Fukushima Incident and Seafood from Alaska

On March 11, 2011 a large earthquake struck northeastern Japan and caused significant damage to the Fukushima Daiichi Nuclear Power Plant. The event caused radiation-contaminated water to seep into the ocean near the plant. Since the incident, questions of food safety have arisen, specifically, will consumption of Alaska seafood have detrimental effects on human health?

In April 2021, the Japanese government began releasing treated wastewater into the Pacific Ocean. The water, which is an accumulation of ocean and groundwater seepage, will be treated with the Advanced Liquid Processing System (ALPS) to remove harmful radionuclides such as cesium and strontium, leaving only the mildly radioactive and less harmful isotope, tritium. This water will be released over a period of decades to allow additional dilution. The scientific community has expressed a resounding consensus that there is no threat posed to Alaska seafood species or those who consume them.

MONITORING AND REPORTING:

Beginning in 2014, the Alaska Department of Environmental Conservation (ADEC), Division of Environmental Health, in collaboration with the Alaska Department of Health and Social Services and the FDA has tested fish samples collected in Alaskan waters for various contaiminants including cesium-134, cesium-137 and iodine-131 radioisotopes. The Fish Monitoring Program (FMP) developed the sampling plan for this project in order to collect relevant species from important fishery areas around the State. All the samples tested to date have resulted in non-detects.

- In April 2021, ADEC announced the expansion of species tested for radioisotopes to several varieties of crab to "evaluate the entire ecosystem" of Alaska seafood.

Update: Since 2021, ADEC have been collaborating for the creation of an Alaska Seafood Nutrient/Contaminant Database. This project is making Alaska's testing of contaminants, including radiation, among the most transparent and robust monitoring programs existing for fish.

The European Union has also conducted extensive testing on imported seafood products and has not found any specimens with radiation levels above the accepted threshold.

The Food and Drug Administration (FDA), Environmental Protection Agency (EPA), National Oceanic and Atmospheric Administration (NOAA), and Health Canada are the primary federal agencies that are performing the monitoring as well as some of the coastal western states. Through these various levels of monitoring, there is systematic notification as international partners like the World Health Organization continually monitor this issue. These notifications will alert local monitoring agencies should detections occur in water currents moving toward Alaska.

At Fukushima, the International Atomic Energy Agency (IAEA) is conducting thorough and robust testing on site before, during, and after the release while providing updated reports and information to the international community.

Studies have been conducted by numerous organizations (Food and Drug Administration and Alaska Department of Environmental Conservation) and they have all reached the same conclusion: ***consumption of Pacific seafood poses no threat to human health. Alaska seafood is safe and most people would be healthier with a diet that includes more seafood rather than less.***

The FDA is taking the lead on food safety and has been monitoring commercial foods including fish from the North Pacific.

Given the Japanese government's commitment to adhere to the established nuclear safety standards, the lack of risk associated with the release as stated by the FDA, as well as the continued absence of perceptible radiation in seafood following the original event as outlined below.

This new development will not impact the health of Alaska seafood.

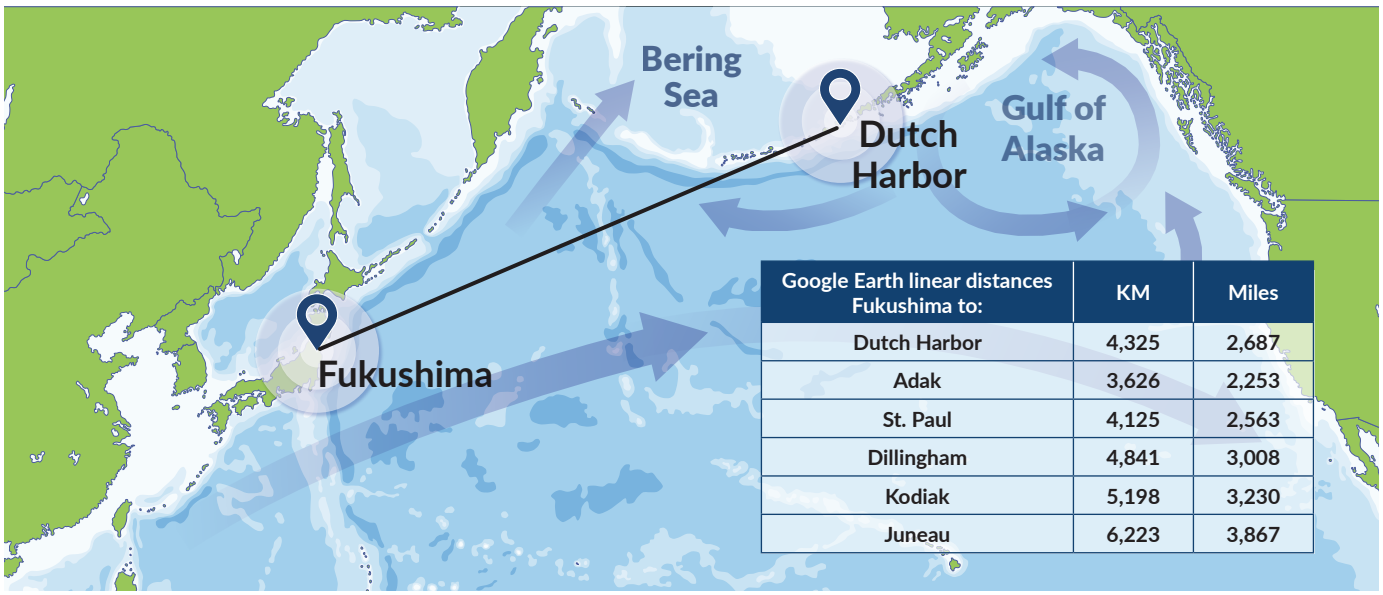
DISPERSAL AND DILUTION:

According to a study by the Congressional Research Service, the small amount of contaminated water released from Fukushima was quickly and efficiently diluted as it entered the massive Pacific Ocean.

The ocean currents and tides in the area acted to further disperse the radiation. According to the Nuclear Regulatory Committee, water samples collected less than 20 miles from the coast of Japan have shown radiation levels below (EPA) drinking water standards. Furthermore, samples taken between 18 and 125 miles from Fukushima have shown levels of cesium 137, one of the potentially harmful radio nucleotides, to be at very low levels, more than 1800 times below the EPA standard for drinking water.

The Pacific Ocean is a very large place. Alaska's fishing waters are thousands of miles from the release site.

According to salmon migration studies, Gulf of Alaska salmon do not travel west of 170 degrees E, thousands of kilometers from Japan. Salmon in the Bering Sea are observed further west, but the Bering Sea will receive water from the North Pacific Current long after that water has crossed the Pacific, and passed along the Gulf of Alaska coast

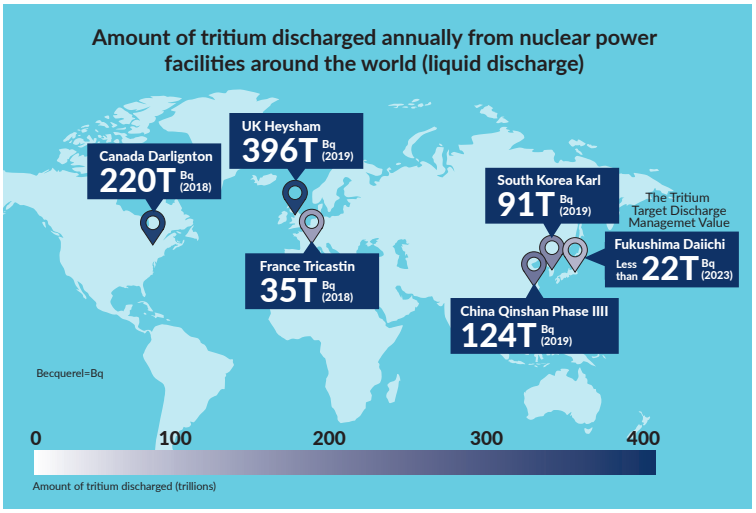


Google Earth linear distances Fukushima to:	KM	Miles
Dutch Harbor	4,325	2,687
Adak	3,626	2,253
St. Paul	4,125	2,563
Dillingham	4,841	3,008
Kodiak	5,198	3,230
Juneau	6,223	3,867

RADIATION AND EXPOSURE

Tritium is a radioactive isotope of hydrogen that is naturally present in the environment and can also be produced as a result of human activity. Tritium presents very low risk of impacts to human health unless presented in exceedingly large amounts, much larger than are found in food or the environment. To date, no human health events have been recorded due to exposure to tritium via these sources.

Studies from the Proceedings of the National Academy of Sciences of the United States of America found that radionuclide levels in tuna caught in the Eastern Pacific were equivalent to or less than the typical radiation exposure from medical exams, air travel, and other peripheral sources, and 300 times below levels that would trigger an FDA health investigation, thus posing very little threat to human health. Furthermore, most of the fish harvested in Alaska's waters do not travel anywhere near Fukushima and typically spend most of their lives in the Gulf of Alaska.



Source: Japan Ministry of Foreign Affairs.

Nuclear facilities located elsewhere in the world regularly release levels of tritium far greater than what is being discharged from treated Fukushima wastewater.