

NATURAL DISASTERS

FOR INFORMATION ON YOUR LOCAL COUNTER DISASTER PLAN and for further advice on preparedness for cyclones and storms, floods, and bushfires, contact:

STATE EMERGENCY SERVICE

HEADQUARTERS LEAKE STREET BELMONT 277 5333

REGIONAL CO-ORDINATORS—

Metropolitan
Lynton St, Mt Hawthorn

444 9044

LOCAL VOLUNTARY SERVICE UNITS—

(See State Emergency Service Entries—W.A.
Government Section of this Directory)

BASIC RULES FOR COMMUNITY SURVIVAL

- Be aware of threats from natural disasters to life and property—where you live and work. These are cyclones and storms, floods, and bushfires
- Know your local **Counter Disaster Plan**.

CYCLONES AND STORMS

DO THIS NOW—Ask your **Local Counter Disaster Co-ordinator** about risks, warnings and plans

BEFORE THE CYCLONE SEASON

- Observe the basic rules above and:
- Check your house roof is sound
- Clear property of loose items which could cause damage by being blown around in a high wind.
- If you live in a Storm Surge Zone, know your nearest safe high area.

UPON A CYCLONE WARNING

- Board or tape windows, store loose articles inside.
- Lock up pets, fill water containers, fuel car and place under cover.
- Listen for official advice over radio and TV.
- If told to take shelter, **do so**, either at home with friends, or in a public Emergency Shelter.

ON WARNING OF A LOCAL EVACUATION

- Switch OFF electricity, gas
- Collect emergency evacuation kit and follow advice.

WHEN THE CYCLONE COMES

- Stay in shelter with torch and radio
- Beware the calm Eye. Remain indoors until advised that the cyclone has passed

AFTER THE CYCLONE

- Act on official advice—try not to panic
- Avoid unnecessary travel in affected areas.

FLOODS AND STORM SURGES

DO THIS NOW—Ask your **Local Counter Disaster Co-ordinator**.

- What are the official warnings and what do they mean?
- What are the **where, when, how** of local floods including storm surge?
- What official flood height will affect your house?
- What is the local plan for warnings, advice, rescue, evacuation, welfare, flood-free routes?
- Observe the basic rules above, and

ON WARNING OF A LOCAL EVACUATION

- Switch OFF electricity, gas
- Collect emergency evacuation kit and follow advice

IF A FLOOD COMES

- Avoid entering flood waters on foot or in vehicles, avoid sightseeing, and don't drink flood water

AFTER THE FLOOD

- If you evacuate, don't return until advised, then use the route recommended

- Ensure your transistor radio is working, and has fresh batteries (it could be your only information link if power fails)
- In one area of the house known to the whole family gather your emergency evacuation kit—clothing, tinned food, water containers, emergency lighting (candles, torches), first-aid kit and medicines enough for 2-3 days at least.
- When you become aware that a disaster may occur or has occurred listen to your radio and **follow official warnings and advice**.
- Record the telephone numbers of the **EMERGENCY SERVICES** for **AMBULANCE, FIRE** and **POLICE** on the inside front cover of your telephone directory.
- If your property could be isolated, have your property name painted on the roof to assist those trying to help you.

BUSHFIRES

DO THIS NOW—Ask your **Local Council Office** or **Bushfire Control Officer** about the risks, warnings and plans. Learn the fire danger-rating warnings and your legal responsibilities

BEFORE THE FIRE SEASON

- Observe the Basic Rules above, and
- Clear combustible materials particularly close to buildings and in roof guttering.

DURING THE FIRE SEASON

- Be aware of the fire danger-rating when you wish to light a fire.
- Be particularly careful with fire yourself and be alert to other people's fires becoming uncontrollable.
- Have a hose long enough to reach all parts of the garden and house including the inside roof.
- Keep areas close to buildings clear of combustible material

IF A FIRE THREATENS

- Shut doors and windows, block the downpipes, and hose the roof and the ground and walls nearest the fire.
- Follow the instructions and advice of the fire fighting authority

ON WARNING OF A LOCAL EVACUATION

- Switch OFF electricity, gas.
- Collect emergency evacuation kit and follow advice.

DURING THE FIRE

- Cover as much as possible of the body with fire-resistant clothing—legs, arms, head
- If caught in the fire, lie as low as possible under cover or in a car, covered with a fire-resistant rug or clothing until the fire has passed

AFTER THE FIRE

- Beware of damaged buildings or trees which could collapse without warning.

PASS ON WARNINGS AND ADVICE TO YOUR NEIGHBOURS IF IT IS SAFE TO DO SO. THEY MAY NOT HAVE HEARD OR UNDERSTOOD THE OFFICIAL BULLETINS, PARTICULARLY IF THEY DO NOT READ OR UNDERSTAND ENGLISH
SCHOOL TEACHERS—Explain this information to children and ask them to explain it to their parents particularly where the parents may not read or understand English

WHEN DISASTER STRIKES HERE'S WHAT TO DO

VIOLENT EARTHQUAKE

(When it is difficult to stand or walk)

IMMEDIATE ACTION

Indoors.

Get the family into doorways, or under tables, bedridden folk under beds, keep away from windows and chimneys. Do NOT rush outside.

Outdoors

Keep clear of buildings, high walls, or dangling electric wires. Downtown, shelter under archways or doorways but do NOT re-enter damaged buildings.

Driving

If you can feel the earthquake when driving, it is serious. Pull off the road, stop and stay in the car.

AS SOON AS YOU CAN

Put out all domestic fires and heaters.

Turn off at mains electricity, gas, home heating oil and water if you suspect that house has been damaged.

Leave the house if a fire starts that you cannot put out at once.

Leave the house if you detect a gas leak after turning it off at the mains. Open all doors and windows.

Save water in tanks and cisterns. Fill your emergency containers.

Leave the fridge shut as much as possible if power has failed.

Free dogs and cats.

Follow your Civil Defence checklist — back cover.



heating oil and gas if you have to leave the house.

Lock all outside doors and windows if you have to leave the house.

Do NOT enter floodwater on foot or in a car if it can be avoided. Never wander around a flood area on your own.

Follow your Civil Defence checklist — back cover.

TSUNAMI (Commonly called Tidal Waves)



If you are in low lying areas near to the sea or estuary

Listen to the radio for information and advice.

Act as for floods.

Move to high ground or 500 metres inland if tsunami warning is given.

Keep away from streams flowing into the sea.

Never go down to the beach. If you see a wave it will be too late to escape it.

Follow your Civil Defence checklist — back cover.



STORM FORCE WINDS AND CYCLONES

Listen to the radio for information and advice. Allow considerable margin for safety. Storm may change direction, speed or intensity within a few hours.

Preparation — If storm force winds or severe gales are forecast for your area

Store or secure loose boards, corrugated iron, rubbish tins or anything else that could become a missile.



Tape up large picture windows.

Follow your Civil Defence checklist — back cover.

When the Storm Hits

Stay indoors and shelter in strongest part of the house.

Listen to the radio and follow instructions.

Open windows on sheltered side of house if roof begins to lift.

Find shelter if in the open.

VOLCANIC ACTIVITY



Listen to the radio for information and advice.

Find shelter but NOT in a building with a low pitched roof if heavy ash is falling. Avoid basements or confined spaces where gases may accumulate.

Move to a ridgeline if you are in the open. Keep well above the shoreline of large lakes.

Wear substantial covering over your head and body if you have to move in an ash shower. Breathe through a handkerchief, carry a torch even if it is daytime and move as quickly as you can away from the eruption.

Follow your Civil Defence checklist — back cover.



**KNOW WHAT YOU HAVE TO DO
BEFORE YOU HAVE TO DO IT.**



FLOOD

Listen to the radio for information and advice.

Disconnect all electrical appliances and move all valuable personal and household goods, food, and clothing out of reach of water if you are warned or if you suspect that flood waters may reach the house.

Prevent dangerous pollution — move weedkillers and insecticides out of reach of the water.

Turn off electricity, home

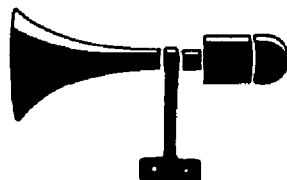
BEFORE DISASTER STRIKES...

IN A DISASTER, YOUR FAMILY MAY HAVE TO LOOK AFTER ITSELF UNTIL HELP ARRIVES.

IN A MAJOR EMERGENCY THIS COULD TAKE DAYS, OR EVEN LONGER.

TO HELP YOU SURVIVE IN A DISASTER, YOU MUST KNOW WHAT TO DO BEFORE THE EMERGENCY.

KNOW THE CIVIL DEFENCE WARNING signal for your area — an emergency warning signal on a radio, or a series of short blasts on a hooter or some other device. If you hear the warning **LISTEN TO YOUR RADIO**



KNOW WHERE TO GET HELP

Know where to find your nearest civil defence post (probably a school or community hall), or police station. The elderly, the very young, or the disabled next door may need **YOUR** help.

KNOW HOW TO FIND HIGH GROUND.

If you live near water, or in a low lying area, know how to find high ground. Find out how high the river must flood to reach your home.



KNOW HOW to turn off **IN THE DARK**, gas, electricity, home heating oil and water supply. Your switch-board **DOES NOT** switch off power lines from the street to your home. Know how to put out your open fire quickly.



KNOW HOW TO GET DRINKING WATER if usual supplies stop. (The water in your hot water cylinder or toilet cistern should be safe to drink without treatment.) If in doubt, purify water.

Know how to make water safe for drinking. If necessary, strain water through several layers of clean cloth, boil water vigorously for at least three minutes and store in container in which the water was boiled.

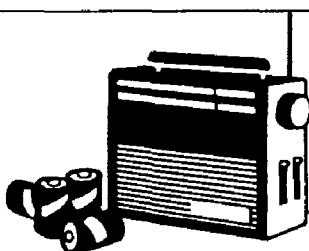


If boiling is not possible, add five drops of household bleach per litre of water, mix thoroughly, and allow to stand for 30 minutes before use. (This is about half a teaspoon of bleach in a bucket of water.)

MAKE SURE YOU HAVE A SURVIVAL KIT

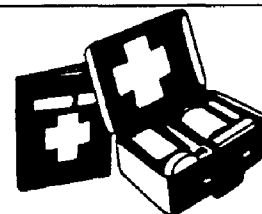
Your family will need an emergency kit if a disaster strikes.

MAKE SURE you have a battery powered radio, and spare batteries for it.

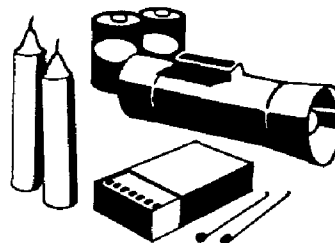


MAKE SURE you have 2-3 days supply of tinned food. And a tin opener. And water containers to fill in an emergency. You can store drinking water now, in carefully-cleaned, corrosion-proof, tightly-covered containers.

MAKE SURE you have a first aid kit and book.



MAKE SURE you have a torch, spare batteries for it, candles and matches.



MAKE SURE YOU CAN FIND YOUR SURVIVAL KIT IN THE DARK, IF NECESSARY.

Everyone in the house, including the children, should know where to find these items.

IN AN EMERGENCY YOU MAY HAVE TO BE EVACUATED.

Take extra clothing and towels. Take personal and family documents. Carry some identification — tie labels on small children. Take essential medicines, infant care and toiletry items.

Take a torch, battery radio, blankets and some food, if possible.

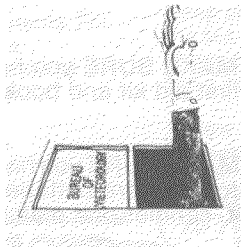
MORE CIVIL DEFENCE INFORMATION?

Read the Civil Defence section in the Yellow Pages. To contact civil defence, call your local council.



KNOW WHAT YOU HAVE TO DO BEFORE YOU HAVE TO DO IT.

THE ABC & D OF YOUR NEXT FLOOD

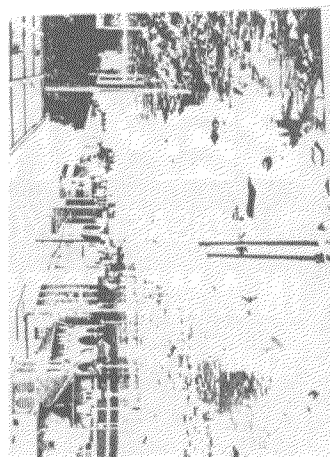
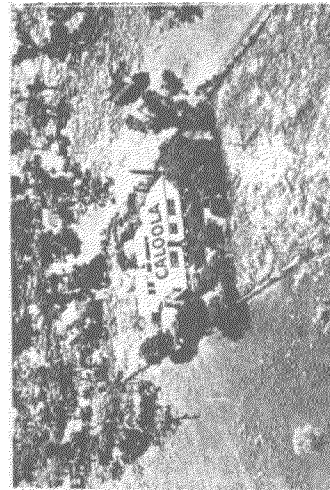
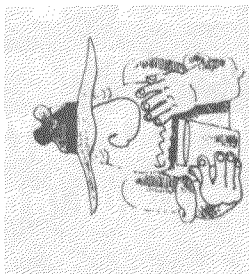
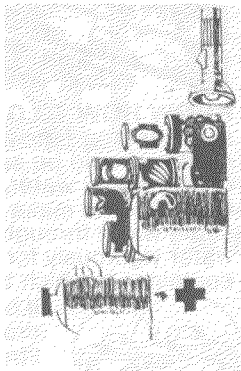


As a result, you will be able to find out what a local council might need to do to meet its obligations. These are excellent guides. But you also need to be able to call on the services of a professional body to help you with the identification of needs in your area which will affect the quality of life.

SIGNIFICANT RIVER RISES—now, when all of last century's flood-control flood basins will be saturated and in place, they are but when appreciable river rises are expected. This team should alert landholders of possible need to remove pumps and irrigation equipment and plan for stock removal.

3. Ensure your transition radio's working, and has fresh batteries (it could be your only link with the news if power goes off).
4. In one area of the house known to the whole family, gather a supply of appropriate clothing, linens, bed, water, food, and medicine, enough to last 2 to 3 days at least.
5. If your property could be reached by a bomb attack, having your property name put on the roof (see below) will assist those trying to help you.
6. An appreciation of the local Government's deficits, of the Community Disaster Plan, warning systems, action to reduce losses, evacuation, welfare, why is it, you, to make it safe.

1. Don't ignore warnings and advice – they are for the good of everybody.
2. Don't enter floodwater on foot or in a car – you could be swept away.
3. Don't use a boat for sightseeing – the wash causes unnecessary damage.
4. Don't let disaster areas – unnecessary people cause unnecessary problems.
5. Don't drink floodwater – you could become seriously ill.



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FIGURE 38
First source of information: non-nuclear disasters

Source	Volcano		Flood	
	N	%	N	%
Neighbour/friend	21	23.3	107	24.7
Relative	13	14.4	60	13.9
Local emergency authorities	38	42.2	209	48.3
Mass media	9	10.0	49	11.3
State or other authorities	3	3.3	0	0.0
Saw eruption or high water	6	6.7	8	1.8

Most reliable source: non-nuclear disasters

Source	Volcano		Flood	
	N	%	N	%
Neighbour, friend, relative	7	7.8	129	26.9
Local emergency response authorities	33	36.7	266	55.4
State/county emergency authorities	1	1.1	18	3.8
Federal authorities	11	12.2	0	0.0
Mass media	20	22.2	38	7.9
Personal judgement	18	20.0	29	6.0

Most important reason for evacuating: non-nuclear disasters

Reason for evacuating	Volcano		Flood	
	N	%	N	%
Neighbours/relatives left	12	15.2	44	13.7
Media warnings	5	6.3	5	1.6
Officials urged departure	21	26.6	93	29.0
Relatives urged departure	16	20.3	28	8.7
Past experience	2	2.5	21	6.5
Saw eruption/high water	23	29.1	130	40.5

Source: "Citizen Evacuation in Response to Nuclear and Non-Nuclear Threats", by R. W. Perry, published as document BHARC-400/81/013 by Battelle Human Affairs Research Centers, Seattle, Washington, U.S.A., 1981.

PUBLIC PARTICIPATION IN EXERCISES

Some attempts have been made to raise public awareness of what can be done to mitigate the effects of the impact of a disaster-causing phenomenon, and at the same time to give the public experience of the action which they themselves will be required to take. These attempts have taken the form of disaster drills in which the public's participation has been sought. The question is whether these attempts have met with any success.

Social and behavioural scientists, in the United States of America in particular, have written many papers on the public's response to a disaster. Much less seems to have appeared on disaster preparedness in the public context. A research paper⁸⁶ limited to United States' experience rightly points out that exercises involving personnel of the emergency organizations have proved their value, but draws the conclusion that the public would probably not benefit in the same way if they did take part in disaster drills. This conclusion is in reality an assumption only, because in the 228 disasters surveyed by the authors, no case could be found in which a prior evacuation drill had been held. However, where comparisons could be made between two similar events not widely separated in time, and in which evacuation had been necessary, it was found that people tended to assume that the second event would be a repetition of the first, and that the behaviour

⁸⁶ Strobe *et al.*, *op. cit.*, footnote 73.

adopted on the first occasion could safely be repeated. This attitude is open to three objections: the earlier behaviour might not, in fact, have been as effective as it was believed to have been; it excludes the possibility that a better way of behaving might have been found; and it certainly might not be so effective under even slightly different circumstances.

Limited participation by the public in exercises primarily designed for the benefit of the emergency services themselves (for example, by playing the role of homeless evacuees, to test the efficiency of the welfare services) has been found to be useful, because it has stimulated those taking part to discover what (if any) emergency plans exist in their own communities. But if the aim is the education of the public as to what they should do themselves in a major emergency, then it would appear that even where—as, for example, in Japan—it is possible to hold annual national earthquake drills in which the general public take part, their true value may be less than sometimes believed because the circumstances are so artificial. An illustration is given in figure 39. The scene after a major earthquake would display considerable differences from that depicted.

FIGURE 39

School children evacuated to open spaces during Tokyo earthquake preparedness exercise.

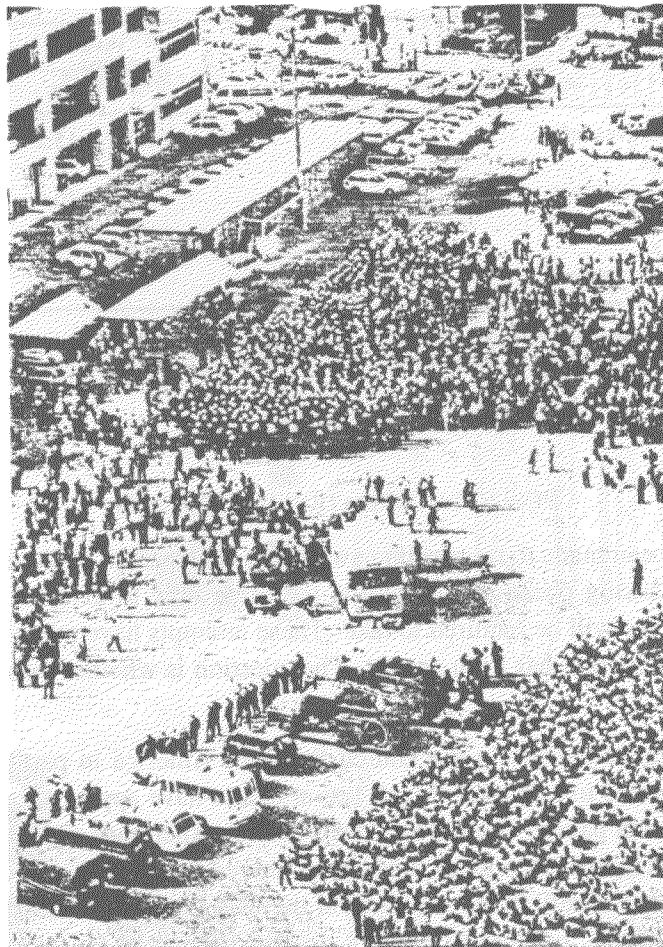


Photo: Sankei Shimbun

However, when no physical destruction can be expected, public evacuation drills may not suffer from the same disadvantage. A two-day exercise held in November 1982 in Yugoslavia simulated an emergency at the Krško nuclear power plant. More than 70,000 people took part, including 8,000 officials in off-site and on-site response groups and organizations. As part of the exercise, one village in the vicinity of the plant was selected to demonstrate full-scale evacuation, and people in a wider area were told to take shelter. Precautions were taken to prevent contamination of the food supply; fire-fighting demonstrations were held under full radiological contamination control; decontamination facilities were set up, and traffic controls established.⁸⁷

For less specialized kinds of emergency simulations, public participation may to a degree be achieved when trained people join with personnel of the emergency services' organizations in exercises. This sort of assistance can begin with the younger generation. Those who have joined community organizations such as the Junior Red Cross, Boy Scouts or Girl Guides (Scouts) can form a pool of human resources, training and experience which is extremely useful in community action. Because they receive training as part of their normal activities, and because they are accustomed to some discipline, they can well be absorbed into an emergency organization under the direction of local, provincial or even national authorities.

For example, trained younger people can in this way:

- (a) Help in rescue and other immediate activities, notably helping relief personnel in providing first aid, evacuating the injured, giving directions to secure points, established safety areas and local medical facilities;
- (b) Operate open-air or other emergency cooking facilities, and distribute food, blankets and clothing;
- (c) Co-operate and assist in directing traffic and cordoning off disaster sites and providing accurate information to the public about food distribution points, evacuation sites, and general conditions in the disaster area. This service is especially important because it helps to diminish the prevalence of rumours and other misinformation and so reduces the potential for panic;
- (d) Act as motor-cycle despatch riders, as messengers or as communications operators; and
- (e) Assist a tracing service to reunite children with parents or relatives.

In disaster preparedness activities, young people can participate in training and education programmes, in particular learning and understanding the forecasting and warning systems, the location and preparation of stockpiles of food, medicines and other supplies, and the operation of communications and transport. Especially in isolated areas, they can assist in instructing the public and younger school children about the importance of understanding warnings and heeding them. A special charge for members of girls' organizations might well be the care of the old, sick and infirm, and children, whose needs are often forgotten.⁸⁸ These groups can also benefit from the services of those like the Band of Home Nurses, which is active in India.

Some emergency or civil defence exercises, if they are to be realistic, may have to call upon professional members of the public, particularly doctors and nurses, for assistance. Normally, this presents no difficulty and co-operation is readily forthcoming; but too much must not be expected of such "volunteers." In one exercise, in which the situation envisaged was one of a railway accident in a remote area where there was no road access, some civilian participants declined to fly in helicopters to the exercise site as they thought it would be too dangerous to do so.

⁸⁷ "Emergency Preparedness Exercise 'POSAVJE 82' in support of the Krško Nuclear Power Plant—Report to the Government of Yugoslavia", document NENS/83/2, published by the International Atomic Energy Agency, Vienna, June 1983.

⁸⁸ The subject is examined in somewhat greater detail in "Guidelines: Youth in Disaster Relief", the report of a seminar held in Nassau, Bahamas, in April 1982 and published by the League of Red Cross Societies, Geneva, (in association with the Commonwealth Youth Programme, Caribbean Centre) July 1982.