Historic earthquakes

# (McSaveney, 2009b)

## The 1931 Hawke's Bay earthquak

In 1931, New Zealand's deadliest earthquake devastated the cities of Napier and Hastings. At least 256 people died in the magnitude 7.8 earthquake – 161 in Napier, 93 in Hastings, and 2 in Wairoa. Many thousands more required medical treatment.

#### 256 or 258?

The official death toll of the Hawke's Bay earthquake is 256. But there are 258 names on the memorial, and this unofficial number is likely to be correct.

Tuesday morning, 3 February 1931, at 10.47 a.m., the ground in the awke's Bay region heaved sharply upward and swayed. A deceptive half-minute pause was followed by a downward motion and violent shaking and rocking. In all, the quake spanned two and a half minutes.

## **Fatalities**

As buildings began to disintegrate, many people fled outdoors into a lethal rain of chunks from ornate facades, parapets and cornices. Buildings swayed violently, and their walls bulged and collapsed into the streets in avalanches of brick and masonry that crushed vehicles and people. Roofs caved in on buildings that had large open internal areas, such as churches, libraries and theatres. In some buildings the internal floors pulled free of the swaying walls, collapsing inward in a jumble of girders, wood and plaster.

In Napier, the recently built Nurses' Home collapsed, killing clerical aff and off-duty nurses who were sleeping. In Hastings at least 50 people were in Roach's department store when it collapsed; 17 died and many were seriously injured. The entire front of the five-storey Grand Hotel in Hastings crumbled into Heretaunga Street, claiming eight lives. Fifteen died at the Park Island Old Men's Home near Taradale, but a 91-year-old man was pulled alive from the rubble three days later.

The earthquake struck on the first day of school after the summer holidays. Most pupils managed to escape to the outdoors in time, but nine students died in the wreckage of the brick Napier Technical College. Several of those students had gone back into the school to rescue trapped classmates. Seven students also died at the Marist Fathers' Seminary in Greenmeadows.

## **Everybody out**

This account is from Jock Stevens, who was at Napier Boys' High School when the earthquake struck:

'[A] boy said "Earthquake, Sir!" We were immediately struck with the full force of the quake. The master in charge, Matt Alexander, said



Extent of shaking, Hawke's Bay earthquake, 3 February 1931



Damage to buildings (1st of 3)



Napier in flames (1st of 2)



Fireman in the wreckage



Napier after the 1931 earthquake

"Everybody out!" ... The shakes sent me flying onto the floor of the doorway and I can still feel the feet of the class trampling over me. I got to my feet and from there I saw the Assembly Hall collapse like a pack of cards - each wall fell in then the tiled roof came down. Then dust clouds blotted it out.' 1

## The fires begin

Within minutes of the earthquake, fire began in three Napier chemist shops in the business district. Firefighters were almost helpless – water pressure faded to a trickle as the reservoir emptied. Attempts to pump sea water from the beach were short-lived, as hoses quickly became blocked by shingle. By mid-afternoon Napier's business area was ablaze. Some 36 hours later, after a remarkable attempt by firemen, volunteers and sailors working through the night, the fires were extinguished. Almost 11 blocks of central Napier were gutted. Fires also sprang up in Hastings, but water supplies were available there shortly after the earthquake and fire damage was less extensive.

^ head of the spreading fires and amidst continuing aftershocks, sperate rescuers, using crowbars, shovels, picks, and their hands, worked to reach people trapped in wrecked buildings. Some could not be rescued in time; a doctor administered a lethal overdose of morphine to an injured woman trapped in the ruins of St John's Cathedral before fire reached her. A number of rescuers were killed as aftershocks caused further collapses.



Clearing the rubble



The hazards of rescue work



Walking to safety (1st of 2)

### Rescue work

The navy sloop HMS Veronica had berthed in Napier's harbour that morning. When the earthquake struck, the harbour bottom rose, leaving the ship aground. On deck, sailors watched as the wharf buckled, roads split open, and buildings collapsed in clouds of dust. The Veronica radioed Auckland, and within hours the cruisers HMS Dunedin and Diomede were on their way, each carrying 450 men and officers, doctors and nurses from Auckland Hospital, and medical and emergency equipment. They arrived the following dawn. Meanwhile, eams of the Veronica's sailors spread out into the town to help with rescue efforts.

Napier's hospitals were badly damaged and unusable, so patients were moved to the lawns of the Botanical Gardens, where a surgical station was set up. Emergency hospitals were set up at the Hastings racecourse and at Napier Park racecourse, where doctors operated beneath the grandstand. In the ensuing days, many injured people were evacuated to other centres.

#### Aftershocks

After the earthquake most homes lacked water, electricity, sewerage and chimneys, and people camped in open areas as continuous tremors made it dangerous to stay inside. Within a day the army had set up a tent camp that could house 2,500 people. Women and children were encouraged to leave the area, and refugee camps sprang up in a number of North Island towns. Able-bodied men were required to stay to provide labour for search, demolition and clean-up.

Ten days after the quake, the region was shaken by the largest aftershock since the initial earthquake, a powerful magnitude 7.3 jolt that did yet more damage to already weakened buildings.



#### Footnotes

1. From Robert McGregor, *The great quake – the story of the 1931 Hawke's Bay earthquake*. Napier: Regional Publications, 1989, p. 20. > Back

## **Biographies**



Charles Edward Adams, 1870-1945



Edmund Anscombe, 1874-1948



William Edward Barnard, 1886-1958



James Walter Chapman-Taylor, 1878–1958



William Herbert Guthrie-Smith, 1862-1940



Leo Lemuel White, 1906-1967

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