

Study estimates Fukushima health effects

U.S. researchers have released a study indicating that the global health effects of radioactive fallout from Japan's Fukushima nuclear accident may be deadlier than predicted. Previous reports claimed that the release of radiation would likely cause no severe health effects

KEY REPORT FINDINGS

► Cancer-related deaths

Range from 15 (lowest) to 1,300 (highest), with 130 being most likely number

► Cancer-related cases

Between 24 and 2,500 – 180 most likely

► Global distribution

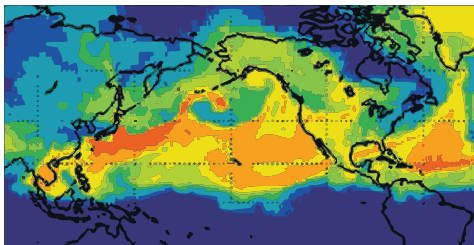
Most people affected would be in Japan. Extremely small effects seen in mainland Asia and North America

► **Containment:** Casualties would have been higher if more radioactivity had fallen on land – about 80% was deposited in Pacific Ocean

► **Other casualties:** Data predicts small number of casualties – between 2 and 12 – among Fukushima plant workers. About 600 elderly or ill people were reported to have died during evacuation of area around plant in 2011



Satellite image of damage at Fukushima nuclear plant following earthquake and tsunami of March 11, 2011



Study used 3D atmospheric model to predict radiation spread, and health-effects model to estimate human exposure to radioactivity

ESTIMATES BY REGION*

	Number of deaths			Number of cases		
	Low	Medium	High	Low	Medium	High
Asia (incl. Japan)	13	99	931	22	139	1,510
North America	0.24	1.4	8.6	0.39	2.1	22
Europe	0.17	0.89	4.8	0.28	1.4	11
Africa	0.08	0.55	3.8	0.14	0.9	12
Japan	13	94	905	20	131	1,450
Worldwide total**	15	130	1,300	24	180	2,500

*Figures are for inhalation and external exposure to radiation. **Worldwide totals also include ingestion exposure and other factors based on radiation emission rates and evacuation radius around plant