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Natural Hazards

HIC Case Study New Zealand 2016



quiz



The Big Picture



Key Terms



Immediate responses - The reaction of people as the disaster happens and in the immediate aftermath.



Long-term responses - Later reactions that occur in the weeks, months and years after the event.



Primary effects - The initial impact of a natural event on people and property, caused directly by it.



Secondary effects - The after-effects that occur as indirect impacts of a natural event, sometimes on a longer timescale.



Overview

- November 14th 2016
- 00.02 am
- 95km north east of Christchurch
- High income country
- Magnitude 7.8
- Destructive margin – Australian and Pacific



Primary Effects

- 2 people died.
- 50 people were injured.
- 60 people needed emergency housing.
- Over 190km of roads and 200km of railway lines were destroyed.
- 20,000 buildings were damaged or destroyed.
- Water, sewerage & power supplies cut off.
- Total damage estimated at US \$8.5 billion.



Secondary Effects

- 100,000 landslides blocked roads & railways.
- A landslide blocked the Clarence River causing flooding - 10 farms were evacuated.
- The earthquake triggered a tsunami of 5m, leaving debris up to 250 metres inland.



Immediate Responses

- A tsunami warning was issued and residents were told to get to higher ground.
- Hundreds housed in emergency shelters.
- Vulnerable people evacuated by helicopter.
- Power restored within hours.
- International warships were sent to Kaikoura with supplies such as food, medicine and portable toilets.
- Temporary water supplies set up.
- Other countries sent food and medicine.



Long-term Responses

- \$5.3 million from District Council for repairs and rebuilding.
- Road and rail routes reopened within 2 years.
- Relief fund set up to provide basic supplies.
- By March 2017, a permanent water main had been laid in Kaikoura. the new pipe was designed to move with any future earthquakes so it won't break.