



FDA's 2014 Radionuclide Testing Results for Alaska

Fukushima Radiation Not Detected (ND)

FDA Analyses Confirms that Alaska's Seafood is Safe from Fukushima Radiation

The Food and Drug Administration (FDA) is the lead U.S. agency on food safety. The agency has been monitoring radiation in both domestic and imported foods and determined that there have been no levels of Fukushima radiation in those foods that would pose a public health concern. However, Alaskans have insisted on Alaska-specific sampling and data. The Alaska Departments of Environmental Conservation (DEC) and Health and Social Services (DHSS) coordinated with the FDA for them to analyze Alaska fish species that are known to migrate from the western Pacific Ocean and that are harvested by commercial, recreational and subsistence fishers. DEC and DHSS developed the sampling plan. DEC Food Safety inspectors collected the samples during their 2014 fishing season inspections following FDA sampling protocols. Samples were collected over the course of the fishing season, spring to late summer. FDA's Winchester lab in Massachusetts analyzed the fish samples using high resolution gamma spectrometry.

What fish were sampled?

Fish species were selected that are known to migrate from the western Pacific Ocean and species that are important to subsistence, recreational fishing, and commercial fishers.

- King (Chinook) salmon
- Chum salmon
- Sockeye (red) salmon
- Pink salmon (humpies)
- Halibut
- Pollock
- Sablefish
- Cod

How were samples collected?

All samples were collected following FDA's sampling protocol. Composite samples of filet tissue of a minimum of 4 pounds were collected for analysis.

Where were samples collected?

Samples were collected from four regions of the state.

- Aleutian Bering Sea
- Bristol Bay
- Gulf of Alaska
- Southeast

What were the samples analyzed for?

Samples were analyzed for Fukushima related radionuclides Iodine-131 (I-131), Cesium-134 (Cs-134), and Cesium-137 (Cs-137).



FDA's 2014 Radionuclide Testing Results for Alaska Fukushima Radiation Not Detected (ND)

What were the results?

No samples had any detectable levels of Fukushima-related radiation. All results were non-detect (ND).

How do we know fish are safe?

All samples were non-detect for Fukushima-related radionuclides (I-131, Cs-134, and Cs-137).

Was Strontium-90 (Sr-90) sampled for?

Only one or two of the first samples were tested for Sr-90. No strontium was detected. Based upon FDA's lab protocols, Sr-90 is not tested unless cesium is detected at high levels. All cesium results were non-detect and therefore Sr-90 was not tested further.

Why are some researchers detecting Fukushima-related radiation, whereas FDA is not?

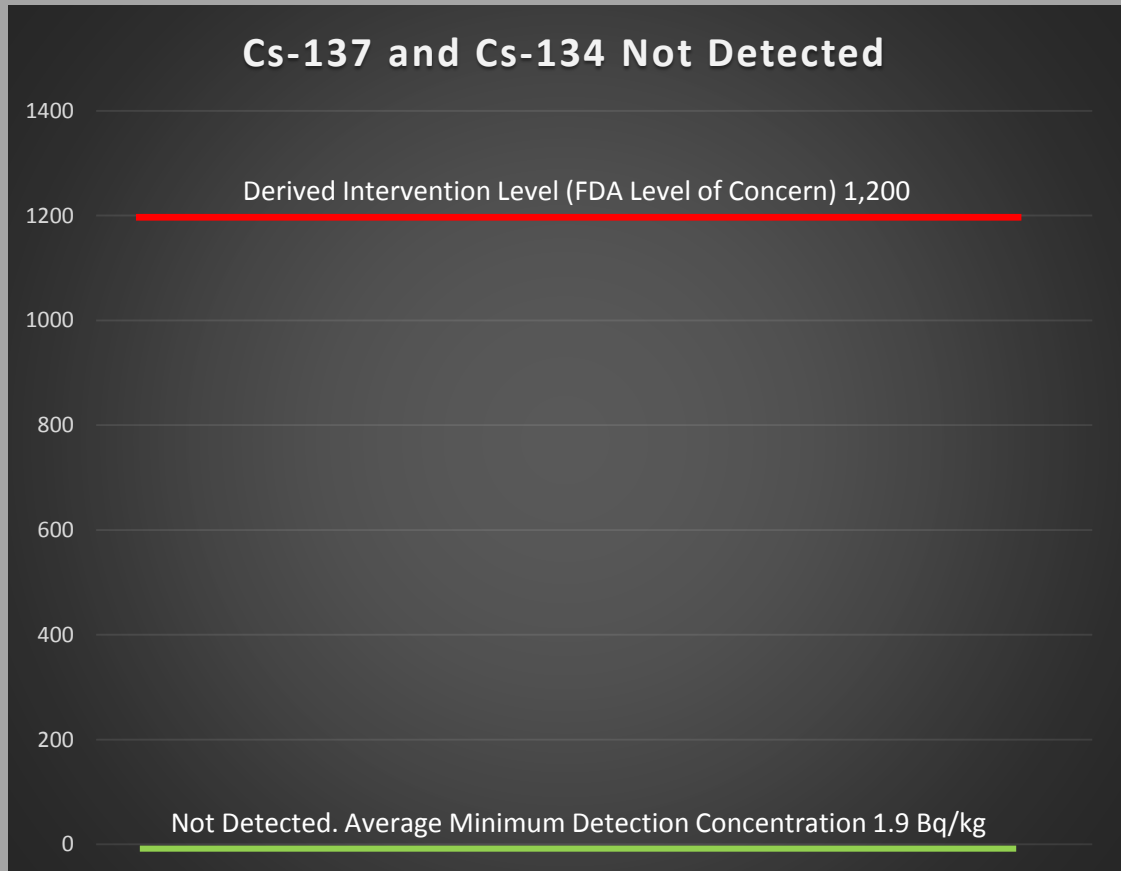
The analytical detection limits for FDA's analyses are higher than those of research scientists. FDA's focus is on food safety rather than determining baseline or characterization efforts.

FDA's analytical detection limits were far below the Derived Intervention Levels (DILs) which are the levels FDA uses to determine if food is safe.

Despite FDA's higher limits of detection, they are adequate to see any levels of radiation that might be of concern to someone who eats a lot of fish on a daily basis such as a subsistence user.



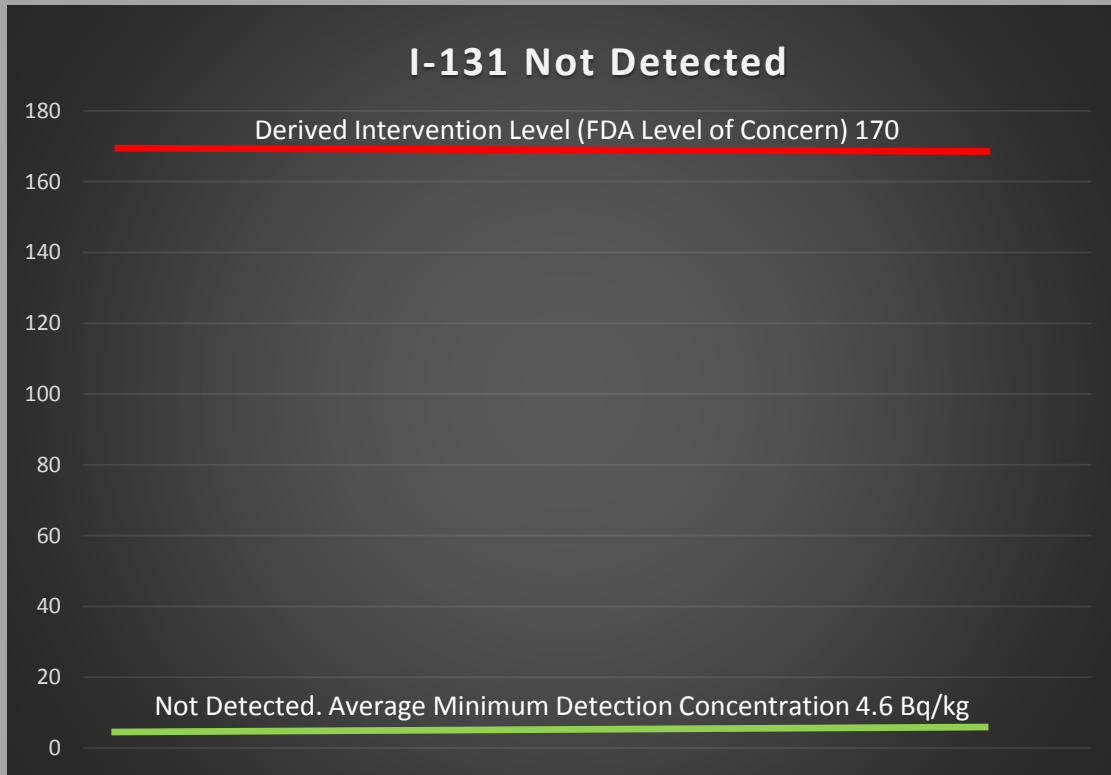
FDA's 2014 Radionuclide Testing Results for Alaska Fukushima Radiation Not Detected (ND)





FDA's 2014 Radionuclide Testing Results for Alaska

Fukushima Radiation Not Detected (ND)





FDA's 2014 Radionuclide Testing Results for Alaska

Fukushima Radiation Not Detected (ND)

Area	Species	I-131	MDC*	Cs-134	MDC*	Cs-137	MDC*
Aleutian Bering Sea	Pollock	ND	3.55	ND	2.12	ND	2.06
	Halibut	ND	3.00	ND	1.93	ND	1.82
	Pollock	ND	3.86	ND	2.56	ND	1.97
	Pollock	ND	6.13	ND	2.00	ND	2.01
	Cod	ND	3.71	ND	2.42	ND	1.98
Bristol Bay	Chinook	ND	3.71	ND	2.08	ND	1.88
	Sockeye	ND	3.39	ND	1.92	ND	1.64
Gulf of Alaska	Sablefish	ND	2.11	ND	1.96	ND	1.68
	Sablefish	ND	2.72	ND	2.31	ND	1.86
	Halibut	ND	2.67	ND	2.13	ND	1.94
	Halibut	ND	2.34	ND	1.75	ND	1.51
	Pollock	ND	3.41	ND	1.88	ND	1.77
	Pollock	ND	5.92	ND	2.07	ND	1.74
	Chum	ND	5.97	ND	2.23	ND	1.76
	Chum	ND	5.29	ND	1.88	ND	1.72
Southeast	Halibut	ND	3.31	ND	1.81	ND	1.67
	Chum	ND	9.99	ND	1.8	ND	1.4
	Pink	ND	10.61	ND	2.08	ND	2.05
	Chinook	ND	5.05	ND	1.8	ND	1.79
	Halibut	ND	6.07	ND	1.94	ND	1.91

* MDC (Minimum Detection Concentration)

Analytical Method: Determination of Potassium, Iodine, Cesium High Resolution Gamma Spectrometry

FDA's Derived Intervention Levels (DILs)

Radionuclide Group	DIL (Bq/kg)
Iodine-131	170
Cesium-134 + Cesium-137	1,200

DIL are used by the FDA to determine whether a food presents a safety concern.



FDA's 2014 Radionuclide Testing Results for Alaska Fukushima Radiation Not Detected (ND)