence.govt.nz www.getready.govt.nz

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The Taupō District is surrounded by some of the most awe-inspiring scenery - and some of the biggest hazards. These hazards, including volcanoes, earthquakes, landslides and floods among others, have the potential to cause a major disaster in our district.

Living with the risks presented by these hazards are part of our everyday life, so this means you and your family, your workplace and your community need to be prepared.

A man-made or natural event can happen without warning, and this means you, your family and your community need to be prepared. Getting to know your neighbours, having an emergency grab bag, and having a plan are all important parts of being prepared.

Taking the time to read through the information and tips that are included in this guide will help you to identify hazards in your area and help you and your family to prepare and plan for an event.





### MAKE A PLAN

Emergencies can happen anytime, anywhere, and often without warning – and the best thing you can do is make sure you are prepared.

# In an emergency you could be:

- Unable to get home
- Confined to your home
- Separated from family
- Forced to evacuate.

Making a plan will help you get ready, and talking about your plan with your whānau/family, workmates, marae and community will make sure everyone's prepared.

#### **YOUR PLAN SHOULD INCLUDE:**

- How and where you will meet following an emergency
- Where grab bags and emergency items are stored at home and who is responsible for them
- What actions to take around elderly relatives or vulnerable people in your neighbourhood
- Who will be picking up children from day care or school

**NOTE:** Schools or early childhood centres will only release children to named adults on their system given to them by parents or approved caregivers.



- How to care for pets and livestock
- Where special medication or mobility aids can be found
- How to turn off power, gas and water
- How to stay informed, including a list of local radio stations to listen to for updates
- Important phone numbers, neighbours, trades people etc

## HOUSEHOLD EMERGENCY PLAN

Find a digital version of this plan template here:



www.getready.govt.nz/ prepared/household/ make-a-plan/householdplan

#### Who is this plan for?

Household members	
Name:	Contact Details:
Does anyone have special requiremen	ts?
emergency? Does anyone rely on mobility or	ce to evacuate, or while stuck at home during an medical devices or other special equipment? Does by have supplies to last three days or more or
Any babies or young children?  Do you have nappies, formula, etc. to last thr you have supplies in a grab bag in case you n	ee days or more if shops and roads are closed? Do eed to leave in a hurry as well?
Any pets?	
	•



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Anyone else who might need help.	
Are there any friends, family or neighbou emergency at home or to evacuate?	irs who might need your help to get through an
Name:	Contact Details:
Name:	Contact Details:
Name:	Contact Details:
Useful contacts —————	
,	bout your council's emergency hotline, medical centre/ wer company, day care/school, work and family
Name: Emergency services	Contact Details: 111
Name:	Contact Details:
Name:	Contact Details:
If we can't get home————Our meeting place	
<u>~.</u>	each other and are separated when an emergency ddress and instructions:
Who will pick up the kids? ———	
If you are not able to pick children up fro Do they know? Does the school / day care	m school, day care, afterschool care, etc., who will? e have their details?
Name:	Contact Details:
Name:	Contact Details:
If we can't get hold of each other	
Who will you check in with (someone out	of town in case local phone lines are down)?
Name:	Contact Details:
Name:	Contact Details:
We will get updates by  How will you find the latest news/alerts?  and social media pages will you check?	Which radio stations will you listen to? Which websites
Radio station/website/social media channel:	
Radio station/website/social media channel:	
Radio station/website/social media channel	



## If we are stuck at home Do we have emergency supplies Food and drink for three days or more (for everyone including babies and pets)? Torches, a radio, and batteries for both? 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. Make detailed notes on where these items are stored: Do we know how to turn off water, power and gas? Only turn these off if you suspect a leak or damaged lines 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. Details on how to turn off the water, power and gas: If we have no power-What will you need to do if there is no power? How will you cook, stay warm, see at night (do not use candles as they are a fire hazard)? Do you have spare cash in case ATMs are not working? Do you have enough fuel in case petrol pumps are not working?). Make notes on what your household needs to do: If we have no water -What will you need to do if there is no water? Do you have enough drinking water stored (three litres per person per day for three days or more)? Do you have water for your pets? What will you cook and clean with? What will you use for a toilet? Make notes on what your household needs to do:



If we have to leave in a hurry ———————————————————————————————————
Do we have grab bags?
Does everyone have grab bags* in case you need to evacuate? At home, at work, in the car? *A small bag with warm clothes, a torch, radio, first aid kit, snack food and water. <i>Make detailed notes on where the grab bags are stored:</i>
When a will are as 2
Where will we go?————————————————————
Where will you go in case you have to evacuate? How will you get there? If you live near the coast, make sure it is outside of all tsunami evacuation zones. Where will you stay if you can't get back to your home? <i>Make detailed notes on where you will go and how you will get there:</i>
get back to your nome: make detailed notes on where you will go and now you will get there.
The state of a state of a small con-

#### Important contact numbers -

NAME	PHONE	EMAIL
Doctor		
School		
Police – non emergency		

### EMERGENCY KITS AND GRAB BAGS

In an emergency, Civil Defence Emergency Management and other emergency services will be on the scene, but they cannot reach everyone immediately.

You could be stuck at home without basic services, such as electricity, gas, drinking water, flushing toilets, and phones, for days or even weeks.

### Think about what you will need in an emergency:

- Do you have enough food and water for your household?
- How will you cook and store food without electricity?
- Do you have enough water for everyone in your household?
- Does this include water to cook and wash with?
- What about family members who need medication? Do you have enough?
- Do you have a baby who may need extra supplies (e.g. nappies, formula)?
- Do you have enough food and water for your pets?

Check out our suggestions for making up your own grab bags and emergency kits.

#### **HOME EMERGENCY KIT**

#### **Emergency supplies for your whare/home**

Your house is already full of emergency items disguised as everyday things – as long as you know where they are and can find them in a hurry and/or in the dark! Make sure everyone in your household knows where the torches and batteries are.

By looking after yourself and your whānau, you'll help emergency services focus their attention on people who need the most help.

# SUGGESTED ITEMS FOR YOUR HOME EMERGENCY KIT

- Torch and radio with spare batteries or wind-up torch check batteries every 3 months
- First aid kit and essential medications
- · Thermal blankets or sleeping bags
- · Pet supplies
- Emergency toilet large rubbish bags and toilet paper (can be placed in toilet if sewerage system is not working)
- Face and dust masks
- Non-perishable food, preferably canned food before dried food - check dates on food every 6 months
- · Infants needs
- Older persons needs
- Water for drinking at least 3 litres per person, per day
- · Water for washing and cooking
- A gas cooker/BBQ to cook on/matches
- · A can opener
- Hand sanitiser
- · Rain jackets
- · Safety gloves
- Multitool
- Toiletries
- Cash in case of power cuts and ATM and Eftpos isn't working.

#### EMERGENCY SURVIVAL ITEMS



Torch with spare batteries or a selfcharging torch



Blankets or sleeping bags



Face and dust masks



Non perishable food, can opener and water for drinking, cooking and washing



Radio with spare batteries



Wind and waterproof clothing, sun hats, strong outdoor shoes and safety gloves



Toilet paper and large rubbish bags for your emergency toilet



Infant and older persons needs



First aid kit and essential medicines



Multi-tool



Toiletries



Cash



Pet supplies



#### **STORING WATER**

Household water supplies, including drinking water, can be affected in an emergency. It is important to have a supply of stored water – either commercially-bottled water, or your own containers filled from the tap.

You should have a minimum of three litres of drinking water per person per day for three days – that is, 9 litres per person – for drinking and basic sanitation. Ideally, you would have a week's worth: 21 litres per person.

Children, nursing mothers, and ill people will need more. Hot environments and intense physical activity can double the amount of water you need. You will need additional water for washing and cooking.

Store water in new food rated containers or fizz/juice bottles. DO NOT store water in milk bottles.

- Wash bottles thoroughly in hot water.
- Fill each bottle with tap water until it overflows.
- Store in a cool dark place and replace the water every 12 months.

If uncertain before drinking, boil the water first, if unable to do so add the recommended dosage of aqua tabs or a small amount of household bleach (half teaspoon for 10 litres).

**NOTE:** Do not use scented bleach or ones that contain detergents.

#### **FOOD**

Cost is always a concern when purchasing food for emergency use. Try and buy an extra item or so each time you shop. Canned food is better as it requires less or no water. Purchase items with the furtherest use by date.

Check food dates every six months, use those items that are nearly due then replace them. Consider how you will heat your food if there is no power (barbecue, primus, fuel tabs).

#### **FIRST AID**

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.

# INDIVIDUAL/FAMILY EMERGENCY GRAB BAGS

In situations where an event affects people's safety in their home they may opt to self evacuate or authorities will advise on evacuating.

This process should be part of your plan. Pre-arrange with friends or family for you to stay with them over this period. If unable to, authorities will have alternative emergency shelter in place until either the event is over and it is safe to return home, or temporary accommodation can be arranged.

Put together an emergency grab bag with a few basic requirements for being away from home. Have it available in a cupboard or laundry so it can be grabbed quickly. That way you're not running around trying to find everything.

# SUGGESTED ITEMS FOR YOUR INDIVIDUAL OR FAMILY GRAB BAGS:

- Torch and radio with spare batteries or a good wind-up radio - check batteries every 3 months
- Power bank (for charging cell phones)
- · Water bottle
- Easy to carry food rations (muesli bars, etc)
- · First aid kit and essential medication
- · Walking shoes
- · Wind/waterproof clothing
- Toiletries towel, soap, toothbrush, toothpaste, toilet paper, etc
- · Light blanket
- · Face and dust masks
- Pet supplies
- · Infant/children needs
- Hearing aids and spare batteries, glasses, mobility aids
- Important documents
- Identification (copies of birth and marriage certificates, drivers licences, passports)
- Financial (copies of insurance policy numbers, mortgage details, etc)
- Copies of family photos
- Cash in case of power cuts and ATM and Eftpos isn't working

# IF WE HAVE TO EVACUATE WE WILL:

- · Take our grab bag
- · Tell someone where we are going
- · Turn off power and water
- Take our pets

Put your plan somewhere on your property that a trusted person could find, but is not visible to everyone who may pass by your property.

Do not turn off gas unless you smell or suspect a leak or are instructed to do so by authorities.

**NOTE:** If driving, travel at normal speed and obey road signs. Do not put your family at risk by speeding or driving recklessly.

## WORK/CAR EMERGENCY GRAB BAG

Plan ahead for what you will do if you are in your car when a disaster strikes. In some emergencies you may be stranded in your vehicle for some time. A flood, snow storm or major traffic accident could make it impossible to proceed.

- Consider having essential emergency survival items in your car. If you are driving in extreme winter conditions, add windshield scrapers, brush, shovel, tire chains and warm clothing to your emergency kit.
- Don't keep your emergency grab bag in the car as it might not be there when you need it. Have some basic supplies in your car instead.
- Suggested items for your individual work / car emergency grab bag:
  - Comfy walking shoes
  - · Water bottle
  - Jacket
  - Muesli bars
  - Torch
  - · Warm clothes
- When planning travel, keep up to date with weather and roading information.



# **CHECKLISTS**



HOME EMERGENCY I	KIT	(SUGGESTED CONTENTS)
Hand sanitiser/toiletries Infant's / older persons' needs Pet supplies Emergency toilet - toilet paper and large rubbish bags (can be placed in toilet if sewerage system is not working) Face and dust masks Water: - At least 3 litres per person per day for drinking - For washing and cooking purposes		A primus or gas barbeque for cooking  Can opener  Blankets/sleeping bags  Torch and radio with spare batteries or wind up torch - check batteries every 3 months  Rain jackets  Safety gloves  Multitool  Spare toiletries
CHECK ALL BATTERIES EVERY 3 MONTHS	C	HECK ALL DATES ON FOOD EVERY 6 MONTHS
INDIVIDUAL/FAMILY EN	ИER	GENCY GRAB BAG
Torch and radio with spare batteries  Hearing aids and spare batteries, glasses or mobility aids  Water bottle and easy- to-carry food rations (muesli bars etc)  Extra supplies of special dietary items  Infant's needs  Wind/waterproof clothing, walking shoes light blanket		Face and dust masks  Toiletries - towel, soap, toothbrush, sanitary items, toilet paper  Important documents: - Identification (copies of birth/marriage certificates/drivers licences and passports - Financial (copies of insurance policies numbers, benefit details and mortgage details)  Copies of family photos etc  Pet supplies
IF WE HAVE TO EVA	ACU	ATE WE WILL:
Take our grab bag Turn off power and water if there is time		Tell someone where we are going & put our plan somewhere outside on our property that a trusted person could find Take our pets
WORK/CAR EMERG	BEN	CY GRAB BAG
Comfy walking shoes  Water bottle  Jacket Work/car emergency grab bag		Muesli bars Torch Warm clothes

# PLAN OF OUR HOME

### DRAW A LAYOUT BELOW OF YOUR HOUSE INCLUDE WHERE YOUR EMERGENCY KIT AND GRAB BAGS ARE KEPT.

V						

### **DISABILITIES**

# PEOPLE WITH DISABILITIES OR SPECIAL REQUIREMENTS

If you, or a member of your household or community has a disability or any special requirement that may affect their ability to cope in a disaster, make arrangements now to get the support needed.

#### Build a personal support network.

- Organise a personal support network of a minimum of three people to alert you to Civil Defence warnings, or to help if you need to be evacuated. This could be family members, carers, friends, neighbours or co-workers
- Ensure you have an emergency plan before a disaster happens and practise it with your support network. Plan for various disasters and situations you could encounter
- Discuss your needs with the support network and make sure everyone knows how to operate necessary equipment
- Inform your personal support network if you are travelling or away from home.

#### **Have supplies:**

- Ensure you have emergency survival items, including any specialised items you need, and an emergency grab bag in case of evacuation
- Keep at least seven days supply of your essential medications and make provisions for those that require refrigeration - talk to your doctor or chemist about your medication.
- Wear a medical alert tag or bracelet to identify your disability or health condition
- When travelling let a hotel or motel manager know of your requirements in case of an emergency.
- Know where to go for assistance if you are dependent on a dialysis machine or other lifesustaining equipment or treatment.

#### HEARING IMPAIRMENT

Radio and television stations will broadcast Civil Defence information and advise before and during a disaster. Ask your support network to alert you to warnings and keep informed. Contact the emergency management staff at your local council to find out what warning systems are in place in your community.

Consider installing a system appropriate to your needs such as an alarm with a flashing strobe light to get your attention. Replace the batteries once a year. You may want to consider giving a key to a neighbour so they can alert you to a warning. Keep a writing pad and pencils and a torch in your emergency grab bag so you can communicate with others.

#### **SIGHT IMPAIRMENT**

People who are blind or partially sighted may have to depend on others if they have to evacuate or go to an unfamiliar Civil Defence centre. If you have a guide dog, make sure you have an emergency grab bag for your dog with food, medications, vaccination records, identification and harnesses to take with you. Keep extra canes at home and in the workplace even if you use a guide dog. Be aware that animals may become confused or disoriented in an emergency. Trained service animals will be allowed to stay in emergency shelters with their owners. Check with your local council for more information.

# PHYSICAL DISABILITY OR MOBILITY IMPAIRMENT

If you or someone you are caring for has a physical disability or difficulty with mobility, include mobility aids in the emergency grab bag. This will help in the event of an evacuation.

In a major earthquake the ground-shaking will make it difficult or impossible for you to move any distance. If you cannot safely get under a table, move near an inside wall of the building away from windows and tall items that can fall on you, and cover your head and neck as best you can. Lock your wheels if you are in a wheelchair. In bed, pull the sheets and blankets over you and use your pillow to protect your head and neck.

# ASTHMA AND RESPIRATORY PROBLEMS

People with asthma or a respiratory disorder will be more susceptible to dust, volcanic ash, or the stress of an emergency. Make sure you have dust masks at home and in your emergency grab bag and sufficient medicines for at least seven days.

# SPECIAL FOOD REQUIREMENTS

If you, or someone you are caring for, has special dietary needs, make sure there is sufficient stock of these food items for at least seven days at home, and in the emergency grab bag. If you have to be evacuated, emergency shelters are unlikely to have the special food items you may need.



### PETS AND LIVESTOCK

#### We all love our animals and that's why it is important to think about how you will look after your pets during an emergency.

Your animals are your responsibility. You need to include them in your emergency planning and preparation. Failing to plan for them in case of hazards (such as an earthquake or flood) puts their lives at risk.

### Reduce the risks to your pets and other animals:

- Ensure your pets are all microchipped and their details are registered with the NZ Companion Animal Register (NZCAR). Make sure these details are kept up to date and include details for an out-of-region contact (as close friends and whānau/family may also be affected by the emergency).
- Review your pet insurance policy to see
  if it covers emergencies (for example, pet
  accommodation, behavioural trauma, and
  illnesses such as giardia from floods).
- Include essential supplies for your pets in your emergency kits and grab bags.
- Ensure outside kennels and caging are located on higher ground to avoid floods, and away from other hazards such as slopes prone to landslides.
- Make sure you have a pet crate or cage for your animal(s) to be transported or held in while accommodation is being sought.
- Restrain standing cages for birds and rodents, and tanks for fish and turtles, so they do not fall over or become damaged during earthquakes.

Further advice and checklists for protecting your pets and other animals in emergencies is available on the Ministry for Primary Industries website.

If you live on a lifestyle block the *Lifestyle Block Emergency Preparedness* handbook is a guide specifically designed to help lifestyle block owners make a plan. You can find a copy here <a href="https://www.taupo.govt.nz/community/civil-defence-and-emergency/2get-ready">www.taupo.govt.nz/community/civil-defence-and-emergency/2get-ready</a>

### **EMERGENCY SANITATION**

In some emergency situations the water supply may be cut off, or water and sewage lines may be damaged, and you may need to use improvised emergency toilets.

#### **HOW TO MAKE AN EMERGENCY TOILET:**

- Use watertight containers such as a rubbish bin or bucket, with a snug-fitting cover
- If the container is small, keep a large container with a snug-fitting cover available for waste disposal
- · Line bins with plastic bags if possible
- Pour or sprinkle a small amount of regular household disinfectant such as chlorine bleach into the container each time the toilet is used to reduce odour and germs.
- · Keep the toilet covered.
- If your toilet is intact, put a bag liner inside.

## GET YOUR BUSINESS READY

Emergencies can happen anytime, including during business hours. You can't predict when they will happen, but you can take actions to make your business or organisation more prepared.

Planning for emergencies makes good business sense. Whether you are a large or small business, or a community organisation, you should plan for disruption from an emergency event. It helps keep you and your workers safe and minimises downtime.

#### Identify the risks to your business and staff

Find out what the risks are and how they can impact on your business. Risks include natural hazards, health emergencies and utility failures. If you have staff, talk to them about the risks they think are most relevant to your business.

Find out how to assess health and safety risks on the <a href="www.business.govt.nz">www.business.govt.nz</a> website

#### Make an emergency plan for your business

Businesses have an obligation to be prepared for an emergency. In most cases we can't predict when an emergency will happen. But we can make plans to make sure our staff are safe, our financial and personal losses are reduced and we are able to get back to business as soon as possible.

Find out more on the Get Ready website

#### Look after your staff

As an employer, you have a duty of care to your staff, including caring for them during and after emergencies. Start by involving your staff in identifying risks and making an emergency plan. Talk to them about what they, and their whānau, would need to get through an emergency.

Find out more on the Get Ready website

#### **Provide supplies for your staff**

In an emergency, your staff may be stuck at work or unable to take transport home for a day or more. Make sure you have enough supplies for everyone onsite for three days. This should include for visitors too.

Find out more on the Get Ready website

#### **Build relationships**

Get involved in your local business community. Get to know your local Chamber of Commerce, industry organisations, business neighbours, competitors and suppliers. Talk to them about their emergency and business continuity plans. In an emergency, you may be able to help each other get back up and running faster.

#### **Create contingency plans**

Develop a contingency plan for your whole business. It should include staff, information, assets, customers, suppliers and distribution channels.

Identify your core business needs, and how you'd manage in an emergency.

- · Back up your data.
- Know how to contact staff and suppliers.
- · Test your back up systems.

Find contingency planning resources and links on the Get Ready website

Prepare a plan for your farm or lifestyle block

Rural communities, businesses and individuals need to adapt and build resilience to emergencies. Your animals are your responsibility. You need to include them in your emergency planning and preparation. Failing to plan for them puts lives at risk.

Find out more on the Ministry for Primary Industries website or <a href="https://www.taupo.govt.nz/community/civil-defence-and-emergency/2get-ready">www.taupo.govt.nz/community/civil-defence-and-emergency/2get-ready</a>

### **GET YOUR MARAE READY**

Marae preparedness planning enhances resilience and safety of marae, taonga and iwi. It helps te hau kāinga and te haupori understand and manage their risks.

# MARAE EMERGENCY PREPAREDNESS PLAN

The Marae Emergency Preparedness Plan helps marae be as prepared as possible for a natural disaster or emergency. It encourages whānau, hapū and iwi to:

- Think about the possible impacts of natural disasters, and
- Recognise who could be called upon in the event of an emergency.

Work through the marae emergency preparedness plan to plan out what your marae will do.

Find out more on the Get Ready website.



### WHO TO CONTACT

The primary responsibility for Civil Defence emergency management (CDEM) at a local level rests with your local council. Local and regional councils work with emergency services (police, fire, ambulance) and other relevant agencies to plan for, and respond to disaster events.

CDEM groups are the consortium of local councils and agencies in each region and they have a responsibility to plan for, and manage regional hazards and risks.

Contact the Civil Defence emergency management office at your nearest local council for information on local hazards and community response arrangements.

During a disaster event, telephone lines need to be kept clear for emergency calls to get through so please avoid making calls unless absolutely urgent.

If life or property is threatened always dial 111 for police, fire or ambulance.

### **STAY INFORMED**

There are many different ways you can stay informed about what is happening before, during and after an emergency event. A range of channels, as outlined below, are used to make sure as many people as possible receive information as needed.

# EMERGENCY MOBILE ALERTS

If your life, health or property is in danger, Emergency Mobile Alerts can be sent to your mobile.

You don't have to download an app or subscribe to a service. Just ensure your phone is capable and the operating system software is up to date. If your phone is on, capable and inside the targeted location, you should get the alerts.

Only authorised emergency agencies can send Emergency Mobile Alerts. Agencies will only send alerts when there is a serious threat to life, health or property.

### The only agencies currently authorised to issue alerts are:

- New Zealand Police
- · Fire and Emergency New Zealand
- · Ministry of Health
- Ministry for Primary Industries
- National Emergency Management Agency
- Local Civil Defence Emergency Management Groups.

The alert message will identify the agency sending the Emergency Mobile Alert.

Emergency Mobile Alert is an additional channel to help keep people safe if there is an emergency. It does not replace other emergency alerts. If you feel your life is in danger, don't wait for an official warning. Take immediate action.

#### **RADIO**

In an emergency the radio may be your prime source of information. If the power goes out, a solar or battery powered radio (or your car radio) can help you keep up to date with the latest news.

For localised information during an emergency we recommend you tune into one of the local radio stations listed below for updates.

STATION	FREQUENCY
Classic Hits	FM 96.8
MoreFM	Taupō 93.6
MOLELM	Kinloch 107.2
	National FM 101.6
Radio New	National FM Acacia
Zealand	Bay 104.8
	Concert 98.4
Newstalk ZB	FM 96.0
The Edge	FM 88.8
Timeless Taupō	FM 106.4
Tuwharetoa FM	FM 97.6

In addition, the following radio networks work collaboratively with Civil Defence emergency management authorities around New Zealand to broadcast important information and advice in an emergency:

- Radio New Zealand (AM and FM frequencies) www.rnz.co.nz/listen/amfm
- MoreFM (FM frequencies) www.morefm.co.nz/home/frequencies.html
- NewstalkZB (AM and FM frequencies) www.newstalkzb.co.nz/info/newstalk-zbs-frequencies
- The Hits (FM frequencies) www.thehits.co.nz





#### **FACEBOOK**

www.facebook.com/CivilDefenceTaupo

Facebook is another great way to stay informed. Follow us on Facebook for the latest information, useful tips for being prepared, updates on the work our team does in the community and more!

During emergency events, our Facebook page is one of the channels we will use to keep affected communities informed of what's going on, where to get help, and any other valuable information we can provide.

#### ANTENNO

For localised information download Antenno, Taupō District Council's free mobile app that sends you notifications and alerts



about places you care about. Antenno is free to download and use, and doesn't ask for any personal information or login details, so it's a nice easy way to stay informed.

www.taupo.govt.nz/council/antenno

#### WEBSITE

If disaster strikes, important information and updates will be made available at www.taupo.govt.nz.

# HAZARDS IN THE TAUPŌ DISTRICT













Disasters such as earthquakes, volcanic eruptions, floods and storms can strike at any time, sometimes without warning. All disasters have the potential to cause disruption, damage property and take lives.

Learn what you can do to reduce the impact of the hazards that can occur in our communities. Find out what to do before, during and after a disaster happens, so you and your loved ones keep safe and get through.



**BEFORE** 



**DURING** 



**AFTER** 

#### **EARTHQUAKES**

All of New Zealand, including the Taupō District, is at risk of earthquakes. Smaller earthquakes are happening all the time but a large earthquake can be frightening and damaging.

We can't predict when one will happen, but we can protect ourselves and our whānau. There is a lot you can do to prepare for a large earthquake and be sure you can cope better with the impacts on you and those you care for.

# REDUCE THE IMPACTS OF EARTHQUAKES

Make your home safer. Fix and fasten objects that could fall and hurt you in an earthquake.

Most earthquake-related injuries and deaths result from people moving during earthquake shaking, due to collapsing walls and roofs, and falling glass and objects caused by the earthquake shaking. You can reduce the impacts of earthquakes by making sure objects that can fall, damage, and hurt are either placed somewhere else, or fixed and fastened.

Think about your whare/home, wāhi mahi / workplace, kura/schools, and in other places where you and your whānau/family spend a lot of time and see what you can do to make them safer.

#### Inside your whare/home

Use brackets or specific seismic restraints to securely fix bookcases, cabinets, and other tall furniture and appliances to wall framing.

Hang heavy items, such as pictures and mirrors, away from beds, couches, and anywhere people sleep or sit. Use appropriately sized hooks and push them closed to prevent the string or wire jumping out during shaking.

Install strong latches on cabinet doors. The contents of cabinets can shift during the shaking of an earthquake. Latches will prevent cabinets from opening and spilling their contents.

Place heavy objects on shelves near the floor. Secure large ornamental items that might fall and break.

Store weed killers, pesticides, and flammable products securely in closed, latched metal cabinets.

#### Structural fixes

If you have a tall chimney made from brick or concrete masonry, consider removing or replacing it. Chimneys built before the 1970s that extend above the roofline are at greater risk of collapse.

Hot water cylinders should be secured to wall framing with seismic restraints. If the water heater tips over, the gas line can break, causing a fire hazard, and the water line can rupture. Consider having a certifying plumber and gasfitter install flexible fittings for gas and water pipes.

If your whare/home has a header tank, make sure it is well secured. If the tank is no longer in use, remove it.

Consider replacing heavy roofing materials, such as clay or slate tiles, with lighter weight options. Ensure any heavy tiles are properly secured to roof framing beneath.

Make sure your whare/home is securely anchored to its foundations and that adequate bracing is in place. If you are not sure, contact a professional engineer or Licensed Building Practitioner.

Buildings that are securely attached to their foundations and correctly braced are less likely to be severely damaged during earthquakes, and less likely to become uninhabitable.

Consider having your whare/home evaluated by a Chartered Professional Engineer or Licensed Building Practitioner. This is particularly important if there are signs of structural defects, such as cracks in foundations or chimneys.

Get more tips on making your home safer on the Toka Tū Ake EQC website. www.eqc.govt.nz/be-prepared

#### Keep your pets safe

Think about where your pets sleep or hide, or where crates, cages or tanks are kept. Ensure they are as safe as possible by securing objects that might fall on them, or hazardous substances that might harm them.

Have insurance and review your level of cover regularly.

Review your insurance regularly. Having insurance cover for your home and contents is important to help you get back on your feet if you suffer damage in a disaster.

# GET READY BEFORE AN EARTHQUAKE

In a severe earthquake, every second counts. Make sure you know what actions to take in the places where you spend most of your time.

- Make and practise your emergency plan
- Have your grab bag and emergency supplies ready
- Know how to stay informed

Practise Drop, Cover and Hold at least twice a year.

You can do this when the clocks change and by taking part in New Zealand ShakeOut. It's important to practise the right action to take so that when a real earthquake happens, you know what to do.



#### **Drop, Cover and Hold**

Drop, Cover and Hold is the right action to take during an earthquake. It stops you being knocked over, makes you a smaller target for falling and flying objects, and protects your head, neck and vital organs. Do not try to stand in a doorway – in modern homes, doorways are no stronger than any other part of the structure and usually have doors that can swing and injure you.

If you are inside, Drop, Cover and Hold – do not run outside or you risk getting hit by falling bricks or concrete and glass. You should only leave if the building is showing obvious signs of distress, or if you are in a tsunami evacuation zone. Read more about what to do during a tsunami.

If you are outside, move away from buildings, trees, streetlights, and power lines, then Drop, Cover and Hold. Stay there until the shaking stops.

Even after earthquake shaking stops, move with care as debris can cause further injuries.

#### How to Drop, Cover and Hold







**DROP** down on your hands and knees. This protects you from falling but lets you move if you need to.

**COVER** your head and neck (or your entire body if possible) under a sturdy table or desk (if it is within a few steps of you). If there is no shelter nearby, cover your head and neck with your arms and hands.

**HOLD** on to your shelter (or your position to protect your head and neck) until the shaking stops. If the shaking shifts your shelter around, move with it.

# WHAT TO DO AFTER AN EARTHQUAKE

Expect there will be aftershocks, these can happen minutes, days, weeks, months and even years following a large earthquake.

- Each time you feel an aftershock Drop, Cover and Hold.
- 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 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 or you are in a tsunami evacuation zone.
- Turn off water, electricity and gas if advised to. 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 you can, put on protective clothing that covers your arms and legs, and sturdy footwear. This is 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.
- 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.
- Check on your neighbours and anyone who might need your help.

#### If your property is damaged:

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

#### Pets and other animals

- Pets may become disoriented, particularly if the earthquake has affected scent markers that normally allow them to find their way home.
- Try to keep pets calm and under control so that they don't try to run away.
- Keep leashes and pet-carrier boxes handy. Make sure they have plenty of water.
- If farming, check livestock have access to fresh water as well as their general welfare. Check fences to ensure livestock are secure.
- Be aware that the behaviour of pets and livestock may change dramatically after an earthquake and they may become more aggressive or defensive.
- Further advice about caring for your pets and other animals after an emergency is available on Ministry for Primary Industries website.
   www.mpi.govt.nz/animals/animal-welfare/ animal-welfare-emergency-management/ preparing-animals-for-emergencies/

#### Geonet

The GeoNet website provides detailed information about the most recent earthquakes that have occurred in New Zealand.



# VOLCANIC ACTIVITY

# NEW ZEALAND VOLCANOES AND THE TAUPŌ VOLCANIC ZONE

New Zealand lies in the Pacific Ring of Fire, an area of increased geological activity that circles the Pacific Ocean and contains about 90 per cent of the world's volcanoes. There are three types of volcanoes found in New Zealand, cone volcanoes (e.g. Mount Ruapehu), caldera volcanoes (e.g. Lake Taupō), and volcanic fields.

Most New Zealand volcano activity in the last 1.6 million years has occurred in the Taupō Volcanic Zone (TVZ). The zone extends from Whakaari/ White Island to Ruapehu. The Taupō Volcanic Zone is extremely active on a world scale: it includes three frequently active cone volcanoes (Ruapehu, Tongariro/Ngauruhoe, Whakaari/White Island), and two of the most productive calderas in the world (Okataina and Taupō).

### Volcanoes can produce a wide variety of hazards including:

- · Ash and falling rock debris
- Very fast-moving mixtures of hot gases and volcanic rock (base surges)
- · Lava flows (fire fountaining)
- · Lahars (volcanic mudflows)
- Gas
- Shockwaves
- Earthquakes
- Tsunami

For information on eruption hazards specific to Mt Ruapehu and Mt Tongariro, visit www.taupo.govt.nz/cdhazards-volcanic

# VOLCANIC ACTIVITY BULLETINS

Volcano Activity Bulletins (VABs) issued by GeoNet are New Zealand's official source of volcano status information including the current Volcanic Alert Level (VAL). The bulletins are issued on an as-needed basis summarising the volcano status and recent events.

See Volcanic Activity Bulletins on the GeoNet website.

# REDUCE THE IMPACTS OF VOLCANIC ACTIVITY

If you live in an area at risk from volcanic ash falls, take the following steps to reduce volcanic impacts:

- Make buildings as airtight as possible, to exclude ash.
- Ensure rain gutters are well-maintained, kept clear of debris, and securely attached. Gutters are prone to collapse from ash loading.
- If your household uses roof-collected rainwater tanks, consider installing first-flush diverters to reduce ash entering water tanks.
- Ensure galvanised steel roof cladding is wellmaintained and painted/coated to be more resistant to corrosion from volcanic ash, gases and aerosols.
- Design buildings with steeply pitched roofs to help shed ash to reduce risk of roof collapse. This is primarily an issue for buildings in Tongariro and Taranaki National Parks.
- Seal any openings in water tanks (e.g. poorly-fitted covers) to prevent the entry of ash.

# GET READY BEFORE VOLCANIC ACTIVITY

Be aware that in the event of ash fall, you may need to remain indoors for several days.

- · Make and practice your emergency plan
- · Have your grab bag and emergency supplies ready
- · Know how to stay informed

# If you are at risk from volcanic ash fall, you should add the following to your emergency supplies:

- Properly-fitted effective dust masks (rated P2 or N95) and goggles without side vents.
- Be aware that masks can make breathing more difficult for some people. Speak to your doctor if you are unsure if you should wear a mask.
- Adult masks do not fit smaller children well, so may offer little protection
- You can learn how to fit a dust mask correctly on the International Volcanic Health Hazard Network (IVHHN) website.
- 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 spare bags and filters for your vacuum cleaner.

You could be stuck in your vehicle, so remember to store emergency supplies there.

#### **Protecting your health**

If you or your dependents have any respiratory conditions, such as asthma, chronic obstructive pulmonary disease (COPD) or chronic bronchitis, be aware that you are at higher risk of experiencing ill effects from airborne volcanic ash, gas and aerosols. If you have asthma, ensure you have a current asthma action plan. This written set of instructions, prepared by your doctor, is essential to help you recognise if your asthma is worsening and what to do about it. If you have respiratory or heart conditions, keep your relief and preventer medications handy and use as prescribed. If you have any concerns, call your doctor.

Further information on respirator protection in ash fall, including how to fit a dust mask correctly, is available on the International Volcanic Health Hazard Network (IVHHN) website.

#### **Power cuts**

Expect power outages as ashfall can lead to power cuts. These may have implications for health due to lack of heating or other infrastructural requirements that depend on electricity.

If you or a member of your whare/household is dependent on critical electrical equipment (such as a ventilator) you should ensure your electricity retailer is aware and you have plans in place to deal with any power outages.

Information for medically dependent electricity consumers is available on the Electricity Authority website.

# WHAT TO DO DURING VOLCANIC ACTIVITY

If there is volcanic activity, follow official advice provided by:

- Taupō District Emergency Management (learn how to stay informed) or your local Civil Defence Emergency Management Group
- Department of Conservation (for visitors to the Tongariro and Taranaki National Parks)
- · local authorities and emergency services
- If a volcano is active, minimise your time in the summit region and valleys. During volcanic activity, near-volcano hazards may be present. These can be highly destructive and dangerous up to 20 kilometres (km) from the volcano. In rare cases, near-volcano hazards may reach beyond 20 km.
- If you are in an exposed area and become aware of near-volcano hazards, the best way to protect yourself is to quickly move (run or drive if you can) as far away as possible from the volcano.

Learn more about volcanic hazards on the GeoNet website.

### If you cannot leave the area, try and do the following:

- Seek shelter and cover your nose, mouth, and exposed skin to protect yourself from ashfall and pyroclastic flows
- Seek shelter and cover your head with your pack to protect yourself from ballistics
- Avoid valleys and low-lying areas getting to higher ground may reduce your exposure to lava flows and lahar

If there has been a volcanic eruption in New Zealand, GeoNet will provide ash fall forecasts and these will be communicated in the media.

#### If ash fall has been forecast in your area:

- Before ash fall starts, if possible, go home to avoid exposure to, and driving during, ash fall.
- · Move pets and pet water bowls indoors.
- If you have respiratory or heart conditions, keep your relief and preventer medication handy, and use as prescribed. If you have any concerns, call your doctor.
- Take steps to keep ash out of your house:
- Set up a single entry/exit point for your house.
   Place damp towels by the door to prevent ash being tracked indoors on your shoes.
- · Close all remaining doors and windows.
- Close other entry points, such as cat doors and air vents.
- Shut down heat pumps and air conditioning units, to prevent ash from being blown indoors, and to prevent ash from damaging the units by clogging filters and corroding metal.
- Cover electronics and leave covered until the indoor environment is free of ash.
- Move vehicles and machinery under cover (if possible), or cover them, to avoid ash-causing corrosion damage.
- Cover spa pools and swimming pools, as ash can clog filters.
- Disconnect downpipes from gutters, to allow ash and water to empty from gutters onto the ground.
- Disconnect roof catchment rainwater storage tanks from downpipes, to prevent contamination.
- Seal any openings in water storage tanks (e.g. poorly-fitted covers), to prevent the entry of ash.

- Cover any open gully traps or drains with a sheet of plywood or similar, to prevent ash from entering the wastewater or stormwater systems.
- Cover vegetable gardens with tarpaulins, to prevent ash contamination.
- Further information on how to prepare for ash fall is available on the International Volcanic Ash Impacts website.

#### **Protecting livestock**

- Move livestock to shelter, where possible.
   Airborne ash can cause eye and skin irritation and accumulate in sheep fleece.
- Ensure that animals have supplementary feed.
   Ash ingestion can be hazardous to livestock.
   It can cause physical problems such as tooth abrasion and gut blockages and toxicity problems such as fluorosis.
- Ensure livestock have access to clean drinking water. Cover open water troughs with a sheet of plywood or similar, to avoid contamination by ash fall.
- Further information on protecting livestock from ash fall is available on the Ministry for Primary Industries and International Volcanic Ash Impacts websites.

#### **During ash fall**

- · Stay indoors.
- Keep pets indoors
- Do not attempt to clear ash from your roof while ash is falling.
- Avoid non-essential driving. If you have to drive, drive slowly, maintain a safe following distance behind other traffic, use headlights on low beam, and avoid using wipers as ash can scratch windscreens.
- Put your emergency plan into action.
- Stay informed and follow any instructions from emergency services, the Department of Conservation (for visitors to the Tongariro and Taranaki National Parks), local authorities and Civil Defence Emergency Management.
- Do not use unflued gas heaters indoors while your house is sealed to keep out ash, as there is a risk of carbon monoxide poisoning. Learn more on the Ministry of Health website.
- Never use outdoor gas appliances indoors.

# WHAT TO DO AFTER VOLCANIC ACTIVITY

- Continue to follow official advice provided by Civil Defence, the Department of Conservation (for visitors to the Tongariro and Taranaki National Parks), local authorities, and emergency services.
- · Stay out of designated restricted zones.
- If you have been evacuated, do not return home until told it is safe to do so.
- Keep children indoors and discourage playing in ash.
- Keep animals indoors until ash is cleaned up or washed away. If pets go outside, brush ash from their paws and fur before letting them back indoors.
- Check on your neighbours and anyone who might need your help.
- Be prepared for further ash falls and accumulation.

#### **Travelling**

Be careful driving as the reduction in visibility from airborne ash may cause accidents. This danger is compounded by ash covering roads. Not only are road markings covered up, but thin layers of ash are very slippery, reducing traction. Thick deposits of ash may make roads impassable, cutting off communities from basic supplies.

#### Cleaning up ash

It is important to clean up ash promptly from homes and neighbourhoods, as it is a potential health hazard and can cause damage to buildings and machinery. Be aware that:

- Ash clean-up is physically demanding and timeconsuming. You may require assistance with ash clean-up and disposal.
- Repeated cleaning or multiple clean-ups may be necessary.
- Water restrictions will likely be in force after ash fall. Use water very sparingly to avoid depleting treated water supplies. As always, follow any advice and instructions about water use issued by Taupō District Council and Civil Defence.

Further information on how to clean up ash is available on the International Volcanic Ash Impacts website.

# TSUNAMI

All of New Zealand's coastline is at risk of tsunami. And although rare, tsunamis can happen at Lake Taupō or other lakes in New Zealand. Knowing the warning signs and the right action to take can help save lives - don't wait for an official tsunami warning.

When you're near the coast, if an earthquake is Long and Strong, Get Gone! Move immediately to the nearest high ground or as far inland as possible.

In the case of Lake Taupō, when you're near the lake front, if an earthquake is Long and Strong, Get Gone - that is, you should move to higher ground as soon as it is safe to do so, especially if you hear loud noises or see unusual lake action during earthquake activity.

Find out what to do before, during and after a tsunami.

# REDUCE THE IMPACTS OF TSUNAMI

#### Find out your tsunami risk

Coastal tsunami evacuation zone maps and advice can be found on the Get Ready website. www.getready.govt.nz

#### Review your insurance regularly

Ensure that you have appropriate insurance cover for your whare/home and contents, it is important to help you get back on your feet if you suffer damage in a disaster.

#### Make your home safer

We can't predict disasters, but we can prepare for them. One of the best places to start is with your home. Find out what you can do to make your home safer.

# GET READY BEFORE A TSUNAMI

Find out if the places where you live, work or frequently visit are in tsunami hazard areas. Be aware of tsunami evacuation zones, tsunami evacuation routes, and warning methods and signage.

If you are visiting an area at risk from tsunami, check with the hotel, motel or campground operators for tsunami evacuation information, and find out what the local warning system is for tsunami. It is important to know the evacuation routes before any natural or official warnings.

- Make and practice your emergency plan
- Have your grab bag and emergency supplies ready
- Know how to stay informed. Understand the different types of warnings: Natural, Official and Unofficial.
- Know your tsunami evacuation zones. Make sure you know where to go, whether you are at home, at work or on holiday.
- Regularly practice your tsunami hīkoi (evacuation walk).

### 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. Remember, LONG or STRONG, GET GONE.

If there is earthquake shaking, drop, cover and hold. Protect yourself from the earthquake first, then act as soon as the shaking stops.

If you are near the coast, you need to act immediately if you 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 water level.
- Hear loud and unusual noises from the water.
- 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 you get an official all-clear message from Civil Defence. Tsunami activity can continue for several hours, and the first wave may not be the largest. If there was an earthquake, expect aftershocks. Each time you feel one, drop, cover, and hold. Aftershocks may generate another tsunami.



### Only return home once you are told it is safe to do so

Listen to the radio or follow your Civil Defence Emergency Management Group online. They will give you information and instructions. If there was an earthquake, expect more shaking. More earthquake shaking may generate another tsunami. Be prepared to evacuate.

#### 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, and other hazards.

#### Stay away from coastal water

Stay away from coastal water, tidal estuaries, rivers and streams for at least 24 hours after any tsunami or tsunami warning. Even small waves create dangerous currents.

#### If your property is damaged

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

# FLOODS

Floods are usually caused by heavy or prolonged rainfall, but can also occur due to landslides triggered by heavy rainfall or earthquakes, failure of dams, high sea levels at river mouths, coastal storm inundation, and tsunami.

Floods happen often in New Zealand and can cause a lot of damage to buildings and lifeline utilities, as well as injuries and loss of life. Floods can cause major disruption to whānau/family life – you might have to leave your whare/home and you could lose some or all of your possessions - and the emotional impact can be profound. But there are things you can do to reduce the risk and ensure you are prepared.

Usually there will be sufficient warning of a storm, or heavy and prolonged rainfall - but sudden storms and flash flooding can occur without warning.

You can stay up-to-date with the latest weather information from MetService New Zealand and look out for weather watches and warnings which are also available on the MetService mobile app.

www.metservice.com

# REDUCE THE IMPACTS OF FLOODS

Find out what the flood risk is in your area. If you live in a flood-prone area, the best thing you can do is prepare yourself, your whare/home and your whānau/family.

If you own a house or another building in a floodprone area, take these steps to reduce potential flood damage:

- Install non-return valves in drainage pipes, to prevent sewage backing up into the house.
- · Reduce water ingress:
  - Fit water-resistant door and window frames
  - Install ready-made flood defences, such as flood barriers
  - Use waterproof sealant on external walls
- On your property's ground floor, avoid fitted carpets, wooden skirting boards and normal (non water-resistant) plaster. These will be damaged by floodwater and will need replacing. Choose instead ceramic tiles for floor covering and skirtings, and water-resistant lime plaster or cement render and water-resistant paint on internal walls.
- In kitchens and bathrooms, raise cupboards up on stilts, so that water can flow beneath them. Avoid chipboard or MDF units, which will be damaged by floodwater – install stainless steel, plastic or marine plywood kitchen and bathroom units, which can be wiped down after flooding.
- Raise the height of electrical sockets to at least 1.5 metres above ground floor level, to prevent floodwater damage.
- Position any main parts of heating or ventilation systems upstairs or raised well above ground level.
- Purchase a portable pump, or install an automatic pump, to remove flood water. Pumps can keep the floodwater level low inside.
- Review your insurance regularly. Having insurance cover for your home and contents is important to help you get back on your feet if you suffer damage in a disaster.

# GET READY BEFORE A FLOOD

Find out if your home or business is at risk from flooding and know what you need to do if you have to evacuate.

- Take measures to reduce potential flood damage (see section below)
- Make and practise your emergency plan to get to higher ground
- Make a grab bag and have emergency supplies in case you need to evacuate
- Know what to do with your pets and livestock if you have to evacuate
- Know how to stay informed. Stay up-to-date with the latest weather information from MetService New Zealand and look out for weather watches and warnings which are also available on the MetService mobile app.

#### Get your whare/home or business ready:

- 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.
- Secure outdoor possessions including outdoor furniture and trampolines that can be swept away in floodwaters.
- Clear debris and leaves from external drains and gutters.
- Take photos of your ground floor rooms and outdoor areas, for insurance purposes.
- If you can, attach sheets of waterproof plastic around exterior doors using duct tape.
- Consider using sandbags to keep water away from your house or other buildings.
- Move vehicles to higher ground, or park vehicles in garages, if you can.
- · Help neighbours who may need assistance.

# WHAT TO DO DURING

Put safety first. Don't take any chances. Act quickly if you see rising water.

Floods and flash floods can happen quickly. If you see rising water, do not wait for official warnings. Head for higher ground and stay away from floodwater.

#### Stay out of flood water

Do not try to walk, play, swim, or drive in floodwater: even water just 15 centimetres deep can sweep you off your feet, and half a metre of water will carry away most vehicles. Many flood fatalities are caused by people attempting to drive through water.

Flood water is often contaminated and can make you sick. Make sure you wash your hands, clothes and property after contact with flood waters.

Help others if it is safe to do so, especially people who may require special assistance.

#### If flooding is possible in your area:

- Be prepared to evacuate and keep your grab bag near.
- Stay informed in an emergency. Listen to emergency services and local Civil Defence authorities. Follow any instructions about evacuation of your area. Selfevacuate if you feel unsafe.
- 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.
- Turn off water, electricity and gas if advised to.
- Move valuable and dangerous items as high above the floor as possible. This includes electrical equipment and chemicals. Use watertight containers to store important items.
- Lift curtains, rugs and bedding off the floor.
- Check on your neighbours and anyone who may need your help.

If you have been evacuated, it may not be safe to return home even when the floodwaters have receded. Listen to emergency services and local Civil Defence authorities and don't return home until they tell you it is safe to do so.

# 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. You might hamper rescue and other emergency operations and be 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.

Help others if you can, especially people who may need extra help.

#### If your property is damaged:

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

#### Food safety after a flood:

- Throw away food and drinking water that has come into contact with floodwater, including canned goods.
- Avoid drinking or preparing food with tap water until you are certain it is not contaminated.
   Follow any boil water notice instructions from your local authorities.
- For more information on food safety during and after an emergency visit the Ministry for Primary Industries website.

#### Cleaning up after a flood

Clean and dry your house and everything in it. Floodwater can make the air in your home unhealthy. When things get wet for more than two days they usually get mouldy. There may also be germs and bugs in your home after a flood.

Mould may make some people with asthma, allergies or other breathing problems sick.

Talk to your doctor or another medical professional if you have questions about cleaning or working in a home that has been flooded. If there is a large amount of mould, you may want to hire professional help to clean up the mould.

#### Protect yourself by wearing:

- A certified respirator
- Goggles
- Gloves
- Protective clothing that covers your arms and legs, and
- · Sturdy footwear.

Throw away anything that was wet with flood water and can't be cleaned.

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.

# STORMS

Storms can happen any time of the year. A storm can bring strong winds, heavy rain or snow, thunder, lightning and tornadoes. Coastal areas are also likely to see heavy swells, coastal inundation and storm surges.

Heavy rain from storms can see stream and river levels rise, leading to dangerous, fast-flowing currents which can cause flooding and destroy bridges. Heavy rain can also cause landslides. Storms with strong winds can fell trees and poles, tear off roofs from buildings, and cause flying objects.

Storms can make driving dangerous. They can also cause road damage, power supply disruption and damage to buildings. As a result, storms can isolate communities and cut off communications and power supply.

You can stay up-to-date with the latest weather information from MetService New Zealand and look out for weather watches and warnings which are also available on the MetService mobile app.

Find out what to do before, during and after a storm.

# REDUCE THE IMPACT OF STORMS

If you live in a storm-prone area, regularly inspect and trim trees and shrubbery. Strong winds frequently break weak tree limbs and hurl them at great speed, causing damage to buildings or injury when they hit.

- Make trees more wind-resistant by removing diseased or damaged limbs, and strategically remove branches so that wind can blow through.
- Green waste and tree removal services may be unavailable just before a storm arrives, so it is best to do this regularly rather than leave it until severe weather is forecast.

### Get your roof checked regularly to make sure it is secure.

- Make sure all materials are securely fixed down, and all nails and other fastenings are in place.
- Clear away leaves and other debris from spouting and drains to prevent blockage and flooding or water damage.

#### Additional measures to consider:

- Strengthen garage doors. Garage doors are often damaged or destroyed by flying debris, allowing strong winds to enter.
- Install permanent shutters to cover windows.
   Shutters can be closed quickly and provide the safest protection for windows.
- Install lightning rods on your whare/home and on sizeable sheds or any other buildings that house animals. Lightning rods will carry the electrical charge of lightning strikes safely to the ground, greatly reducing the chance of a lightning-induced fire.

#### Review your insurance regularly.

Having insurance cover for your home and contents is important to help you get back on your feet if you suffer damage in a disaster.

# GET READY BEFORE A STORM

### Be aware that storms can trigger floods and landslides. Make sure you know how to respond.

- · Make and practise your emergency plan
- Have your grab bag and emergency supplies ready
- · Know how to stay informed

### Prepare your property for high winds and heavy rain

- Secure items like trampolines, outdoor furniture, wheelie bins, boats and trailers. Bring items inside or tie items down that could move in strong winds.
- Clear debris and leaves from drains and gutters to help prevent surface flooding.
- Make a list of items to bring inside or tie down when strong winds are forecast. A list will help you remember anything that strong winds can break or pick up.

#### Be prepared for possible power outages

- Check and prepare your emergency kits and grab bags - in a storm you could be stuck at home for up to three days.
- Know how to stay informed in a power outage have a solar or battery powered radio ready.

# Identify a safe location in your whare/home for household members to gather during a thunderstorm

- This should be a place away from windows, skylights, or glass doors, which can be broken by strong winds or hail and cause damage or injury.
- Keep materials at hand for repairing windows, such as tarpaulins, boards and duct tape.

#### Look after your pets and protect your lifestock

- Bring pets indoors. They can get unsettled by storms and it is more comforting and safer for them to be with you.
- If you have livestock, know which paddocks are safe to move livestock away from floodwaters, landslides and power lines.

### Keep up to date with any Severe Weather Warnings and Watches issued

You can stay up-to-date with the latest weather information from MetService New Zealand and look out for weather watches and warnings which are also available on the MetService mobile app.

# WHAT TO DO DURING A STORM

#### When a storm is forecast

- Bring inside or tie down anything that strong winds could break or pick up. If you have a trampoline, turn it upside down to minimise the surface area exposed to wind.
- Remove any debris or loose items from around your property. Branches and firewood can become missiles in strong winds.
- Bring pets indoors. They can get unsettled by storms and it is more comforting and safer for them to be with you.
- Check on your neighbours and anyone who might need your help.

#### **During a storm**

- Stay inside. Don't walk around outside. Don't drive 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 breaks
- Stay informed during an emergency. Follow any guidelines or instructions from Civil Defence and emergency services.
- Avoid bathtubs, water taps, and sinks. Metal pipes and plumbing can conduct electricity if struck by lightning. Use your water from your emergency supplies.
- Unplug small appliances that may be affected by electrical power surges. If you lose power, unplug major appliances. This will reduce the power surge and possible damage when power is restored.

# WHAT TO DO AFTER A STORM

### Continue to follow any guidelines or instructions from Civil Defence and emergency services.

- · Check for injuries and get first aid if necessary.
- Help others if you can, especially people who may need extra 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.
- Stay alert for extended rainfall, flooding, landslides and debris hazards, especially when driving.

#### If your property is damaged:

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

#### **SNOWSTORM**

In a snowstorm, the primary concerns are the potential loss of heat, power and telephone services, and a shortage of supplies if storm conditions continue for more than a day. It is important for people living in areas at risk from snowstorms to consider the need for alternative forms of heating and power generation.

- Avoid leaving home unless absolutely necessary when a snow warning is issued
- If you have to travel, make sure you are well prepared with snow chains, sleeping bags, warm clothing and essential emergency items
- At home, check fuel supplies for wood burners, gas heaters, barbecues and generators
- Bring pets inside. Move domestic animals and stock to shelter
- If you are caught in your car or truck in a snowstorm stay in your vehicle. Run the engine every ten minutes to keep warm. Drink fluids to avoid dehydration. Open the window a little to a void carbon monoxide poisoning. Make yourself visible to rescuers by tying a bright-coloured cloth to your radio aerial or door and keeping the inside light on.

#### **TORNADOES**

Tornadoes sometimes occur during thunderstorms in some parts of New Zealand. A tornado is a narrow, violently rotating column of air extending downwards to the ground from the base of a thunderstorm. Warning signs include a long, continuous roar or rumble or a fast approaching cloud of debris which can sometimes be funnel shaped.

- · Alert others if you can
- Take shelter immediately. A basement offers the greatest safety. If underground shelter is not available, move to an interior room without windows on the lowest floor. Get under sturdy
- Furniture and cover yourself with a mattress or blanket
- If caught outside, get away from trees if you can.
   Lie down flat in a nearby gully, ditch or low spot and protect your head
- If in a car, get out immediately and look for a safe place to shelter. Do not try to out run a tornado or get under the vehicle for shelter.

# LANDSLIDES

# Landslides can happen without warning. They are often triggered by heavy rain, earthquakes and in some cases, human activity.

Landslides occur when sloping ground becomes unstable and rock, soil or vegetation fall down a slope. Landslides cause more deaths than any other geological hazard in Aotearoa New Zealand. They can cause significant damage to buildings, roads and other infrastructure. They can also dam rivers and if the dam fails, this can result in flooding downstream.

Find out what to do before, during and after a landslide.

# REDUCE THE IMPACT OF LANDSLIDES

Some areas are at a higher risk of landslides – including areas with existing old landslides, steep slopes, drainage channels on steep slopes, stream and riverbanks, or coastal cliffs.

- The best option is not to build or develop on unstable or hazardous/higher risk sites. Seek expert advice from a chartered professional geotechnical engineer if you are planning on excavating or building on steep slopes or believe the site may be affected by landslides. Council Land Use Planning plays an important part in this.
- Be aware that landslides on another property could affect you – for example, if you are in the path of a landslide runout.
- Find out from your council if they have information on landslide hazard and risk, if there have been landslides in your area before, and where they might occur again.
- Areas that are prone to landslide often include existing (old) landslides, steep slopes, streams or riverbanks or coastal cliffs.
- If you have a slope on your property, check drains are clear and adequate, and that retaining walls are in good condition.
- Learn the warning signs for unstable ground:
  - · Small slips, and rockfalls.
  - Subsidence at the bottom of slopes.
  - Doors and window frames that start to stick, or gaps developing around them.
  - Outside fixtures like steps, decks and verandahs moving or tilting away from your house.
  - New cracks or bulges on the ground, road or footpath.
  - Trees, retaining walls or fences that start to tilt.
- Be alert when driving, especially where there are embankments along roadsides. Watch the road for collapses, mud and fallen rocks.
- · Review your insurance regularly.

# GET READY BEFORE A LANDSLIDE

Get your household ready. Work out what supplies you might need and make a plan together.

- Make and practise your emergency plan\_ www.taupo.govt.nz/community/civil-defenceand-emergency/3make-a-plan
- Make a grab bag and have emergency supplies in case you need to evacuate www.taupo.govt.nz/community/civil-defenceand-emergency/emergency-kits-and-grab-bags
- Know how to stay informed <u>www.taupo.govt.nz/community/civil-defence-</u> and-emergency/stay-informed

# Regularly inspect your property, especially after long dry spells, earthquakes or heavy rainfall.

- Look for signs of instability: doors and windows that start to stick, gaps appearing, decks moving or tilting away from the house, new cracks or bulges on the ground, leaning trees or fences, slope movement, etc.
- Watch the land around where you live for signs of increased threat. Look at the hillsides around your home for any signs of land movement (like rockfall, small landslides or debris flows) and any trees that start to "tilt" over time.
- Watch the patterns of storm water drainage on slopes near your home, and especially the places where runoff water converges, increasing flow over soil-covered slopes. Noticing small changes can alert you to an increased threat of a landslide.

If you notice any of these changes, seek professional advice as soon as possible. There may be some problems you can fix yourself, but many will require expert help.

#### Other things you can do:

- Keep gutters, downpipes and drains free of dirt, leaves and other blockages. Trim back or remove vegetation blocking drains and gutters.
- Inspect swimming pools regularly for leaks.
- · Regularly empty septic tanks.
- Check retaining wall drainage for blockages and water build-up behind the wall.
- Regularly check and clear drains.

# WHAT TO DO DURING A LANDSLIDE (OR IF YOU THINK A LANDSLIDE IS ABOUT TO HAPPEN)

#### Recognise the warning signs and act quickly

Landslides can occur without any warning signs. Be aware of the potential for landslides, particularly in the weeks after potential triggering events, such as heavy rainfall, earthquakes, and previous landslides. If you see a landslide, move quickly out of its path and stay away from it. It is important to recognise the warning signs and act quickly.

#### Some warning signs before landslides occur:

- Small slips, rock falls, and sinking land, at the bottom of slopes.
- Sticking doors and window frames, which may mean the land is slowly moving under the house.
- Gaps where window frames are not fitting properly.
- 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.
- Tilting trees, retaining walls, or fences.

### If you learn or suspect that a landslide is occurring, or is about to occur in your area:

- Evacuate immediately if it is safe to do so. Seek higher ground outside the path of the landslide.
   Getting out of the path of a landslide or debris flow path is your best protection.
- If you cannot leave safely, move out of the path of the debris. The side of your house furthest from the landslide is likely to be the safest location within the property. Take your pets with you, and move livestock to safe paddocks, if you can do so without endangering yourself.
- Alert your neighbours. They may not be aware of the potential hazard. Advising them of a threat may save their lives. Help neighbours who need assistance to evacuate if you can do so without putting yourself in danger.
- Contact your local council or technical expert.
   Local council engineers or other geotechnical engineers are the people best able to assess the potential danger.

#### What to do if a landslide occurs

If you see a landslide, move quickly out of its path and stay away from it.

If lives are in danger, evacuate immediately and dial 111. Alert your neighbours if you can do so safely. If you can't get outside, move away from the slide area and dial 111. Stay away from the landslide area. Further landslides may occur.

Check for injured and trapped persons and animals near the landslide, without entering the landslide area. Direct rescuers to their locations.

#### What to do during severe storms

During a severe storm, if you are in an area susceptible to landslides, you should:

- Evacuate if you can move to higher ground and out of the path of potential landslides. Staying out of the path of a landslide can save your life.
- If you cannot evacuate, move to an upper floor in your whare/home, or the side furthest from the potential slide area. This is likely to be the safest location within the whare/home.
- Stay up-to-date with the latest weather information from MetService, Te Ratonga Tirorangi, New Zealand's National Weather Service (www.metservice.com). Pay attention to heavy rain warnings. Short bursts of heavy rain may be particularly dangerous, especially after longer periods of wet weather.
- Watch for signs of slope movement, such as:
  - small slips, rock falls, subsidence or bulges at the bottom of slopes
  - cracks in the ground, plaster, brick work, tiles, foundations, retaining walls, driveways and other hard surfaces
  - tilting trees, walls or fences
  - building movement, such as doors or windows that stick or jam
  - outside fixtures, such as steps, that are pulling away from buildings.
- If you are near a stream or waterway, be alert to any sudden increase or decrease in water flow, and to a change from clear to muddy water.
   Such changes may indicate landslide activity upstream, so be prepared to move quickly. Save yourself, not your belongings.

- Be especially alert when driving. Embankments along roadsides are particularly susceptible to landslides. Watch the road for collapsed areas, mud, fallen rocks, and other indications of a possible debris flow.
- Ensure livestock are in safe paddocks if there is heavy rain. Consider precautionary evacuation of livestock if you believe there is a risk of landslide.

# WHAT TO DO AFTER A LANDSLIDE

### Further landslides may occur, so stay away from the affected area.

- Stay away from the landslide area until it has been properly inspected and authorities give the all clear.
- Look for broken utility lines (power, telephone) and report them to appropriate authorities.
   Reporting potential hazards will get the utilities turned off as quickly as possible, preventing further hazard and injury.
- Help others if you can, especially people who may need extra help.

#### If your property is damaged:

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

Keep the existing information about Wildfires, pandemic and bomb threat/terrorism.

# WILDFIRES

Fires can be extremely destructive and dangerous to human and animal life. They can also move very quickly. Do not take risks that may start a fire; even a lawn mower hitting a stone can cause one.

Obey fire restrictions and permit guidelines. Property can be threatened by wild fires but also people may be affected as well. If you are near to a fire you may become affected by fumes or smoke. If you have respiratory concerns you may need to evacuate. If fire threatens property, authorities will advise on evacuating anyway. You should have an emergency getaway kit for this reason.



For fire readiness and response, visit: www.fireandemergency.nz

### **OTHER**

#### WHAT TO DO IN A PANDEMIC

For up to date information, visit: www.moh.govt.nz

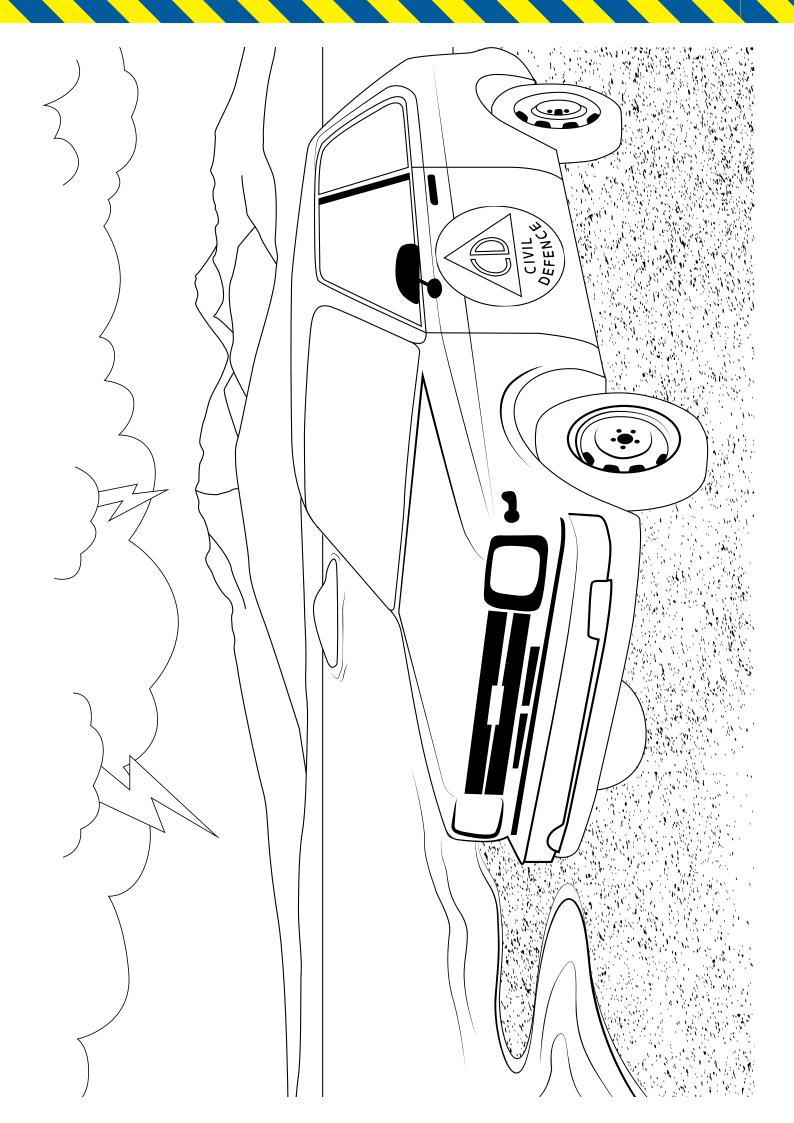
#### **BOMB THREAT / TERRORISM**

For information on criminal acts and terrorism, visit: www.police.govt.nz

### **HEY KIDS - COLOUR ME IN!**



**Get your household ready for an emergency** Whakaritea tō kāinga mō te ohotata



# For further information:



Taupō District Council www.taupo.govt.nz

www.taupodc.govt.nz/civildefence



Local Civil Defence Emergency Management

www.taupo.govt.nz

Other Civil Defence Sites www.waikatocivildefence.govt.nz

Ministry of Civil Defence www.civildefence.govt.nz

Be prepared www.getready.govt.nz



New Zealand Police www.police.govt.nz

Fire & Emergency NZ www.fireandemergency.nz

St John Ambulance www.stjohn.org.nz



