



Australian Red Cross
THE POWER OF HUMANITY

Cleaning up after an emergency

Red Cross Emergency REDiPlan
Dealing with wind and water damage



CRISIS CARE COMMITMENT

**Emergency REDiPlan
is a Red Cross program
helping Australians
prepare for, response
to and recover
from emergencies.**

Australian Red Cross acknowledges the assistance of American Red Cross in the production of this booklet.

The Red Cross Emergency REDiPlan project provides people with general information to help them deal with the effects of an emergency.

This information booklet is designed to assist people to deal with the effects of floods, storms and cyclones but contains only information of a general nature that may not be appropriate in all situations.

Before taking any action you should independently consider whether that action is appropriate in the light of your own circumstances. Depending upon the particular circumstances of your situation, or if you do not feel confident about undertaking any suggested task, you should seek the advice of professional services. In any event, before undertaking any suggested task you should always contact your insurer.

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Emergencies by their very nature are disruptive and can be very stressful. A major dilemma many households face with wind and water damage, is how and where to begin the clean up.

This booklet contains some useful tips and practical information to help households start the clean up – both inside and outside.

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Looking after yourself

The aftermath of a natural hazard can be devastating.

Prepare yourself mentally for the possibility of seeing and hearing things that are distressing, and consider leaving pets and children with family or friends in a safe area until you can assess when it is safe and less distressing for them to return.

Water

Don't drink any water from taps or tanks until your council or health or water authority advises you that it is safe to do so.

The recovery from an emergency can be a long and sometimes tiring process and it's important to make sure you look after yourself. Return to personal and family routines as soon as possible.

- Maintain a healthy diet, do regular exercise and watch your intake of alcohol, caffeine and other stimulants. Get plenty of sleep and rest.
- When they feel comfortable, encourage family members to talk about what has happened. If you or members of your family are finding it difficult to cope, talk to your doctor or health practitioner.
- For further advice on looking after yourself, see our booklet *Coping with a major personal crisis*.

Returning home

- Before returning home after an emergency, stock up on basic items such as non-perishable food (canned or in jars), bottled water, medications, a torch and batteries.
- Fill up your fuel tank and with-draw cash (ATMs in your area may not be working or banks may be closed).
- Be prepared for a slow journey; road conditions may have changed and there may be detours in place.
- Keep listening to your radio for up-to-date information about the emergency and any new potential risks.
- Wait for the 'all clear' from emergency services agencies before going into an affected area, and ask the authorities if you can salvage items from your house.
- If you can, check on your neighbours to see if they are OK and need any help. Let them know if you need some help. Once phone lines are restored, let family and friends know that you are OK and can be contacted.

General safety issues

Because of potential safety/hygiene issues it is important to:

- Keep children away during the clean up
- Use disinfectant when cleaning
- Wash your hands before eating, drinking or smoking
- Disinfect any cuts quickly and cover with a waterproof dressing
- Bury any faecal matter quickly
- Flood waters can be dangerous and may be contaminated, so always wear protective equipment for all tasks: sturdy boots, long pants and long sleeves, eye protection and gloves – and wear a hat, sunscreen and insect repellent when necessary.
- Watch out for potential dangers such as snakes, spiders and other animals. If wildlife has taken shelter in your sheds or home, contact your local council or wildlife rescue to arrange for their care.
- If power lines have fallen, move away slowly and calmly and contact the energy authorities.
- Be careful around trees, as branches may have become loose and can fall without warning.
- If you have to step in water to get to the fuse box or circuit breaker, call an electrician first for advice.
- All electrical equipment (including vacuum cleaners, washers, fridges and dryers) should be dried and checked by an electrician before being used again.

Entering buildings

Warning: If the house is badly damaged and looks unsafe, e.g. roof damage, cracks in walls etc., stay out until a building inspector or engineer has checked it. Take care at all times, as damage can be hidden. If in doubt, do not enter.

- Use a torch to inspect walls, ceilings and floors. Sagging floors may indicate damage to foundations, and sagging ceilings may indicate water in the roof, so leave the building immediately.
- Check for gas or water leaks. If there are any strange odours or you can smell gas or hear hissing sounds, leave the house immediately.
- Do not use electricity, gas or water until you are advised by your provider to do so.
- If you see sparks or broken or frayed wires, or if you smell burning insulation, turn off the electricity at the main fuse box or circuit breaker.

Avoid wading or driving through flooded roads or waterways and watch out for broken glass, tin, nails and other sharp objects that can cause injury.

Repairing the damage

Depending on the level of damage, you will want to return to normal routines as soon as possible. There are some important things to do first.

Record the damage

Take pictures of the damage, inform your insurer and request an insurance assessment of the damage.

Secure your property

If your house is uninhabitable, arrange to have it secured. Advise your power, phone, water and gas companies and your bank, and arrange with Australia Post to have your mail diverted or held.

Using tradespeople

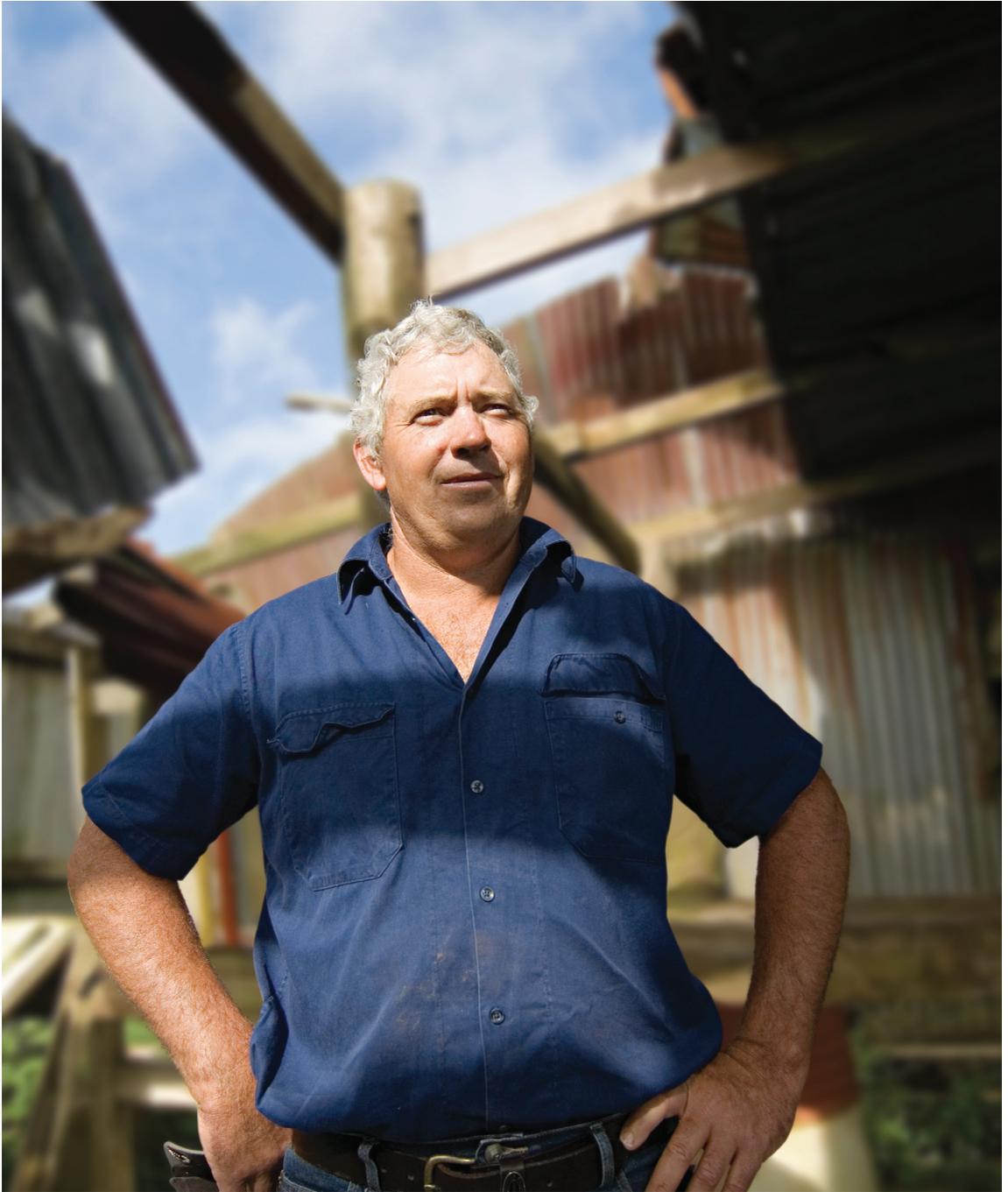
Minor damage such as broken windows or roof damage can be easily repaired. Contact a glazier for window repairs and a licensed plumber for roofing repairs.

Always get three written quotes where possible for insurance purposes.

Before engaging anyone, always contact your insurer to find out what you need to do to request an assessment.

Only use tradespeople who are licensed or registered and members of their professional associations. They have to maintain a level of standards to keep their licence or registration and agree to adhere to a code of conduct.

If you have any concerns about the conduct of tradespeople, contact the consumer affairs department in your state/territory for advice.



Drying your home

Drying out may take weeks and complete restoration months, but there are many things you can do straight away.

To avoid trapping moisture inside the home, everything that is wet and able to be moved should be taken outside to dry (weather permitting). Remove all drywall and insulation that has been in contact with water.

- On dry days keep all doors and windows open.
- On wet days leave windows ajar – the inside will only dry when moisture can get out.
- Turn heaters on in as many rooms as possible, leaving the windows open.
- Only use one heater per room – some heat will help drive off the moisture, but too much may warp and crack wood.
- Look for trapped mud in less obvious places – under shower trays, behind benches, baths and bottom shelves.
- Remove the skirting or plinth covering these spaces and hose or pump out the mud, then dry the area as quickly as possible.
- Ignore any mould until drying is complete (see p.13 for more information on mould).

Draining under the house

Drain away water lying under the house. You may need to dig a pit and pump out the water that collects. Where there is no access, cut a trapdoor in the floor.

Getting rid of excess water under wood or particleboard floors is especially important to avoid decay.

If you do not feel confident doing this, seek the advice of a licensed tradesperson.

To increase the airflow under the house and assist drying:

- cut back or dig out plants obstructing vents
- leave access doors open
- have a licensed tradesperson knock out the ventilators in the foundations
- remove part of the foundation enclosure such as baseboards or sheet materials that are fixed to the outside of stumps.

Forced ventilation such as air conditioners or industrial fans can be used in areas where there is not a sufficient air flow.

Never operate generators or petrol/diesel appliances or barbeques inside the house, under carports, in garages or near windows. Carbon monoxide poisoning can be lethal.

Cleaning your home

It is important to thoroughly wash and disinfect every part of your home that has been flooded to avoid contamination.

Before buying or using cleaning products, seek advice from your council's environmental health officer or your doctor if you have family members with respiratory illnesses such as asthma.

Clean-up supplies

Put together a clean-up kit containing useful items such as a broom, mop, bucket and cleaning supplies. In most cases, household cleaning products will do the job.

- Always read the safety instructions and directions for use on labels BEFORE using a product.
- When unsure, seek advice. Many products have consumer advisory hotline details on their labels.
- Always wear rubber gloves.

Suitable cleaning products

- Household all-purpose cleaner
- Laundry soap or detergent
- Commercial disinfectants or sanitisers
- Commercial mildew removers
- Commercial bleach

Do not mix bleach with other household chemical products, especially ammonia or toilet bowl cleaner; the chemical reaction can create a poisonous gas. If you smell a strong odour or your eyes water from fumes or mixed chemicals, open a window and leave immediately.

Do not use bleach on aluminium or linoleum.

Cleaning tips

- Tackle one room at a time. Make sure you are working in a well-ventilated area
- Wear a mask when using strong chemicals.
- Apply cleaner and give it time to work before you mop or sponge it up.

A two-bucket approach is most efficient:

- Use one bucket for rinse water and the other for the cleaner (this keeps most of the dirty rinse water out of your cleaning solution).
- Rinse your cleaning cloth in the rinse bucket. Replace the rinse water frequently (make sure the water you use is free from contamination).

- After cleaning a room or an item, go over it again with a disinfectant to kill the germs and smell left by the floodwaters.
- You may need to repeat this after 24–48 hours to kill mould, mildew and fungi not destroyed on the first application.

Cleaning internal walls

- Start cleaning a wall at the bottom or where the worst damage occurred. If it won't come clean you may want to replace it.
- If you have removed the wallboard or plaster, wash the studs and sills and disinfect them.

Windows

- If you taped your windows before the storm, clean the tape off as soon as possible; the sun will bake the adhesive into the glass.
- If glass cleaners don't remove the adhesive, other alternatives are lemon oil, tar remover, acetone, nail polish remover or a razor blade.
- Discarding broken glass. Take care when handling broken glass. Always use gloves. Wrap broken glass in newspaper and write BEWARE on it before discarding.

Cleaning furniture and appliances

Furniture

- Remove the back of furniture to let air circulate. Don't try to force open swollen wooden doors and drawers; you will probably be able to open them after they dry.
- Solid wood furniture can usually be repaired and cleaned, but wood veneer often separates and warps.
- Apply wood alcohol or mineral turpentine with a cotton ball to remove white mildew spots on wood.
- Cream wood restorers containing lanolin will help restore wooden furniture parts.
- Upholstered furniture soaks up contaminants from floodwaters and should only be cleaned by a professional or thrown out.
- Get a cost estimate from a professional for antique or valuable furniture to see if it is worth saving.

A licensed electrician should check the power supply and all electrical appliances before they are plugged in and turned on. Seek the advice of a licensed electrician to determine if an appliance can be salvaged.

Appliances

Make sure the sewer line is working or the septic tank has been pumped out before starting a dishwasher or washing machine.

- Clean and disinfect dishwashers, washing machines and dryers only with water that has been declared safe for drinking.
- Refrigerators and freezers have foam insulation and sealed components that may be water damaged. They should be emptied, cleaned, disinfected and checked by a professional or replaced.
- If you receive advice that an expensive appliance should be replaced, get this in writing and discuss it with your insurance assessor before you purchase another one.

Kitchen items

Throw out all food, beverages and medicine exposed to water and mud, including canned goods and containers with food or liquid that have been sealed shut. When in doubt, throw it out.

- Throw out soft plastic and porous items (e.g. wood and pottery)
- Wash dishes by hand in a disinfectant. Air-dry the disinfected dishes; do not use a tea towel.
- If water is safe to drink and the sewer line works, clean and disinfect it first, then use a full cycle (not energy saving) hot setting to wash pots, pans, dishes and utensils.

Cleaning clothes and linen

If water is safe to drink and the sewer line or septic tank works, run the washing machine through one full cycle using hot water and a disinfectant or sanitiser before you wash.

- Shake out dried mud or dirt before you wash items.
- Hose off muddy items to remove all dirt before you put them in the washing machine.
- Adding chlorine bleach to the wash cycle will remove most mildew and will sanitise the items, but bleach fades some fabrics and damages others so always check labels first.
- Domestic washing cleaners (such as pine oil cleaners) can sanitise fabrics that cannot be bleached.
- Shake out loose dirt from 'Dry Clean Only' items and take them to a professional cleaner.
- Leather items are usually worth the cost of professional cleaning. If you want to clean leather yourself, wash the mud off and dry the leather slowly away from heat or sunlight.





Cleaning valuables **Paper and books**

Generally you should use a professional restorer for valuable papers such as books, photographs and stamp collections, however, with effort, you can restore them yourself.

Rinse and freeze items (in a frost-free freezer or commercial meat locker) until you have time to work on them or place them in a zip-lock plastic bag with moth crystals.

- Dry papers as soon as they are thawed or unsealed (a hairdryer will work).
- Place blotting paper between pages of books to assist with drying.
- Don't try to force paper products apart; continue drying them until they come apart easily.
- If papers and books have a musty smell after they are completely dry, place them in a cool, dry place for a couple of days.
- If the smell still lingers, put them in an open box and place that inside a larger container with an open box of baking soda to absorb odours, then close the lid of the larger container.

Be careful not to let the baking soda touch the books, and check the box daily for mould.

Photographs

Seek advice from professional restorers for old and valuable photographs.

- Don't let your photographs dry out because they will stick together and be impossible to separate. Try to get to flood-damaged photographs within two days to prevent mould.
- Carefully stack wet photographs between sheets of wax paper, seal them in a zip-lock plastic bag and freeze them to slow any damage. They can be defrosted, separated and air-dried when you have the time to do it properly.
- Place wet (or frozen) photographs in a tub of cold, clear water and carefully separate those stuck together. Do not run water from the tap directly on the photos as this may damage them.
- Dislodge any dirt by gently shaking the tub of water, and then lay the images face up on a paper towel. Never wipe the front of a photograph.

Photocopy restored valuable papers and records because substances in the floodwater may make them deteriorate

Disks and tapes

Rinse CD's, DVD's or tapes in clear water and place in a plastic bag in the refrigerator. Later, you can take them to a professional drying centre and have the data transferred to a new disk or tape.

Cleaning up outside

- Natural hazards can cause a lot of debris. Much of it may be recycled. Contact your council for assistance or advice on cleaning up and plan your clean up to coincide with their collection schedule. Food and garbage must be removed as soon as possible.
- Contact your local council for advice or assistance with the removal of dead wildlife.
- Watch for trees with branches hanging. You may want to have an arbourist (tree doctor) check trees around your property to ensure that their branches and root systems have not been weakened.

Always use protective equipment, dress appropriately for the cold or heat and wear sunscreen and insect repellent where necessary.

The yard

As you take things from your home, stack them neatly until your insurance assessor has told you how to make sure their loss is covered.

If other people's items have been blown into your yard and you know the owner, let them know as they may need to photograph or move items for insurance.

The shed

- Hand tools should be dried; a hairdryer will help. Use a lubricant water-repelling spray such as WD-40 to get into hinges and joints.
- Electrical tools should be checked by a licensed electrician before use.
- Sporting equipment can be cleaned using normal cleaning products and disinfectant.
- Paints and poisons should be disposed of appropriately and safely (talk to your council).

The barbecue

Have a licensed plumber check the gas fittings before use. Clean and disinfect the plate and wash and rinse thoroughly.

The lawn

Lawns usually survive being underwater for up to four days. Hose any salt water off the lawn and shrubs. You may have to replace the lawn if mud is thicker than one inch deep, or if there is erosion, or chemicals were in the floodwaters.

Check with your local nursery or garden store for advice on plant care and replanting.

Stop mosquitoes breeding

Flooding and storms can create conditions in which disease-bearing mosquitoes can breed. Talk to your local council about the best methods to prevent this. In the meantime:

Drain or remove standing water where possible and dump water out of barrels, old tyres, pots and cans. Note: if you can't get rid of standing water, use a commercial product that kills mosquito larvae but does not harm other animals, or apply a thin film of cooking oil on the water. Repeat the application within a few days if rain disturbs the film of oil.

Ditches, drains and gutters need to be cleaned so they can carry stormwater away from your home.

Cleaning external walls

Brickwork and concrete blocks can be cleaned with water, detergent and a stiff nylon or bristle brush. Do not use acid as it may cause staining.

A white salt growth (efflorescence) is likely to appear on bricks or concrete blocks during drying out, but should stop when the wall is fully dried. Remove with a bristle broom.

Repainting and other repairs to cracked brickwork or concrete masonry are best left until the foundation soil has dried out and foundation movements have ceased. Some cracks may close up as the foundation soil dries out.

Minor cracks are generally not considered serious in brick veneer structures as there is usually a large margin of structural safety; however you should always seek the advice of a structural engineer if you have any concerns.

Timber weatherboards should be cleaned with water, detergent and a cloth or soft bristle brush. Make sure you rinse off all detergent.

If the flood level was higher than the floor, water can be trapped in the external wall cavity and will need to be drained. This is best done by a licensed tradesperson as it requires wedging out the bottom two or three weatherboards, or removing a bottom row brick or veneer block every metre. In both cases this should be done around the entire house. Hose out any mud or silt in the cavity and let it dry out.

Rebuilding

It may take some time before you are ready to rebuild. An architect or building practitioner will be able to advise you of the process and assist you with the many stages of rebuilding.

Check if permits are required from your local council before you rebuild. Your home will need to comply with building codes within your area.

- In a flood prone area, consider ways of flood proofing or reducing flood impact on your home.
- In a high cyclone or storm area, consider using materials that reduce the impact of cyclones or storms on your home.
- This is also a good time to consider planning to reduce your environmental impact.

For more advice on rebuilding go to www.yourhome.gov.au

Household preparedness

Having experienced an emergency it is important to be prepared for any potential threats that may occur in the future.

For further advice on preparing your household contact Red Cross or your local SES.

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