Earthquake

Dr John Goswell

Newcastle 1989

- 5.6 on the Richter Scale

- 13 people died

- Over 160 people were injured

- $4 billion in damages occurred

- 50,000 buildings were damaged

Not an isolated event

Hunter Valley Earthquakes since 1900

Volcano Discovery   https://www.volcanodiscovery.com/home.html

Earthquakes in NSW from 1788 to 1979 (Payne 2010)

Hazard	Risk description	Likelihood	Consequence	Risk priority	Combat agency	Response
Building collapse	Sudden collapse of a building	Rare	Major	Low	FRNSW LEOCON	Plan
Communicable disease	Pandemic	Probable	High	High	Dept. Health	Plan
Earthquake	If causing significant damage	Rare	Major	Moderate	LEOCON	Plan
Bushfire	Forest and/or grass fires nearby	Likely	Minor	Low	NSW RFS	Plan
Fire (commercial)	Affecting the medical centre	Possible	Major	Major	FRNSW	Plan
Flood (flash)	Heavy rainfall causes excessive localised flooding with minimal warning time	Possible	Low	Low	NSW SES	Plan
Hazardous release	Hazardous material is released due to accident or incident	Unlikely	Moderate	Low	FRNSW	Plan
Heatwave	High temperatures affecting the population	Almost certain	Low	Low	SEOCON	Plan
Power failure	Prolonged loss of utility	Possible	Major	Moderate	LEOCON	Plan
No water supply	Prolonged loss of utility	Possible	Low	Low		Plan
Failure of sewer system	Prolonged loss of utility	Unlikely	Low	Low		Plan
Gas supply failure	Prolonged loss of utility	Unlikely	None	None		No plan
Loss of all phone systems	Prolonged loss of utility	Unlikely	Major	Moderate		Plan
Loss of internet	Prolonged loss of utility	Possible	Moderate	Moderate		Plan

Risk Assessment (affecting the ability of the practice to continue running)

In the event….

An earthquake hits

- Violent shaking

- The building starts to collapse
    - Initial confusion
    - Panic
    - Screaming

During the Earthquake

- Drop. Cover. Hold on.
- If inside, stay inside.
- Stay away from glass windows, bookcases, etc
- Do not stand in a doorway.
- If outside keep away from trees, power poles, etc.

Immediate assessment

- Anyone injured?

- Any immediate risks?
  - Building collapse
  - Electricity
  - Fire
  - Gas

- Evacuate the building?

Newcastle Earthquake - Newcastle Library
https://newcastle.nsw.gov.au/library/newcastle-stories/online-collections/the-newcastle-1989-earthquake

Who is in charge?

- Chain of command.
  - The practice principal?
  - The disaster coordinator?

- Who has what skill set?
  - Triage
  - First aid
  - Counting heads
  - Organizational skills
  - Clear headedness

Evacuate the building

- Designated area/s. Why?
- Who is responsible for counting heads?
  – The person in charge?
  – The head receptionist?
  – The practice manager?
- Count heads immediately
- What if someone is missing?

Is the building safe?

- Who initially decides?
- Who eventually decides?
  - Builder?
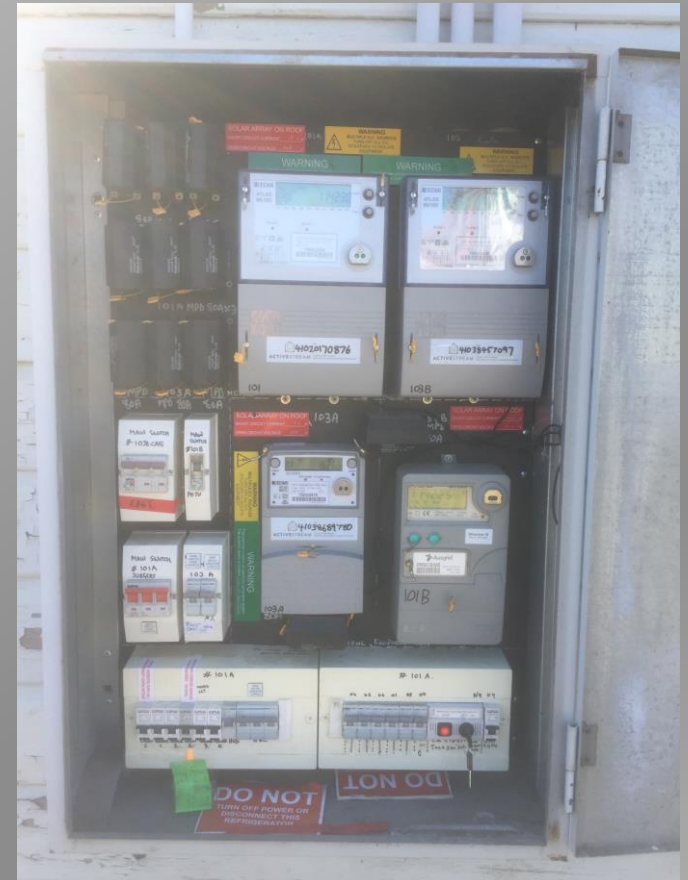 - Engineer?
  - Practice principal?

Fire

- ## Can spot fires be put out?
  - – Where are the fire extinguishers?

- ## Call the fire services?
  - – How?

- ## What if they are delayed?
  - – Are you certain everyone is out?
  - – Do you rescue the server?
  - – Who decides?

Electricity

- Should you turn it off
  - Who decides?

- How do you turn it off?
  - Where do you turn it off?
  - What about solar?

Gas

- Should you turn it off
  - Who decides?
  - Where do you turn it off?
  - How do you turn it off?

Water

- ## Should you turn it off
  - ### Who decides?

- ## How do you turn it off?
  - ### Where do your turn it off?
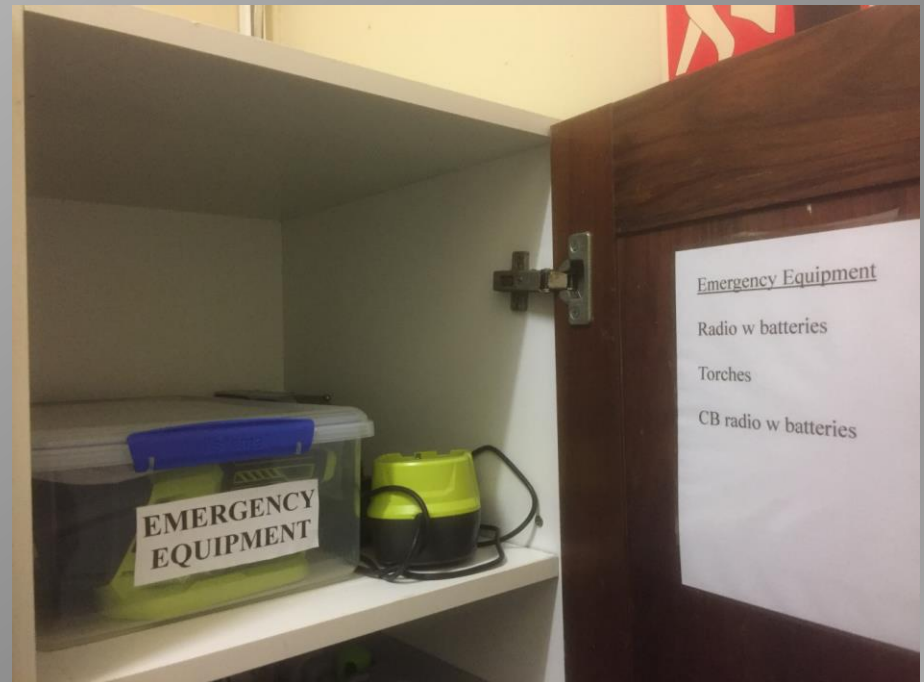 - ### How do you turn it off?

Lights

If the power is off:

- Will you be able to see?

- Where are the torches kept?

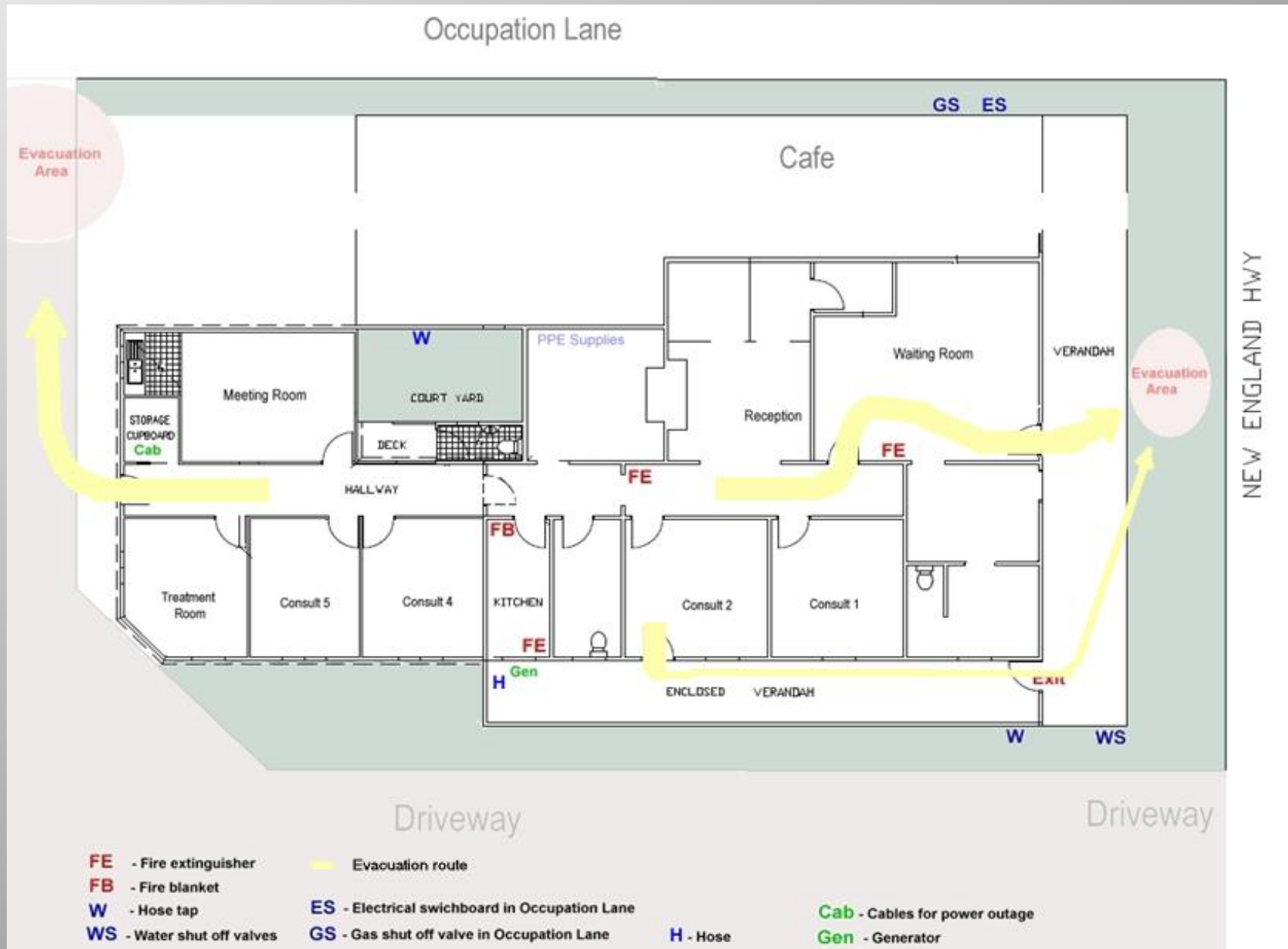- Can they be found in the dark?

- Are the batteries fresh?

Emergency Kit

- Does your practice have an emergency kit?
- Do you know where it is located?

Can other people find what is needed?

Early Considerations

- ?Help others nearby

  – Beyond that may be unwise

- Can the practice function?

  – Note that injured people may come to you for help.

  – Will you make your services available?

- Are the hospitals functioning?

  – How do you find out?

- Who co-ordinates health issues in a disaster?

Who do you call?

- SES
- Electrician
- Plumber
- Gas plumber
- Communications provider
- Staff
- Insurance
- Software

Where are the numbers kept?

Business Continuity Plan

The Aftermath

- Helping people cope
- What resources are available?
- Learning from the disaster

Hunter Photobank:

https://newcastle-collections.ncc.nsw.gov.au/library?page=explore&record=ecatalogue.77994

Planning

Note that the practice may be called upon to provide more than usual services

- The hospitals may have reduced function
- Access to other health services may be limited by road damage/closures/too busy

Hunter Photo Bank

https://newcastle-collections.ncc.nsw.gov.au/library?page=explore&record=ecatalogue.62257
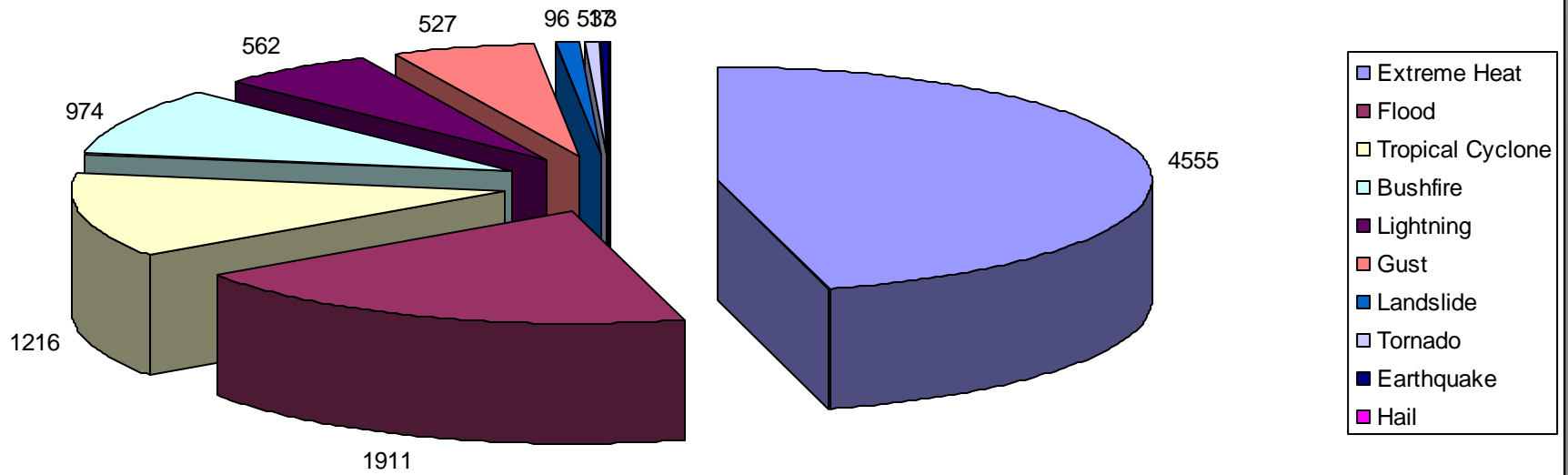
Planning

Note that an earthquake may result in the loss of

- Power
- Communications (phone, internet)
- Water
- Gas
- Sewerage
- Building integrity
- Staff

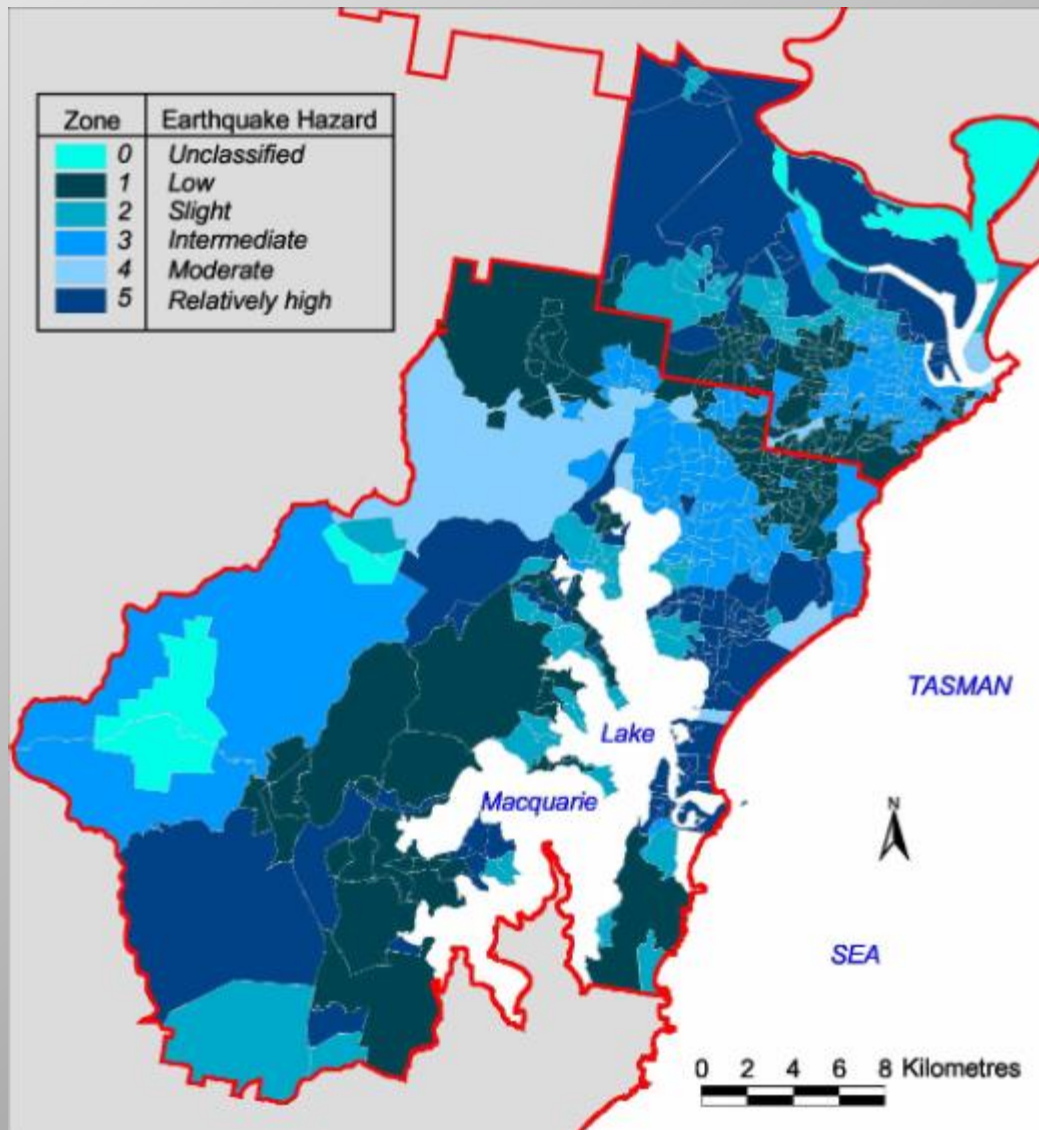- **Have you planned for these scenarios?**

Disaster Plan

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Risk Assessment (affecting the ability of the practice to continue running)

Deaths from natural disasters 1900-2015

Legend	
■ Extreme Heat
■ Flood
□ Tropical Cyclone
□ Bushfire
■ Lightning
■ Gust
■ Landslide
□ Tornado
■ Earthquake
■ Hail

562
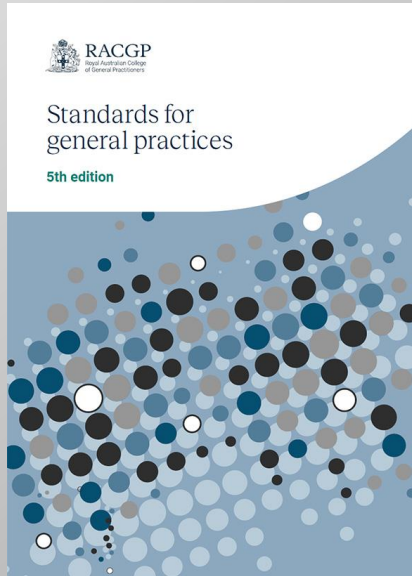527
96 58 77
974
4555
1216
1911

Disaster Plan

Risk Frontiers' Newcastle/Lake Macquarie region regolith zonation

VULNERABILITY OF RESIDENTIAL STRUCTURES IN AUSTRALIA, Edwards, M.R. et al., 2004

https://www.researchgate.net/publication/274955686_Vulnerability_of_residential_structures_in_Australia

The RACGP Fifth Standards

C3.3 A Our practice has an emergency response plan for unexpected events, such as natural disasters, pandemic diseases, or unplanned absences of clinical team members.

https://www.racgp.org.au/running-a-practice/practice-standards/standards-5th-edition/standards-for-general-practices-5th-ed/core-standards/core-standard-3/criterion-c3-3-emergency-response-plan

Disaster Management and Business Continuity Plan

Needs

– a coordinator/planner

– regular review

– to be accessible in a disaster

- in-house copy (?keep with emergency kit)

- copy held outside the practice

- ?online (privacy issues)

Disaster Management and Business Continuity Plan

Photo from Newcastle Library

https://newcastle.nsw.gov.au/library/newcastle-stories/online-collections/the-newcastle-1989-earthquake

Options

- Make your own
- RACGP ERPT
- ACRRM template
- HNECCPHN template
- Rural Health West template
  (https://www.practiceassist.com.au/PracticeAssist/media/ResourceLibrary/General%20Practice%20Accreditation/Emergency-Response-Plan-Template-V2-200710.pdf)

RACGP

Education   Clinical resources   Running a practice   Advocacy   News

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Emergency Response Planning Tool

🏠 Home ▸ Running a practice ▸ Practice management ▸ Emergencies and pandemics ▸ Emergency Response Planning Tool

Emergency and pandemic preparedness, response and recovery

The Emergency Response Planning Tool (ERPT) is a cloud based, practical online tool that assists general practices to better prepare for, respond to and recover from the impacts of emergencies and pandemics.

The tool guides users through a series of planning templates where critical information about the practice can be entered and saved. The information is used to create an emergency response plan which is individually tailored to the general practice. The customised plan is then saved and stored in the cloud and can also be printed as a hard copy resource at any time.

The ERPT is updated with new modules as new risks, or necessary changes to business practices, are identified. Subscribers to the ERPT can now access and complete their COVID Safety Plan within the tool, as well as formulate their cyber incident response plan.

An annual subscription for the tool is $385 (including GST).
Some Primary Health Networks (PHNs) and state departments of health are providing funding for access to the ERPT to general practices in their region. Contact your PHN or email Healthpoint ANZ via help@healthpointanz.com.au or call 1800 008 384 (7.00am–3.00pm AEST) for further information.

Find out more about the tool and how it works by watching this 5-minute video.

Disaster management plan template

RACGP Resources

- Managing emergencies in general practice: a guide for the preparation, response and recovery

https://www.racgp.org.au/FSDEDEV/media/documents/Running%20a%20practice/Support%20and%20tools/Managing-emergencies-in-general-practice.pdf

- Disaster resources for general practice

https://www.racgp.org.au/running-a-practice/practice-management/managing-emergencies-and-pandemics/fact-sheets

- Emergencies and pandemics

https://www.racgp.org.au/running-a-practice/practice-management/managing-emergencies-and-pandemics

- Providing care and support during disasters

https://www.racgp.org.au/running-a-practice/practice-management/managing-emergencies-and-pandemics/naturaldisasters

ACRRM Resources

- Emergency Planning template
  https://www.acrrm.org.au/docs/default-source/all-files/disaster-management-plan-template.docx?sfvrsn=c43ba5a8_4

- Natural Disaster Readiness & Recovery
  https://www.acrrm.org.au/support/clinicians/community-support/natural-disaster-readiness-recovery

- Approach to Care – Natural Disasters (online learning)
  https://mycollege.acrrm.org.au/search/find-online-learning/details?id=17812