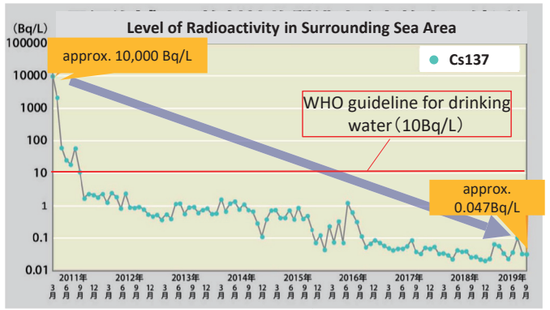
Current State of the TEPCO Fukushima Daiichi Nuclear Power Station (NPS)

- ○ With several measures in place, the impact on the surrounding environment has been greatly reduced. Improvements have also been made to the working conditions, e.g. Workers can work wearing less protective gear.
- ○ The current condition of the power station is stable and the likelihood of a meltdown or accident is kept at the lowest possible level. Measures are in place to handle such incidents if they ever occur.

Reducing the Impact on Surrounding Environment

Improvements in Radioactivity in the surrounding sea area



Measures such as the sea-side impermeable wall (see photo above) are in place to prevent "leakage" of contaminated water.
→ IAEA commends that these measures contribute to the protection of the workers, the public and the environment(January,2019)

Radiation dosage onsite

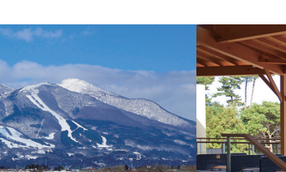
- Monitoring posts set up at the boundaries of the site record radiation levels constantly.
- The additional effective dose from the whole facility on the site is maintained to be less than the regulatory limit of 1mSv/year.(measured at the site boundary)

Improvements in Working Conditions

More areas can be accessed in general work clothes

- With decontamination etc., workers can work wearing general work clothes instead of protective gear at **96%** of the working site.
- The site currently receives many visitors and the need for protective gear has been greatly reduced.

Provision of warm food onsite



- Since Aug 2015, workers are able to enjoy warm food at the large scale resting area onsite.

*Pictures and graphs are from TEPCO.

For more details, search for
METI Decommissioning Search

復興庁 Reconstruction Agency
New Stage towards Reconstruction & Revitalization

Click here to download this pamphlet
Reconstruction Agency Search
http://www.reconstruction.go.jp/english/

Eliminating Negative Reputation Impact

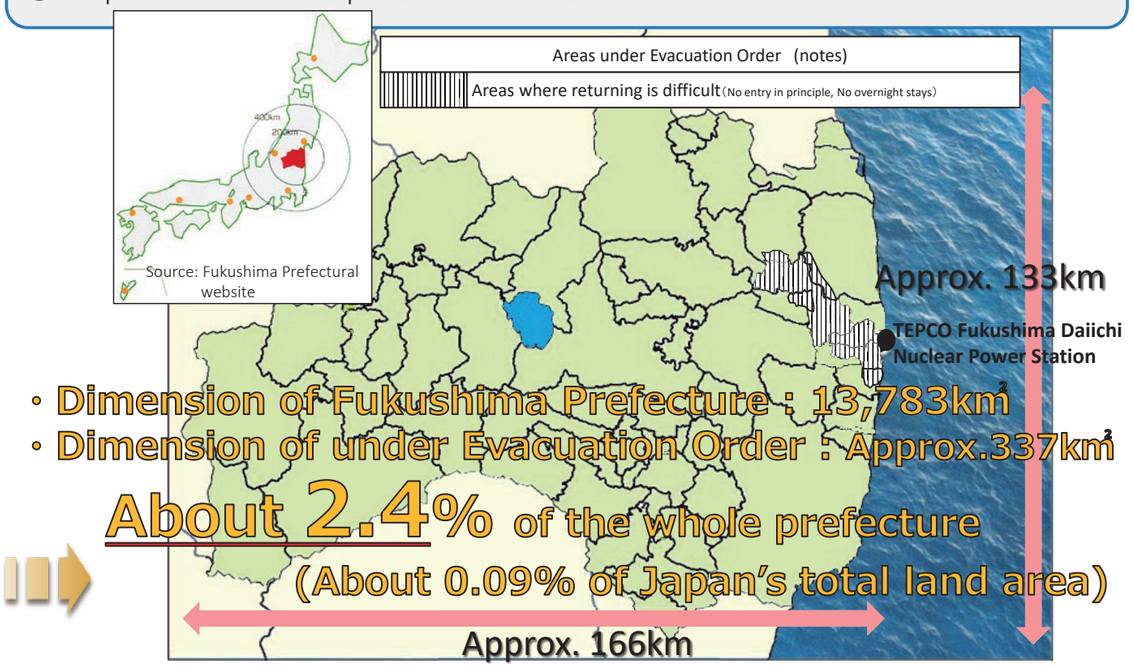
～ Reconstruction from Nuclear Disaster & the History of Safety and Revitalization of Fukushima ～

April, 2020

復興庁 Reconstruction Agency
New Stage towards Reconstruction & Revitalization

Status of the Areas under Evacuation Order in Fukushima

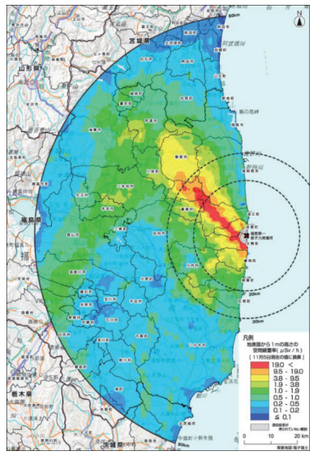
- ○ Dimension of areas under evacuation order is about 2.4% of the whole prefecture (about 0.09% of Japan's total land area).
- ○ People in 97.6% of the prefecture can live a normal life.



Source: Created by the Reconstruction Agency based on materials from Fukushima Prefecture and the Support Team for Residents Affected by Nuclear Incidents

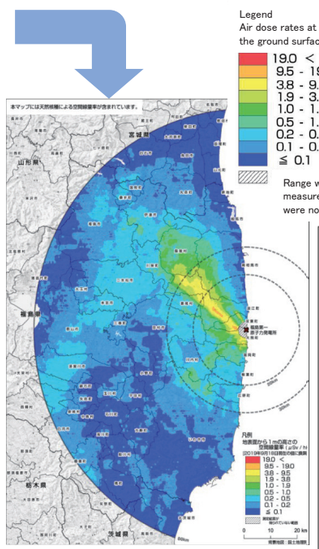
Changes in Air Dose Rate

○The average air dose rate*1 within 80km from TEPCO Fukushima Daiichi Nuclear Power Station decreased by about 78%*2 compared to levels in November 2011.



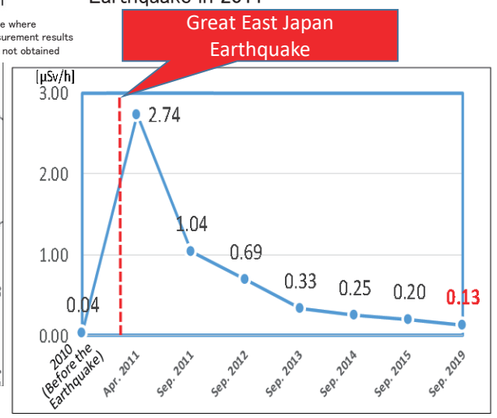
November 2011

Most recent data:
http://radioactivity.nsr.go.jp/en/



September 2019

(ex.) The air dose rate in Fukushima city is now lower than 1/20 of what it was immediately after the Great East Japan Earthquake in 2011

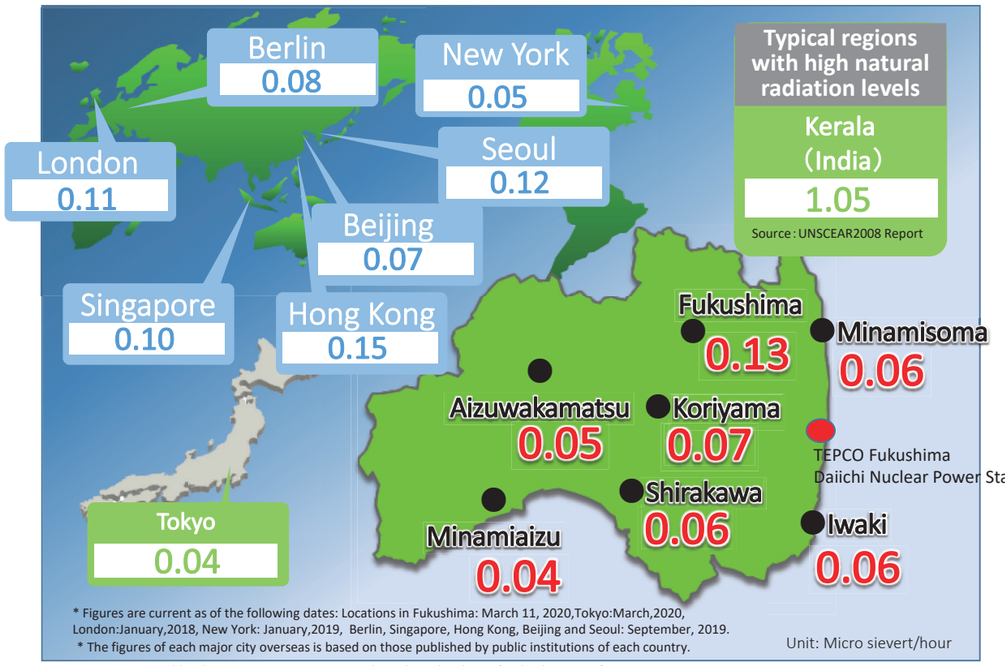


Changes in Air Dose Rate(Fukushima city)

*1Measured at 1m in height from the ground surface
*2The target area is divided into 250-m grid meshes and the value is calculated from the ratio of the measurement results in the central point of each grid mesh. The rate of reduction may differ when other comparative methods are used.
Source: Nuclear Regulation Authority, "Measurement Results of Monitoring by Aircraft in Fukushima Prefecture and Nearby Prefectures", <Changes in Air Dose Rate (Fukushima city)>Created by the Reconstruction Agency based on Fukushima Prefecture "Steps for Revitalization in Fukushima (26th)",

Current State of Air Dose Rates within Fukushima

○The air dose rate of major cities in Fukushima Prefecture is about the same level as other major cities overseas.



Source: Created by the Reconstruction Agency based on the data of Fukushima Prefecture

Standards for Radioactive Contamination of Food

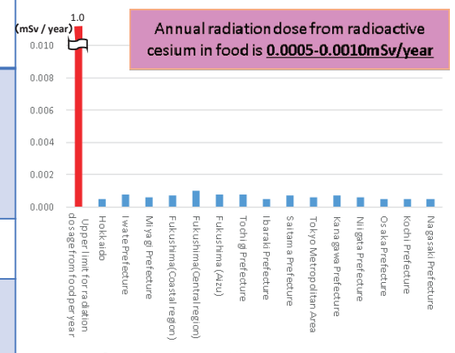
○Japan has the world's strictest level of standards for managing radioactive contamination of food. Foods exceeding the standards are not allowed to be distributed.
○The additional annual radiation dosage received when eating an average meal is about 1/1000 of 1 mSv.

	Japan Food Sanitation Act	Codex(CAC)[3] CODEX STAN 193-1995	EU Council Regulation (Euratom) 2016/52	USA Guidance Levels for Radionuclides in Domestic and Imported Foods (CPG7119.14)
Derived intervention levels (DIL) for radioactive cesium (unit Bq/kg) [1,2]	Drinking water 10 Milk 50 Infant foods 50 General foods 100	Infant foods 1,000 Other foods 1,000	Liquid food (Drinking water) 1,000 Dairy Produce(Milk) 1,000 Infant food 400 Other food 1,250 except minor food	Food 1,200
Upper limit for radiation dosage from food per year[2]	1mSv	1mSv	1mSv	5mSv
Assumption on the proportion of food supply that is contaminated with radiation per year[2]	50%	10%	10%	30%

1: The DILs shown are the upper limits allowed for food to be distributed in the supply chain. DILs are set for monitoring purposes and are not standards for determining whether food is safe or not for consumption. As different countries assume different proportions of their food supply is contaminated with radiation during computation, these numbers by themselves are not comparable.
2: While the Codex Alimentarious Commission(CAC), EU and Japan all adopt 1mSv per year as the upper limit for radiation dosage from food, Japan used the assumption that a higher ratio of foodstuff could be contaminated with radiation, resulting in the lower values for DILs.
3: The CAC was jointly set up by the Food and Agricultural Organization of the United Nations (FAO) and the World Health Organization (WHO) in 1963. The CAC oversees the Codex Alimentarius, a set of international standards for food, to protect consumers' health and to promote fair international food trade. As of August 2018, member states of CAC include 188 nations and the EU.

Source: Adapted from "Initiative to strengthen measures on negative reputation impact" by the Reconstruction Agency

Actual amount of radioactive material in food



Created based on market basket survey results conducted by the Ministry of Health, Labour and Welfare from February to March 2019

・A market basket survey is one method of estimating the intake of various food additives, etc. In this method, the amount of additives, etc. are measured for foods sold at retail venues such as supermarkets, which values are used to estimate the average intake of food additives etc. based on food intake results from the annual National Health and Nutrition Survey (NHNS)
・In this survey, food actually circulated in 15 regions nationwide was used to estimated the annual radiation dose received from radioactive cesium (sum of Cs-134 and Cs-137) in foods.

Safety of Food in Fukushima Prefecture

○Announcement of results of thorough monitoring of agriculture, forestry, and fishery products prior to shipment.
○ Very few foods have exceeded the standard limit (100 Bq/kg).
○ No rice has exceeded the standard limit since the 2015 harvest.
○ Necessary measures are in place to ensure that foods are not distributed in the market if found to have exceeded the standard limit.

◆Testing of all rice produced (August 26, 2019 to February 29, 2020)

	Total No. samples	No. of samples exceeding standard limit	Proportion of samples exceeding standard limit
Brown rice (produced 2019)	Approx.935 million	0	0.00%

Information about the Food Test
https://fukumegu.org/ok/contentsV2/
*The Fukushima Fisheries Cooperative Association has implemented an additional test independently concerning marine fishery products. Their standard (50Bq/kg) is stricter than a national criteria(100Bq/kg).

◆State of monitoring by Fukushima Prefecture of agricultural, forestry and fishery products (April 1, 2019 to Februaru 29, 2020)

Classificationr	Total No. samples	No. of samples exceeding standard limit	Proportion of samples exceeding standard limit
Vegetables & Fruits	2,147	0	0.00
Livestock products	3,782	0	0.00
Cultivated edible plants & Mushrooms	975	0	0.00
Marine Fishery products	5,054	0	0.00
Inner water-cultivated fish	60	0	0.00
Wild edible plants & Mushrooms	768	0	0.00
Inland water Fishery products	1,076	4	0.37

IAEA※ recognized the efforts of Japan in monitoring food products to ensure food safety.
(Based on IAEA's response to the report submitted by Japan in June 2018)

Based on information available to date, the Joint FAO/IAEA Division understands that the measures to monitor and respond to issues regarding the radionuclide contamination of food are appropriate, and that the food supply chain is controlled effectively by the relevant authorities.

* IAEA:International Atomic Energy Agency

Source: Created by the Reconstruction Agency based on the data of Fukushima Prefecture