



## ASIA-PACIFIC

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# Huge blast at Japan nuclear power plant

**A huge explosion has rocked a Japanese nuclear power plant damaged by Friday's devastating earthquake.**

A pall of smoke was seen coming from the plant at Fukushima. Four workers were injured.

Japanese officials say the container housing the reactor was not damaged and that radiation levels have now fallen.

A huge relief operation is under way after the 8.9-magnitude earthquake and subsequent tsunami, which are thought to have killed at least 1,000 people.

The offshore earthquake triggered a tsunami which wreaked havoc on Japan's north-east coast, sweeping far inland and devastating a number of towns and villages.

Japan's Prime Minister Naoto Kan has declared a state of emergency at the Fukushima number 1 and 2 power plants as engineers try to confirm whether a reactor at one of the stations has gone into meltdown.

Tests showed at least three patients evacuated from a hospital near the plant had been exposed to radiation, public broadcaster NHK quotes local government officials as saying.

The patients had reportedly been waiting outside the hospital for rescue helicopters when the explosion hit the plant.

### **Evacuation zone expanded**

Television pictures showed a massive blast at one of the buildings of the Fukushima-Daiichi plant, about 250km (160 miles) north-east of Tokyo.

A huge cloud of smoke billowed out and large bits of debris were flung far from the building.

The Tokyo Electric Power Co (Tepco), the plant's operator, said four workers had been injured.

The Japanese government's chief spokesman, Yukio Edano, said the concrete building housing the plant's number one reactor had collapsed but the metal reactor container inside was not damaged.

He said radiation levels around the plant had fallen after the explosion.

Officials ordered the evacuation zone around the plant expanded from a 10km radius to 20km (12 miles). The BBC's Nick Ravenscroft said police stopped him 60km from the Fukushima-Daiichi plant.

Plans are being made to distribute iodine, which can be used to combat radiation sickness, to residents of the evacuation zone.

Japan's nuclear agency said earlier on Saturday that radioactive caesium and iodine had been detected near the number one reactor of the power station.

The agency said this could indicate that containers of uranium fuel inside the reactor may have begun melting.

Air and steam, with some level of radioactivity, was earlier released from several of the reactors at both plants in an effort to relieve the huge amount of pressure building up inside.

Mr Kan said the amount of radiation released was "tiny".

### **Cooling system failure**

Nuclear reactors at four power plants in the earthquake-struck zone automatically shut down on Friday.

In several of the reactors at the two Fukushima plants the cooling systems, which should keep operating on emergency power supplies, failed.

Without cooling, the temperature in the reactor core rises, with the risk that it could melt through its container into the building housing the system.

Pressure also builds in the containers housing the reactor.

Tepco said it was pumping water into the Fukushima-Daiichi's number one reactor in a bid to cool it down.

The reactors the plant are Boiling Water Reactors (BWR), one of the most commonly used designs, and widely used throughout Japan's array of nuclear power stations.

Analysts say a meltdown would not necessarily lead to a major disaster because light-water reactors would not explode even if they overheated.

But Walt Patterson, of the London research institute Chatham House, said "this is starting to look a lot like Chernobyl".

He said it was too early to tell if the explosion's aftermath would result in the same extreme level of radioactive contamination that occurred at Chernobyl.

The explosion is likely to have been caused by melting fuel coming into contact with water, he told the BBC.

The 8.9-magnitude tremor struck on Friday afternoon off the coast of Honshu island.

It was nearly 8,000 times stronger than last month's quake in New Zealand that devastated the city of Christchurch, scientists said.

Some of the same search and rescue teams from around the world that helped in that disaster are now on their way to Japan.

As relief workers begin to reach the earthquake zone, the scale of the damage is being revealed.

One of the worst-hit areas was the port city of Sendai, in Miyagi prefecture, where police said between 200 and 300 bodies were found in one ward alone.

The town of Rikuzentakada, in Iwate prefecture, was reported as largely destroyed and almost completely submerged. NHK reported that soldiers had found 300-400 bodies there.

Chief government spokesman Yukio Edano said it was believed that more than 1,000 people had died.

NHK reports that in the port of Minamisanriku in Miyagi prefecture, the authorities say that about 7,500 people were evacuated to 25 shelters after Friday's quake but they have been unable to contact the town's other 10,000 inhabitants.

A local official in the town of Futaba, in Fukushima prefecture, said more than 90% of the houses in three coastal communities had been washed away by the tsunami.

"Looking from the fourth floor of the town hall, I see no houses standing," Kyodo news agency quoted him as saying.

**Are you in Japan? Do you live near Fukushima? Have you been affected by the earthquake? You can send us your experiences using the form below.**

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