



Australian Red Cross
THE POWER OF HUMANITY

Relief in times of crisis

Red Cross Emergency REDiPlan
– cleaning up after flooding



CRISIS CARE COMMITMENT

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Australian Red Cross acknowledges the assistance of American Red Cross and the Victorian Department of Human Services in the production of this booklet.

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 deal with the effects of floods but necessarily 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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**Relief in times of crisis,
be it big or small. Care
when it's needed most and
commitment when others
turn away.**

**With more than 100
million volunteers
worldwide and 60,000
members and volunteers
in Australia we reach
people and places like
nobody else and care
for local communities in
Australia and Asia Pacific.
Red Cross is there for
people in need, no matter
who you are, no matter
where you live.**



Emergency REDiPlan is a Red Cross community information program helping Australians prepare for, respond to and recover from emergencies.

This booklet contains information on how to clean up after flooding inside and around your home.

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Clearing out and drying your home

It is important to start clearing out and drying your home as soon as the rain has stopped and the water receded.

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

Floodwater is often contaminated so make sure you have good protective equipment for all tasks: strong boots, long pants and long sleeves, eye protection and gloves.

Warning: If the house is badly damaged and looks unsafe, stay out until a building inspector or engineer has checked it. Take care at all times, as damage can be hidden.

Clearing out

To avoid trapping moisture inside the home, everything that is wet and able to be moved should be taken outside to dry (assuming weather permits).

Because of potential contamination it is important to:

- throw out any food that has come into contact with floodwater (even canned, bottled or jarred goods)
- 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.

Floor coverings may need to be removed, see www.redcross.org.au and follow the link to 'Emergencies: prepare, respond, recover' for further information.

Drying

It will take several weeks to completely dry out the house.

- on dry days keep all doors and windows open
- on wet days leave windows ajar – the inside of the house will only dry when moisture can get out
- if you have heaters turn them on in as many rooms as possible, leaving the windows open
- don't use more than 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, benches, baths and bottom shelves
- remove the skirting or plinth covering these spaces and hose or pump out the mud, then dry as quickly as possible
- ignore any mould growing on wet linings and timber until drying is complete; it can then be removed with household bleach (see pages 6 and 7 for more information). However, seek advice from your council's environmental health officer or your GP if you have family members who have respiratory illnesses such as asthma.

Draining under the house

Drain away any water lying under the house. It may be necessary 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, where fixed to the outside of the stumps.

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

Cleaning your home

It is important to thoroughly wash and disinfect every part of your home that has been flooded because of contamination from flood waters.

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 check the label to see which materials they can be used upon and their directions for use.

Product	Recommended	Also suitable
Cleaners	Household all-purpose cleaner	Laundry soap or detergent
Disinfectants	Commercial disinfectants or sanitisers	¼ cup of laundry bleach*, with 4 litres of water
Mildew removers	Commercial mildew removers	Washing soda, tri-sodium phosphate or ¼ cup of laundry bleach* with 4 litres of water

**Liquid chlorine bleach can do a variety of flood clean up jobs. Check the label to ensure 5.25% sodium hypochlorite is the only active ingredient. Bleach that has a scent added to improve its smell is available. Don't use dry bleach or any bleach that does not contain chlorine.*

Cleaning tips

Tackle one room at a time. Make sure you are working in a well-ventilated area.

Apply cleaner and give it time to work before you mop or sponge it up. Follow directions and all safety precautions on the container.

If you have any doubt, seek advice.

Many products have consumer advisory hotlines on their labels.

A two bucket approach is most efficient:

- use one bucket for rinse water and the other for the cleaner. Using two buckets keeps most of the dirty rinse water out of your cleaning solution. Rinse out your sponge, mop, or cleaning cloth in the rinse bucket
- wring it as dry as possible and keep it rolled up tight as you put it in the cleaner bucket
- let it unroll to absorb the cleaner
- 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 to 48 hours to kill mould and fungi not destroyed on the first application. You may also need to get rid of mildew, an unwelcome companion to moisture that shows as fuzzy splotches.

Warning: Be careful of fumes and wear rubber gloves. Read the safety instructions on the label. Do not mix bleach with other household chemical products, especially ammonia or toilet bowl cleaner; the chemical reaction can create a poisonous gas. Do not use bleach on aluminium or linoleum.

Walls

Start cleaning a wall at the bottom or where the worst damage occurred. If you did not have to remove the wallboard or plaster, you may find it won't come clean and you will 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 tar remover, acetone, nail polish remover, or a razor blade.

Cleaning furniture and appliances

Furniture

Remove the back of the piece of furniture to let the air circulate. Don't try to force open swollen wooden doors and drawers; you will probably be able to open the drawers after they dry.

Solid wood furniture can usually be repaired and cleaned, but wood veneer often separates and warps. Apply wood alcohol or turpentine with a cotton ball to remove white mildew spots on wood. Cream wood restorers with lanolin will help restore good wooden furniture parts.

Upholstered furniture soaks up contaminants from floodwaters and should only be cleaned by a professional. Unless the piece is an antique or especially valuable, upholstered furniture should probably be thrown out. Get a cost estimate from a professional to see if furniture is worth saving.

Appliances

Washing machines, dryers, dishwashers and vacuum cleaners will be needed to help clean your home and contents. Only clean and disinfect dishwashers, washing machines and dryers with water that has been declared safe for drinking. Make sure the sewer line is working before starting a dishwasher or washing machine. Seek the advice of a licensed electrician to determine if an appliance can be salvaged.

Refrigerators and freezers are more complicated. They may have foam insulation and sealed components that suffered water damage. However they hold food, so they should be cleaned, disinfected, and checked by a professional, or replaced. If you receive advice that an expensive appliance should be replaced, get the opinion in writing and discuss it with your insurance assessor before you spend money for another one.

Warning: Do not plug in or turn on any appliance. As the risk of electrocution from a flooded electrical appliance exists, a licensed electrician should check power supply and electrical appliances before they are plugged in.

Kitchen items

Throw out soft plastic and porous items – e.g. wood items – that probably absorbed floodwaters. Floodwaters are contaminated, so you may want to wash dishes by hand in a disinfectant. Air-dry the disinfected dishes; do not use a tea towel.

The dishwasher should be used only after you know your water is safe to drink and your sewer line works. Clean and disinfect it first. Then use a hot setting to wash your pots, pans, dishes, and utensils. If you have an energy saving setting, do not use it until you have thoroughly cleaned all of your dishes.

Cleaning clothes and linens

Cleaning tips

Clothing and linens can often be restored after floods.

- take items outdoors and shake out dried mud or dirt before you wash them
- to avoid clogging the drain, hose off muddy items to remove all dirt before you put them in the washing machine

Note: See pages 9 and 10 for information on cleaning appliances before using your washing machine.

Before you wash clothes, run the washing machine through one full cycle. Be sure to use hot water and a disinfectant or sanitiser.

Check the labels on clothes and linens, and wash them in detergent and warm water if possible.

Adding chlorine bleach to the wash cycle will remove most mildew and will sanitise the clothing, but bleach fades some fabrics and damages other fabrics.

You can buy other sanitisers, such as pine oil cleaners, at the supermarket to sanitise fabrics that cannot be bleached.

If the label says “Dry Clean Only”, shake out loose dirt and take the item 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 much work, you can restore them yourself. Rinse and freeze them (in a frost-free freezer or commercial meat locker) until you have time to work on them. Another alternative to preserving is to place items in a sealed container, such as a plastic bag, with moth crystals.

- dry papers as soon as they are thawed or unsealed (a blow dryer will do)
- 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
- photocopy valuable papers and records soon because substances in the water may make them deteriorate.

After your papers and books are completely dry, they may still suffer from a residual musty smell. To combat this, place the papers in a cool, dry place for a couple of days.

If the musty smell still lingers, put the books or papers in an open box and put that inside a larger, closed container with an open box of baking soda to absorb odours. Be careful not to let the baking soda touch the books, and check the box daily for mould.

Photographs

Don't let your photographs dry out, as they dry they will stick together and be impossible to separate. Try to get to flood-damaged photographs within two days to prevent mould.

If you can't work on them, carefully stack the wet photographs between sheets of wax paper and seal them in a ziploc plastic bag. If possible, freeze the photographs to slow any damage. This way photos can be defrosted, separated and air-dried later when you have the time to do it properly.

Place wet (or frozen) photographs in a tub of cold, clear water and separate any that are stuck together. Do not allow water from the tap to run directly on the photos, as this may further damage them.

Dislodge any dirt by gently moving the tub of water then lay the images face up on kitchen towel. Never wipe the wet emulsion of a photograph.

Tip: Seek advice from professional restorers for old and valuable photographs.

Disks and tapes

If a computer disk or tape has valuable information, rinse it in clear water and put it in a plastic bag in the refrigerator. Later, you can take it to a professional drying centre and have the data transferred to a good disk or tape.

Cleaning up outside Walls

Cleaning up outside can bring welcome variety to your clean-up schedule.

Check when your council will be providing hard garbage collections or other assistance with waste disposal.

Make sure you have good protective equipment, dress appropriately for the cold or heat and remember to be sun smart.

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. This should stop when the wall is fully dried. It can often be removed 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 of the 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.

The yard

As you get rid of things from your home, don't turn your yard into a dump. Food and garbage must be removed as soon as possible. Other discarded items should be removed as soon as your insurance adjuster has told you how to make sure their loss is covered.

Flooding can create conditions for mosquitoes to breed, and they can carry many diseases.

- standing water can become a breeding ground – drain or remove where possible
- dump water out of barrels, old tyres and cans
- check that your gutters are clean and can drain
- ditches and drains also need to be cleaned so they can carry stormwater away from your home
- if you can't get rid of standing water, use a commercial product that kills mosquito larvae but does not harm other animals. Seek advice from an environmental health officer (talk to your local council)
- another method is to apply a thin film of cooking oil on the water. Repeat the application within a few days if rain disturbs the film of oil.

The shed

Hand tools should be dried, a blow drier 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.

The BBQ

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

The lawn

Lawns usually survive being underwater for up to four days. Some grasses are not damaged by saltwater flooding, however hose salt water off the lawn and shrubs. You may have to replace the lawn if there was mud thicker than one inch deep, erosion, or chemicals in the floodwaters; check with your local nursery or garden store.

Recovery is a long and sometimes tiring process – make sure that you look after yourself. See our booklet Coping with a major personal crisis or visit **www.redcross.org.au** for further information.

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