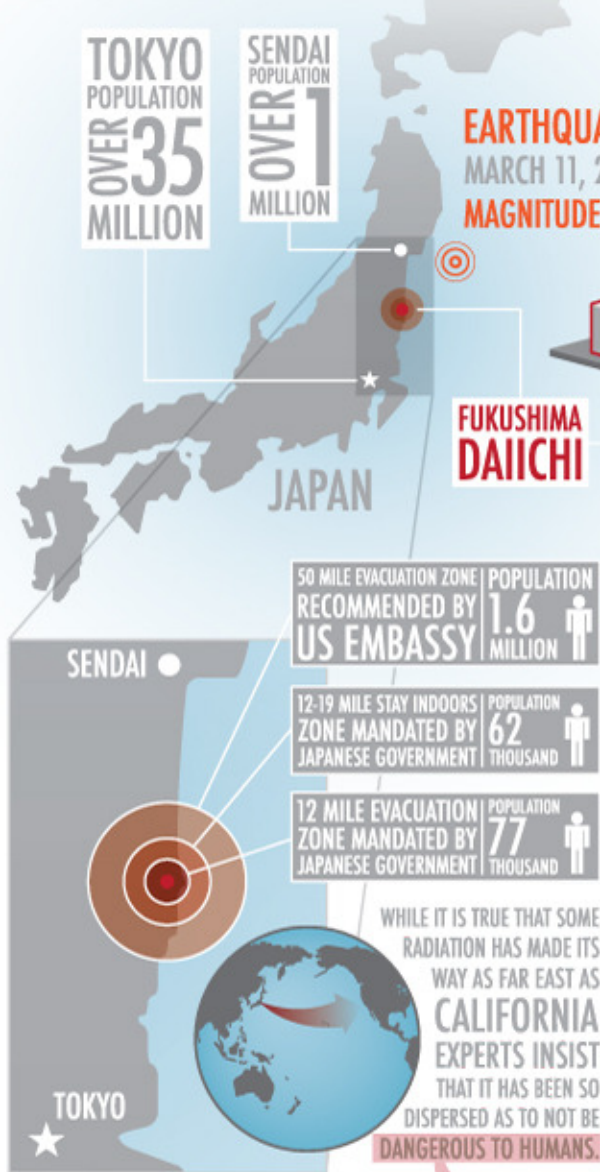
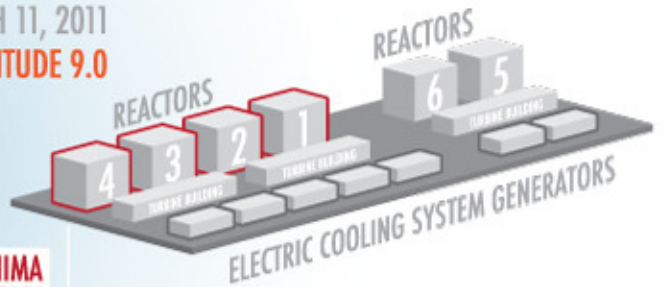


SOME ANSWERS TO LINGERING QUESTIONS ABOUT FUKUSHIMA DAIICHI

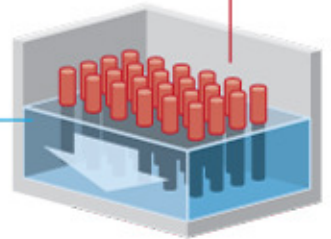
FIRST OF ALL, IT'S PRONOUNCED **FUKU** **DA** **EE** **CHEE**
 IT'S ON THE EASTERN COAST OF JAPAN
 IN BETWEEN THE CITIES OF TOKYO AND SENDAI



THE **EARTHQUAKE** INITIALLY KNOCKED OUT POWER TO THE COOLING SYSTEM. BACKUP DIESEL GENERATORS CAME ON-LINE WHICH WERE THEN KNOCKED OUT BY THE **Tsunami**



REACTORS 1-4 HAVE ALL BEEN PARTIALLY OR TOTALLY DESTROYED BY EXPLOSIONS OR FIRE. ADDITIONALLY: **REACTOR 1** IS PRESUMED TO HAVE HAD A PARTIAL MELTDOWN, **REACTOR 2** IS PRESUMED TO HAVE HAD A PARTIAL MELTDOWN, **REACTOR 3** IS PRESUMED TO HAVE HAD A PARTIAL MELTDOWN, **REACTOR 4** WAS OFFLINE FOR MAINTENANCE, BUT CONTAINED SPENT FUEL RODS WHICH MAY HAVE BEEN EXPOSED TO AIR. **REACTORS 5 AND 6** ARE SHUT DOWN AND THE BUILDINGS ARE NOT DAMAGED BUT THERE IS CONCERN THAT THE SPENT FUEL RODS THEY CONTAIN MAY HAVE BEEN EXPOSED. ACTUALLY, ALL OF THE REACTORS STORED **SPENT FUEL RODS** WHICH ARE **RADIOACTIVE** AND CONTAIN RESIDUAL **HEAT**. THEY NEED TO BE KEPT **COOL** CONSTANTLY

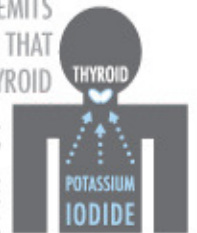


IF THE **POOLS** IN WHICH THEY ARE KEPT BECOME DEPLETED, THE SPENT FUEL RODS WILL BE EXPOSED TO AIR. THIS CAN CAUSE THE RODS TO RELEASE **RADIATION, OVERHEAT, AND CATCH FIRE.**

IN 1990, THE INTERNATIONAL ATOMIC ENERGY AGENCY INTRODUCED THE **INTERNATIONAL NUCLEAR AND RADIOLOGICAL EVENT SCALE** SO SEVERITY OF EVENTS CAN BE COMMUNICATED QUICKLY



ONE OF THE BY-PRODUCTS OF A NUCLEAR ACCIDENT SUCH AS THIS IS **IODINE 137** IT IS DANGEROUS BECAUSE IT EMITS WAVES OVER SHORT RANGES THAT CAN CAUSE CANCER IN THE THYROID WHICH ACCUMULATES IODINE. **POTASSIUM IODIDE** PILLS MAY BE TAKEN TO SATURATE THE THYROID AND THUS PROTECT IT FROM THE RADIOACTIVE IODINE.



THE DESIGN OF FUKUSHIMA DAIICHI PREVENTS IT FROM REACHING THE LEVEL OF THE CHERNOBYL ACCIDENT, HOWEVER, A FINAL OPTION BEING CONSIDERED IS TO BURY THE ENTIRE PLANT UNDER SAND AND CONCRETE TO PREVENT A **CATASTROPHIC RELEASE OF RADIATION, WHICH WAS WHAT THEY FINALLY DID AT CHERNOBYL.**

