Earthquake Hazards

The main hazards are:

1. Ground failure
2. Tsunamis
3. Structural Damage

**Ground Failure:**

In locations of unconsolidated ground the following failures can occur:

* Floodplains and beaches: loose soil mixes with water creating a quicksand like condition called liquification
  + Water squeezes through surface in sand boils
* Sandy hills easily collapse

**Tsunamis**

* Waves are generated by the sudden displacement of water
* Often called tidal waves when waves are very far apart
* Can travel across oceans at fast speeds of up to 1000km/hr

**Structural damage:**

* Collapse of buildings, roads, bridges and other structures
* Analysis can lead to the discovery of hidden faults.

**Preventing damage:**

1. Building codes/techniques:
   1. Concreate and brick should contain steel rods
   2. Wooden structures with post and beam design avoided or re-inforced
   3. Buildings on loose ground anchored in bedrock
   4. Gas/Water lines flexible so they do not break
2. Devise warning systems and practice survival and evacuation plans