

LINCOLN UNIVERSITY

Emergency Management Manual

Part One: Emergency Preparedness and Procedures

Overview

The Lincoln University Emergency Plan is made up of two parts;

1. Emergency Preparedness and Procedures
2. Fire Safety and Building Evacuation

This document comprises Part One.

Objectives

The aim of the Emergency Plan is to assist Lincoln University prepare for, respond to and recover from an emergency, by describing emergency procedures for staff and students to follow.

Review

The Emergency Plan will be reviewed each year by the Health and Safety Manager, to ensure that personnel details are up to date and that the emergency procedures remain appropriate.

Legal Requirements

There are three key pieces of legislation which this emergency plan operates under:

1. Health and Safety in Employment Act 1992 & Amendments

Requires employers to develop procedures, with the involvement of employees, for dealing with emergencies that may arise while the employees are at work. Employers must ensure that employees know what to do in an emergency.

2. Civil Defence Emergency Management Act 2002 replaces the Civil Defence Act 1983. The new Act

- promotes sustainable management of hazards
- encourages and enables communities to achieve acceptable levels of risk
- provides for planning and preparation for emergencies, and for response and recovery
- requires local authorities to coordinate planning and activities
- provides a basis for the integration of national and local civil defence emergency management
- encourages coordination across a wide range of agencies, recognising that emergencies are multi-agency events.

The Act requires that a risk management approach be taken when dealing with hazards. In considering the risks associated with a particular hazard, both the likelihood of the event occurring and its consequences must be considered. As part of the comprehensive approach to civil defence emergency management (CDEM), all hazards, not only natural hazards, must be taken into consideration. The primary goal for communities is to be self-reliant. Communities should aim to reduce the likely impact from, prepare for, and be able to respond effectively to, emergency events on their own. To encourage this, regional cooperation and coordination are paramount and form one of the cornerstones of the Act. In addition, whole of community participation is key. All sectors with an interest in civil defence emergency management will be accountable for ensuring that their communities are aware of, and committed to, effective civil defence emergency management.

3. Fire Service Act 1975

This Act plus the Fire Safety and Evacuation of Buildings Regulations 1992 require organizations to control fire hazards and maintain an effective evacuation plan.

Emergency Contacts and Phone Numbers

LINCOLN UNIVERSITY EMERGENCY CONTACTS		
Service	During the Day:	After Hours:
Christchurch Emergency Services	Primary Response Dial 1 - obtain dial tone - then Dial 111 and state service required (Fire - Ambulance - Police)	Dial 1 - obtain dial tone - then Dial 111 and state service required (Fire - Ambulance - Police)
Medical Emergency Student Health & Support	Secondary Response (medical emergency only) If in Student Health & Support office hours (8.30-4.30 pm) call (03) 325 3835 state requirements, name, location & nature of emergency	(03) 365 7777 Bealy Avenue 24 hour Surgery
Security	Security Desk, extension 9999 or telephone (03) 325 2822.	Security desk, extension 9999 or telephone 325 2822.
National Poisons Centre	Urgent information: 0800 764 766 General non urgent information (03) 479 7227	Urgent information: 0800 764 766
Bealy Avenue 24 hour Surgery	Address: 931 Colombo Street, Christchurch, New Zealand Phone: (03) 365 7777	(03) 365 7777
Restoration of Services	Lincworks, extension 30820	Security Desk ext 9999
Occupational Health and Safety	Canterbury-West Coast Region 81 Lichfield St Christchurch (03) 365 2600	(03) 365 2600
First Aid	Division First Aiders, or Student Health & Support (03) 325 3835	
Civil Defence Emergency	Lincoln University Civil Defence Warden – Adrian Brown (03) 423 0592 After hours (027) 247 5436	Selwyn District Council (03) 347 2800 or (03) 318 8338 025 247 5436 (H&S Manager)

Lincoln University Policies and Procedures

<p>Division Health and Safety Representative & Health and Safety Manager.</p>	<p>Lincoln University Adrian Brown- 03 423 0592 or 027 247 5436 See list on intranet for H&S reps- http://www.lincoln.ac.nz/h&s/advisers.htm</p>	<p>025 247 5436 (H&S Manager)</p>
<p>Defibrillator <i>(there are tow based on campus – one at the recreation centre & the other at Student Health & support)</i></p>	<p>Student Health & Support office hours (8.30-4.30 pm) call (03) 325 3835 or (03) 325 3606and state requirements, name, location & nature of emergency</p>	<p>Recreation centre – Hours Mon-Thurs – 6.00 am – 10.00 pm Friday – 6.00 am – 8.00 pm Saturday – 8.15 am – 4.00 pm Sunday – 9.45 am – 6.00 pm</p> <p>Please call giving exact location and nature of emergency</p>

Building evacuation procedures

<http://hub.lincoln.ac.nz/hr/AnalyticsReports/LU-EMManual-Part%20Two-update-ab-100205.pdf>

Accident or Injury leading to Personal Injury

The aim is to prevent further injury, loss or deterioration to the person or property.

1. Summon help:

Primary Response

1. Ensure your safety and the safety of other's
2. Apply first aid or seek assistance of someone who can
3. Contact emergency services on 1-111 if required. State your **name, location, nature of injury/situation**

Secondary Response

If the situation occurs during Student Health & Support office hours (8.30 am-4.30 pm Mon-Fri) then contact Student Health & Support **(03) 325 3835 or internal 30077** and state your **name, location, nature of injury/situation**

If it is outside Student Health & Support hours then ignore the secondary response.

2. Where a personal injury has occurred, an Injury/Incident Report will need to be completed. The form for this is available from Health and Safety Representative (<http://www.lincoln.ac.nz/h&s/advisers.htm>), or the intranet (<http://www.lincoln.ac.nz/h&s/injury.pdf>) or Human Resources.

Where the injury is serious, the Health and Safety Manager must be contacted immediately-(03) 325 3887 (int. 7887) or 025 247 5436

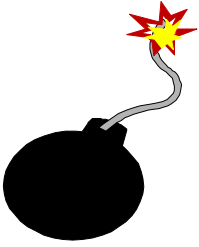
3. Any accident scene involving serious injury is to be left untouched (unless a continuing hazard must be controlled) until the Health and Safety Manager has inspected the scene.

Scope

This plan covers a range of emergencies such as:

- ❖ accident or personal injury,
- ❖ bomb threat,
- ❖ chemical spill,
- ❖ civil unrest,
- ❖ earthquake,
- ❖ fire,
- ❖ flooding,
- ❖ wind storm,
- ❖ other emergencies.

The emphasis of the plan is self reliance as external services such as the fire service, ambulance, hospitals, water, power and other essential services may not be available in the event of a major disaster.



BOMB THREAT

Follow instructions

From the Floor Wardens, security or police.

When evacuating the building, take personal belongings such as brief cases or bags with you.

Procedure

(All bomb threats must always be treated as genuine until proven otherwise.)

1. **For telephone calls**, if you can, keep the caller talking on the phone. Quite often the caller will want to talk about the situation. Ask the questions set out below.
2. Try to get the caller to dial the police on 111 or, if the caller refuses, offer to connect the caller to a senior manager, or the Building Warden.
3. Ensure the Building Warden or Security Officer is notified. This person will contact the police, and then notify other people in the building.
4. Stay where you are unless ordered by the police or Floor Wardens to evacuate the building.
5. If evacuation is ordered, follow instructions and go to the assembly area. Exit by the same routes used for fire, unless directed otherwise by Security or the Floor Warden. The alarms will not be used, so the call to evacuate will be verbal from the Floor Warden.

Place a copy of the following checklist in the front of your telephone directory.

BOMB THREAT - CHECKLIST

Be calm and courteous.

Do not interrupt caller.

Ask:

- (a) Where is the bomb now?
- (b) What time will it explode?
- (c) What does it look like?
- (d) What kind of bomb is it?
- (e) What will cause it to explode?
- (f) Did you place the bomb?
- (g) Why was it placed?
- h) What is your name?
- (i) What is your address?

Try to enlarge on any of these answers and record full details

Time: Date: Toll/Local/Booth/Internal

Exact Words Used:

Male Female Adult Child

Approximate Age/Race:

Speech:	Fast	Slow		
	Intoxicated	Well Spoken	Fairly Spoken	Poorly Spoken
	Clear	Muffled	Stutter	Lisp
	Soft	Loud	High	Deep
	Nasal	Foul Language		

Accent:

Other Peculiarities:

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Background Noise	Traffic	Trains	Factory	Aircraft
	Office	Party	Voices	Quiet

Other:



CHEMICAL SPILL OR GAS LEAK

The response will depend upon the nature of the incident and types of materials involved. Chemicals may be toxic, flammable, corrosive and/or radioactive.

Procedures

i) Dealing with casualties contaminated with hazardous substances.

1. Call for assistance and ensure the area Health and Safety Representative is contacted.
2. Take care not to contaminate yourself. Refer to the Safety Data Sheet for protective clothing including requirements.
3. Remove person from immediate area if continued exposure is likely.
4. If the substance is corrosive, immediately flush the affected area of the body with water for at least 15 to 20 minutes.
5. Provide other appropriate first aid.
6. Keep casualty under constant observation as many chemicals can cause cardiac and/or respiratory arrest. Please note that if poisons are involved, direct mouth to mouth contact should be avoided.

Note a: The specific chemical(s) need to be identified at an early stage.

Note b: If it is likely that the first aider will be contaminated when assisting the casualty, then, where practicable, identify the substance concerned, its probable effects and any appropriate protective equipment required.

ii) If there is a "small" spill (or leak).

1. Isolate the spill area so only authorised people have access.
2. Evacuate any area(s) which are at risk of being contaminated.
3. Contact the Division Health and Safety Representative.
4. For gases or other flammable substances, extinguish naked flames or other sources of ignition.
5. Determine the type(s) of material involved. Safety Data Sheets (SDS) should be consulted to determine potential hazards.
6. Where appropriate, wear protective clothing, including respiratory protection.

iii) If there is a "large" spill (or leak).

1. Alert all people in the vicinity to move away from the area, closing doors as they leave. For gases or other flammable substances, do not activate the building alarms but pass the message on by word of mouth.
2. Contact the Fire service by phoning 1-111 in an area away from the spill site.
3. Contact the Division Health and Safety Representative or other appropriate specialist.
4. Shut down equipment, if this can be carried out safely.

Note : There are stores of substances such as petroleum products, chemicals, explosives, radio isotopes and experimental pesticides and herbicides. Records are available from divisional inventory systems, hazard identification data and waste generation data to identify the category of item, quantity, location and storage method.

For more information refer to the Laboratory Safety Manual

<http://www.lincoln.ac.nz/campus/hr/smous/management/labsafetybook.pdf>

Also refer to laboratory specific spill response plans.

Always consult a SDS!



CIVIL UNREST

Students of Lincoln University have, on occasion, occupied areas of the Registry Building. These events have been widely publicised prior to their occurrence so it is likely there will be a "warning" period in which the University can prepare responses in specific buildings.

Procedure

- ❖ Keep desks as clear as possible.
- ❖ Lock any sensitive or personal information away unless this is being used at the time.
- ❖ Lock filing cabinets and desk drawers where practicable.
- ❖ Save computer work often.
- ❖ Keep cash held to a minimum.
- ❖ Lock any office doors that are not occupied.

At the first indication there is a problem:

- ❖ Leave the area as quickly as possible.

If you have time (i.e., it is safe to do so):

- ❖ Turn off your computer
- ❖ Lock cash drawers
- ❖ Lock any doors (you may be able to snib or prelock doors prior to this time so that the door can be pulled shut as you leave the area.) However, do not attempt to close doors to impede the crowd as this is likely to provoke a response.
- ❖ Take (valued) personal items with you.
- ❖ Go to the designated assembly point.
- ❖ If property damage occurs, do not attempt to intervene but (quickly) look for distinguishing features of the individuals involved to assist with later identification.



EARTHQUAKE

1. **Move away** from potential hazards such as windows or other glass, or equipment that may fall.
2. **Take cover** under solid furniture such as tables, desks or doorway if available.
3. **Wait** for instructions from your Floor Warden.
4. **When the shaking stops:**
 - ❖ If a fire has started, put it out if possible.
 - ❖ Check for electrical and gas hazards.
 - ❖ Assist those nearest to you who may be injured.
 - ❖ Do not go outside - the hazards out there may be worse.
 - ❖ Stay calm.
 - ❖ Stay inside unless a life threatening situation develops.
5. **Evacuate** only when it is safe to do so. If after waiting a reasonable time you do not receive any instructions from your Floor Warden, evacuate the building remembering there may be:
 - ❖ a series of aftershocks
 - ❖ disruption of power (which may disable evacuation alarms)
 - ❖ chemical spills.
6. If an evacuation is ordered, proceed to assembly areas as directed by your Floor or Building Warden.
7. Outside "usual" operating hours for the University, make your way outside the building, checking for other occupants as you leave, taking care not to place yourself at unnecessary risk from falling objects.
8. **Assist others** with safe clearing of other buildings, first aid, communication, transport, clearing of hazardous substances or other activities.

Note:

Unsecured heavy objects above head height and free standing furniture and equipment can cause injury during an earthquake. As part of the hazard management process, these hazards should be either removed or controlled by cross-bracing, affixing to walls, etc.

The Selwyn District Council district lies within the zone of second highest earthquake risk in New Zealand. Earthquakes have the potential to simultaneously affect the campus and the surrounding community and cause other events or circumstances that in combination can be life threatening, e.g. chemical spills, fire, water loss or contamination, building damage resulting in unsafe structures, electricity loss.

These factors, combined with the University's significant day-time population during the academic year (especially in the northeastern quadrant, mean earthquakes must be seriously considered as a threat to University personnel and buildings.



FLOODING

For general flooding of the University area, advice would be issued as and when required. This would include:

1. **Turn off electrical appliances and gas sources.** (The mains would also be turned off.)
2. **Store valuable items** above the likely reach of the floodwater, if possible. (This includes records, equipment) Also store chemical containers and other hazardous substances above this level.

For small floods within buildings due to leaking pipework, flooded sinks, etc.

1. Immediately turn off the water source, if possible.
2. Contact Lincworks, extension 30820 (After hour's telephone security desk - 9999).

The campus site is generally flat with a gentle slope from northwest to the southeast. There are no depressions or old water courses on the main site. Canterbury Regional Council records show that to date neither, the Selwyn or Halswell rivers have affected the University campus or immediate surrounds. Some surface ponding from localised heavy rain have been recorded.

The Canterbury Regional Council has established an early warning flood system. Where and when a threat is established, the information is passed to the regional Civil Defence organisation for assessment and distribution to other civil defence organisations, where applicable. Through the Civil Defence network the University would be given some early warning of flood threat from the Selwyn River. Due to the topography, while flooding may be a threat to the University it is unlikely to cause loss of life.



WINDSTORMS

General advice would be issued as and when required and would include;

1. Stay off the road, especially when towing a caravan or trailer. Shelter in buildings away from windows until the winds subside.
2. Secure any loose equipment, building materials or other materials.

The major windstorm threat to the campus comes from strong southerly or northwesterly gales that occasionally sweep across the Canterbury Plains.

The risk of damage to University buildings and structures, and danger to personnel is low. The only significant exception to this, however, may be potential damage to, and danger from, buildings under construction or roofing materials.

OTHER EMERGENCIES

Procedure in the event of any other emergencies

1. At all times follow the instructions from either your Building Warden or floor warden.
2. When advised, go *exactly* where you are told to, do not wander off sightseeing etc.
3. When at your assembly point you will be informed of the situation and further instructions.

SUMMARY OF RISK RATINGS FOR LOSS OF ESSENTIAL SERVICES

TYPE OF SERVICE LOST	RISK RATING
General information for all major emergencies	Low
Electrical	Medium
Road access	Low
Sewage disposal	Low
Steam supply (heating)	Medium
Telephones	Medium
Water supply	Low

LOSS OF ESSENTIAL SERVICES

General procedure in any major emergency

1. Assess the damage in the building (or Divisional) electrical supply, building stability and water supply. (Also determine the number and nature of any injuries to people within your immediate area.)
2. Contact your Building Warden with this assessment.

In all other cases, contact Lincworks, ext.: 30820 (After hours telephone the security desk-9999).

Loss of Electrical Services

Ensure that any electrically powered equipment or appliance is turned off and/or disconnected from the power supply. This will ensure there is no equipment damaged or unattended when the power supply is reconnected.

The University can use either of the two Electricorp substations at Lincoln Township and Shands Road, Springston. If both supplies were down simultaneously the following would be affected:

- ❖ Heating systems
- ❖ Lighting
- ❖ Facsimile machines
- ❖ PABX system
- ❖ Computer systems and networks
- ❖ Water pumps
- ❖ Other electrically operated equipment.

The University would have to rely upon the use of alternative electrical power generation methods or energy sources. In this respect the University has a number of fixed and portable generators and a coal fired boiler providing steam energy for heating. In a major earthquake, however, the steam heating system could be lost due to disruption of the underground pipe system.

Loss of Road Access

Flooding, earthquake and windblown debris may disrupt road access into and around the campus site. It is unlikely, however, that access to Christchurch, Lincoln or other small settlements in the area would be affected for significant periods given topography and the extensive roading pattern in the district.

The University has on-site tractors, machinery and other equipment to assist in debris/rubble removal from internal roads.

Loss of Sewage Disposal

Sewage is gravity fed to the Lincoln sewage treatment plant south of the Lincoln Township and is then piped into Bromley. As noted earlier, the major threat to the campus site relates to ruptured sewage pipes contaminating the water supply.

Loss of Steam Supply (heating)

Steam is used to heat a significant number of the buildings on site and is used in the kitchens. Steam is ducted around the site via underground reticulated systems.

An earthquake would pose the major threat through rupturing of the underground system. It is feasible therefore that some parts of the heating system could fail in that event. This would be a concern during winter months and alternative heating methods would be required. Despite this, with up to 200 tonnes of coal stored on site, the University is well placed to provide heating to buildings in emergency situations.

Loss of Telephones

The University's PABX telephone system is a complex, computer based facility sensitive to temperature extremes. Power loss could result in irregular operation. There are radio telephones within the University which are connected to emergency power and could be used as a means of emergency communication in a major emergency.

Telephones are connected to emergency power.

Loss of Water Supply

Divisions should prepare emergency plans for protecting water dependent experiments and research projects.

Maintaining a water supply during an emergency is a priority. In this respect the University is well placed in terms of having a substantial storage facility in the form of the central water tower. The University is not reliant upon an external utility authority for its water supply, rather it is sourced from three bores on campus. Water is pumped from the bores to the water tower by submersible electric pumps. The tower has a capacity of 400,000 litres.

Depending upon the nature and scale of the emergency, however, it may be necessary to isolate the tower to protect the water from contamination. For example, an earthquake may rupture underground water and sewage pipes. This in turn could contaminate the water supply at the source or at the mains distribution points. In this scenario it will be necessary to source water directly from the tower.

EMERGENCY RECOVERY PROCEDURES

How the emergency will be terminated

Where the emergency has been serious, a message will be issued by the Human Resource Manager or the Lincworks Manager that normal operation can be resumed. In the event of a major "Civil Defence" emergency, the New Zealand Civil Defence Organisation will inform us.

Recovery

This needs to occur as soon as possible so that all systems are back to normal. This includes clean up, safe storage and disposal of hazardous and contaminated items. This should occur as soon as casualties have been attended to.

Measure to take include:

1. **Inspection** - only enter the affected area if it is safe to do so. If buildings are damaged refer to Section 5 for information on people skilled in such issues as building safety. Look for hazards created by the event, including damaged power lines, burst pipes or leaking hazardous substances. Establish the extent of damage.
2. **Hazards** - Isolate hazards and make the area safe as soon as possible. Check any electrical systems before start-up. Set up physical access barriers to unsafe areas.
3. **Priorities** - Decide on priorities for protection, temporary repair, salvage and restoration.
4. **Protection from elements** - Cover equipment, furniture, machinery, computer hardware and records with waterproof sheets. Secure software and vital records.
5. **Security** - Arrange with security to prevent unauthorised access in critical areas, until physical security is restored. These areas include:
 - (a) Johnston Memorial Lab
 - (b) Registry
 - (c) Laboratories in Hilgendorf and Burns
 - (d) Dangerous Goods Store
6. **Fire protection** - Restore fire protection systems.
7. **Debris** - Start cleaning up debris that create access problems or where further damage is likely to occur. Please note that a written assessment of the damage should be made before full clean up operations commence. It is expected that, unless there is widespread damage, an assessor from the University's insurance company, would need to be involved in this process.
8. **Water** - Remove surplus water from the premises.
9. **Essential Services** - Notify HQ if telephones, electricity or water supplies need to be restored.

10. **Salvage** - Separate damaged goods into those that are slightly damaged and those that are badly damaged. Do not dispose of damaged goods until seen by an insurance assessor. Concentrate on halting deterioration of restorable property. Do not waste time on property that is obviously beyond economic restoration.
11. **Amenities** - Restore toilet and washing facilities as quickly as possible. They will be needed by emergency workers. If they are destroyed arrange for mobile facilities to be hired.
12. Check the condition of any animals.

Note a: Document damage as recovery work proceeds for insurance purposes.

Note b: When there has been an accident which has seriously harmed someone no one may alter the accident scene without the permission of an Inspector from Occupational Safety and Health, Department of Labour (OSH). There are exceptions to this including:

- (i) to save life, prevent harm or relieve suffering
- (ii) maintain access of the general public to essential services or utilities.
- (iii) to prevent serious damage or loss of property.

Debriefing

De-briefing is an essential process as:

1. It allows staff to gather together their records of events for the preparation of reports.
2. It facilitates an assessment of the course of events and the response generated from the Emergency Plan and allows review and amendment where necessary.
3. It provides an opportunity for staff to receive personal assistance.

Report and Evaluation

A (debriefing) report will be compiled by the Health and Safety Manager and Lincworks Manager, in consultation with other staff and team leaders, to identify potential improvements in organisation or facilities and to review the existing plan.

In the event of serious injury the manager or Division Director of the person injured will need to ensure an Incident/Injury form is completed so that this can be forwarded to the Health and Safety Manager and then to OSH.

In the event of injury involving electricity, the manager or Division Director of the person injured will need to complete a prescribed form available from the Ministry of Commerce and forward this to the Health and Safety Manager for further action.