FAQ’s on Radiation Hazard in Japan

Who are the people most at risk from radiation due to events at the Fukushima Daichii Nuclear plant?

People living within 20 km radius of the plant have been evacuated by the government and those living between 20-30 km radius of the plant are being asked to evacuate voluntarily. There are no health risks to people living in other countries from radioactive material released into the atmosphere from the Japanese nuclear power plants.

Is there a radiation risk from exposure to food?

Yes, contaminated food can be a radiation source. Radioactive iodine and caesium has been detected in vegetables and milk obtained from around the nuclear plant area.

What is the risk from drinking water?

On March 23, the Tokyo government announced that the level of radioactivity in the city’s water, caused by radioactive iodine emanating from the quake- and tsunami-damaged Fukushima Daiichi nuclear power plant 149 miles (240 km) to the north, had exceeded safe levels for infants. Hence all infants were supplied with bottled water. Radioactive decontamination of water is also possible by demineralization (eg. reverse osmosis) or distillation.

What is the normal exposure of an average person to radiation?

On average, a person is exposed to approximately 3.0 milli Sieverts (mSv)/year, of which 80% (2.4 mSv) is due to naturally-occurring sources (i.e., background radiation which includes cosmic rays from space and radioactive materials in soil), 19.6 % (almost 0.6 mSv) is due to the medical use of radiation and the remaining 0.4% (around 0.01 mSv) is due to other sources of human-made radiation.

Do travellers returning from Japan represent a health risk for others?

Travellers returning from Japan who have come from the 20 km evacuation zone surrounding the Fukushima Daichii nuclear power plant and who have undergone proper screening and decontamination procedures, and travellers from all other areas, do not pose a radioactive health risk to others and do not require screening.

How does taking potassium iodide tablets help?

Among persons exposed to radioactive iodine, the risk of thyroid cancer can be lowered by taking potassium iodide pills, which helps prevent the uptake of the radioactive iodine. Most pregnant women can take potassium iodide pills, it will cross the placenta and protect the thyroid of the growing fetus, as well as the mother. Breastfeeding women should take potassium iodide tablets only when advised by public health authorities. However, this will not be sufficient to fully protect the breastfed child who will need potassium iodide as well. Intake of other forms of iodine (iodized salt and iodine from other household sources such as disinfectants and water sterilizing solutions) is not recommended.

If one is exposed to high levels of radiation, what should one do?

If you are coming indoors after radiation exposure, undress in the doorway to avoid further contamination in your home or shelter. Remove clothing and shoes and place them in a plastic bag. Seal the bag and place it in a safe location away from living areas, children, and pets. Shower or bathe with warm water and soap. Notify authorities that you may have contaminated clothing and personal belongings to be handled appropriately and disposed of according to accepted national procedures.


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