

Hazardous substances

Risks in a natural disaster or emergency

Disasters like floods and earthquakes can damage storage areas, cause chemicals or gas leaks, or break containers. Hazardous substances are dangerous because they can poison, burn skin, and irritate eyes or lungs. They also ignite easily or explode when heated.

Common hazardous substances

Common hazardous substances include:

- **Bleach and laundry sprays** – cause chemical burns and release toxic fumes if mixed with other cleaners, such as ammonia.
- **Gas leaks from pipes or appliances** – can cause poisoning, fire or explosions and concentrate in low lying areas.
- **Petrol, LPG gas, gas cylinders** – even small sparks can ignite any leaks.
- **Meths, turps and paint thinners** – poisonous and flammable, igniting easily.
- **Drain cleaners, pool chemicals and paint strippers** – these burn and can damage skin and eyes.
- **Garden chemicals and sprays** (e.g. Roundup – can irritate skins, eyes and lungs, and harmful if swallowed).
- **Aerosol cans** that can explode if left in heat (in cars, near heaters, in hot sun).
- **Lithium-ion batteries** (rechargeable batteries in electric cars, bikes and scooters, laptops, phones and other portable devices.) Damaged batteries can cause fire, explosion or toxic smoke.

The most hazardous substances have a coloured diamond on the container.

Keeping hazardous substances safe

- Secure them in a locked cabinet, away from heat, where they won't fall.
- Keep them in their original containers – never use food or drink containers.
- Store in unbreakable containers with tight fitting lids and keep out of reach of children.

- Store petrol, LPG and solvents away from the house, if possible.
- Never mix bleach with other cleaning products.
- Know how to turn off your gas supply.
- Never charge a battery powered device that's been damaged or been in a flood.

What to do in a hazardous substance leak or spill

If there's a major leak or spill, Civil Defence or FENZ may tell you to evacuate.

For smaller leaks or spills:

- Move away from the source, preferably to higher ground upwind.
- If you smell gas or see fuel, avoid using vapes, phones, switches, or any electrical devices.
- Do not light matches, candles, or cigarettes.
- Ventilate by opening doors and windows if safe.
- Leave the building and contact emergency services or your gas provider from outside.
- If the leak is outside, close the windows and stay inside.
- Report the hazard to Police, FENZ or Civil Defence

If a lithium-ion battery is smoking, hissing, swelling or giving off fumes, call 111 immediately.

Avoid exposure to hazardous materials

- Do not wade through floodwaters without wearing protective clothing and footwear.
- Stop clean up if you find debris that might be hazardous like cement roofing or cladding (see asbestos advice), chemical drums or animal carcasses.

Disposing of hazardous materials

- Never dispose of damaged lithium-ion batteries in your rubbish.
- Report unknown or dangerous waste including asbestos to your council.
- Wear protective clothing and gloves if handling these materials.

Advice for clearing damaged materials that may contain asbestos

Asbestos may be present in homes built or renovated between 1940–1990, especially in insulation, exterior cladding, cement roofing, textured ceilings, wall linings and vinyl flooring. It's most dangerous when dry as fibres become airborne.

Asbestos should be removed by a WorkSafe licensed contractor. If this is not possible during clean up, follow the safety steps in [Asbestos in your home](#):

- Wear a **P1 or P2 respirator, disposable hooded overalls, gloves, and shoe covers**. Seal and dispose of them in double bagged rubbish bags afterwards.
- Keep materials **damp** and avoid **water blasters** or **sanding**.
- Use plastic **sheeting** to protect surfaces and seal windows and doors.
- Place asbestos waste in **heavy duty sealed bags** labelled asbestos. If unavailable, double bag and seal carefully. Contact your council for disposal advice.

For more information on hazardous waste

- Contact your local council
- Guidance on asbestos in your home is on the Health NZ website [Asbestos](#)
- Worksafe has advice on workplace disposal – search 'hazardous waste' and 'asbestos'