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## KNDO KNDU Right Now

### First West Coast radiation detection

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RICHLAND, Wash. - Pacific Northwest National Laboratory in Richland detected trace amounts of the radioisotope Xenon-133 from the nuclear incident at Fukushima.

This occurred Wednesday, March 16, and was the first detection in the continental United States. Subsequent measurements here at PNNL were a bit higher but again significantly below levels that would impact public health. On Friday, March 18, sensors here also showed the presence of iodine isotopes, but at even lower levels than the xenon isotopes.



PNNL has this ultra-sensitive monitoring capability that allows them to detect very low levels of nuclear releases.

The dose rate from this amount of radioactivity poses no threat to public health and is a tiny fraction of what a person receives from natural background sources, such as the sun, each day.

Here's a list of Q and A researchers have sent us:

Q: What specifically are you finding?

A: On Wednesday, March 16, Pacific Northwest National Laboratory (PNNL) in Richland, Wash., initially detected a small amount of the radioactive isotope xenon-133, whose origin was determined from atmospheric models to be consistent with a release from the Fukushima reactors in northern Japan. The levels of xenon-133 that PNNL detected were extremely low and pose no health hazard. More recently the levels measured were a bit higher but again significantly below levels that would impact public health. On Friday, March 18 sensors at PNNL also showed the presence of iodine isotopes, but at even lower levels than the xenon isotopes.

Q: Where and when did you detect it?

A: It was first detected in Richland, Washington at Pacific Northwest National Laboratory. PNNL is collecting data continuously; however our initial data was collected and measured on March 16.

Q: How do you know what you're detecting is coming from the incident in Japan?

A: The detection is consistent with isotopes detected locally in Japan, and the measurements are consistent with calculations of where we expect the location of a plume. We have ruled out any possible local sources such as the nuclear power plant at Energy Northwest.

Q: What levels are they – do they pose any health problems?

A: The initial levels measured were approximately 0.1 disintegrations per second per cubic meter of air. The dose rate from this amount of radioactivity poses no threat to