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# Statement of IPPNW Germany regarding Participation in the Olympic Games in Japan

**In July 2020, the 32. Olympic Games will start in Japan. Young athletes from all over the world have been preparing for these games for years and millions of people are looking forward to this major event.**

We at IPPNW Germany are often asked whether it is safe to travel to these Olympic Games in Japan either as a visitor or as an athlete or whether we would advise against such trips from a medical point of view. We would like to address these questions in this publication.

To begin with, there are many reasons to be critical of the Olympic Games in general: the increasing commercialization of sports, the lack of sustainability of sports venues, doping scandals, the waste of valuable resources for an event that only takes place for several weeks and corruption in the Olympic organizations to name just a few. However, every four years, the Olympic Games present a unique opportunity for many young people from all over the world to meet other athletes and to celebrate a fair sporting competition – which was the initial vision of the Olympic movement. Also, the idea of Olympic peace and mutual understanding between nations and people is an important aspect for us as a peace organization.

## Fukushima ...and no end in sight

Regarding the Olympic Games in Japan, another factor comes into play: the Japanese government is using the Olympic Games to deflect from the ongoing nuclear catastrophe in the Northeast of the country.

The government wants people to think that the situation in Fukushima is under control and people in the region are safe from radioactive contamination. The president of the German Olympic Sports Association, Alfons Hörmann, recently went so far as to say that "the regions close to the Olympic Games are safe from environmental disasters".


Of course, this is an untenable assertion for a region with extremely high seismic activity. Regarding the situation around the destroyed nuclear reactors in Fukushima, the situation is far from "under control" even today. External cooling water has to be continuously circulated through the ruins of the damaged reactors. Inside, life-threatening radiation doses still prevail. Large parts of the contaminated cooling-water is still flowing into the sea or leaches into groundwater despite major efforts by the Japanese authorities to contain it. The rest of the radioactive wastewater is being stored in huge tanks on-site. Their contamination with hazardous radioisotopes like Strontium-90 presents an ongoing threat to the region.

In December of 2018, the latest data regarding thyroid tests were published. The incidence of thyroid cancer among tested children in Fukushima is 15 times higher than the Japanese average for this age bracket. **(IPPNW Germany press release, ippnw.de/bit/fukushima_3-19)**

We are also seeing a distict geographic distribution, with a significantly higher incidence of thyroid cancer in the most heavily contaminated regions **ippnw.de/bit/fukushima_3-18).**

With each storm, radioactive particles from the forests and mountains are brought back to the villages and cities – even to those previously decontaminated. International regulations stipulate that the population should not be exposed to more than one millisievert of additional radiation after a nuclear accident. In areas around Fukushima already earmarked for resettlement, the population will be exposed to radiation dosages that can range up to 20 mSv **(Office of the UN High Commissioner for Human Rights, https://kurzlink.de/resettlement).** As an organization of physicians, we have repeatedly pointed out the resulting health risks for the population of the affected regions, which we consider unacceptable.

While the nuclear catastrophe is a daily reality for the people living in the area and will be for many years to come, the situation for visitors is of course different. To answer the question of whether a trip to Japan or participation in the Olympic Games is acceptable from a medical point of view, a variety of aspects must be taken into consideration:

## General information regarding radiation risks

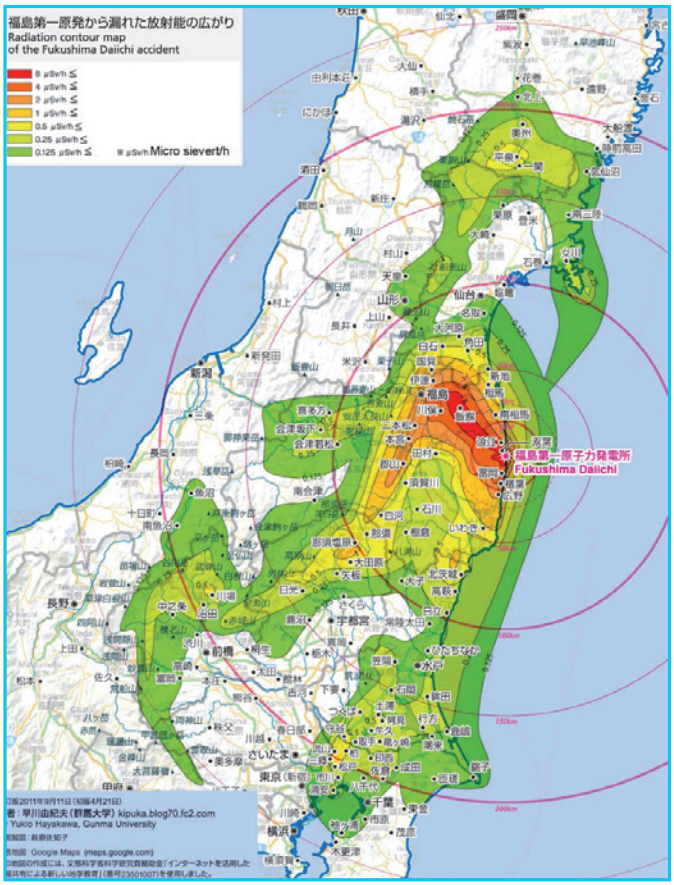
Generally, the radiation exposure in the contaminated regions in Japan poses increased health risks. However, especially for short-term visits, these risks can be considered small – as long as individuals are not specifically sensitive to radiation. But it needs to be stressed that there is no threshold in radiation dose, below which it could be considered safe or without negative effects on health.

The individual disposition and the risk for a radiation-induced disease normally remains undetected and individuals themselves are often not aware of their sensitivity. Once a person falls sick, you can draw conclusions by working backward and may find increased radiation sensitivity (e.g. for breast cancer patients with the BRCA-1/2-mutation).

For pregnant women and small children, we generally recommend to refrain from intercontinental flights and to avoid visits to the contaminated areas in Japan to minimize individual radiation doses. Until today, there are still hot-spots, even in the decontaminated regions – places where radioactive particles from the Fukushima meltdowns have accumulated and were overlooked during the decontamination efforts or places that were recontaminated by rain, pollen flight or flooding. These hot-spots pose an ongoing risk for the residents of the region. Even in the greater Tokyo area, hot-spots were detected in the past.

It is important to know that even when radiation exposure limits are met, certain health risks cannot be ruled out. Exposure limits are derived from the politically acceptable risk of disease that the government thinks the population would be willing to accept. The question is not “At which dose can we expect health risks to occur?" but rather "Which health risks are still acceptable for society?"

Radioactivity in any dosage, however small, can trigger a disease – the higher the dose, the higher the risk. As with smoking and other cancer-inducing factors, there is no "safe" dose. Even natural background radioactivity can trigger diseases. While natural background radiation can mostly not be avoided, we recommend trying to avoid additional radiation exposure as best as possible in order to lower the individual risk of contracting radiation-induced diseases such as cancer.




SPREAD OF RADIOACTIVITY AFTER THE FUKUSHIMA INCIDENT, MARCH 15TH, 2012 – MAP BY YUKIO HAYAKAWA.

We can only hope that there will be no further recontamination in Japan caused by storms, earthquakes, forest fires, flooding or technical failures at the damaged reactors, which could put the Olympic Games in Japan at risk.

## How you travel

For most visitors, the flight to Japan and back will probably present the highest single radiation exposure. Depending on solar activity, length, height, and routing of the flight, the radiation dose for a flight from Europe to Japan is between 45 and 110 microsieverts (µSv) per flight - about the same dose you are exposed to during a normal chest x-ray **(German Federal Agency for Radiation Protection, kurzlink.de/bfs).** The exact radiation dose resulting from a flight can be calculated on the website of Munich Helmholtz-Institute: **www.helmholtz-muenchen.de/en/epcard-neu**

## Where you travel

While large parts of Japan have remained relatively unaffected by the Fukushima nuclear catastrophe, there are still radiation hot-spots in the prefectures of Fukushima, Tochigi, Ibaraki, Miyagi and Chiba (see map). Inhalation or ingestion of radioactive particles with food or water poses a considerable health risk. It is not sufficient to rely on officially published dose measurements, as even previously decontaminated areas can always become recontaminated with radioactive particles from the forests and mountains around Fukushima through pollen, rains, forest fires or storms.

Some areas around Fukushima remain closed to the public due to elevated radiation levels, others have been reopened after decontamination measures were performed. In metropolitan areas, like in Fukushima City, most monitoring posts record radiation levels below 0.2 microsieverts per hour (0.2 µSv/h). This corresponds to common background values registered in other parts of the world. Background radiation is a continuous source of radiation that depends largely on the local geographical soil composition. Background radiation contributes to numerous cancers and cardiovascular diseases worldwide. **(Health effects of ionizing radiation, October 19th, 2013, https://www.ippnw.de/bit/ionising_radiation)** Unlike background radiation, which can hardly be avoided, man-made radiation stemming from nuclear weapons testing or the nuclear industry can be confronted politically. A regularly updated map of the official monitoring posts in


the prefecture can be found online at: **http://fukushima-radioactivity.jp/pc**

However, these official measurements need to be treated with caution since the authorities have a vested interest in systematically downplaying radiation effects and ambient dose levels. While officially published dose levels can be low, just a few meters away from the monitoring post you can find local hot-spots due to contaminated foliage, dust or pollen.

A discussion regarding the actual radiation levels in Japan is difficult since the Japanese government has forfeited a lot of trust through questionable methods, for example by installing shielding lead batteries in the measuring instruments or positioning the monitoring posts in blind spots and other protected areas. Independent monitoring posts installed by independent citizen groups often register much higher values than the official posts.

Unfortunately, for symbolic as well as political reasons, sport arenas in Fukushima were selected to hold softball and baseball competitions during the Olympic Games 2020. Even the symbolic first competitions of the Olympics are to be held here. At the same time, the competition calendar was arranged in a way to ensure that no western teams would compete here. This may sound cynical, but it seems that the organizers expected problems regarding acceptance of these sensitive venues. Consequently, European visitors and athletes will most likely not have to travel to Fukushima in order to compete or watch their team.

If people do plan to travel to Fukushima, they should avoid trips to the mountains or forests and also avoid close contact with dust, dirt, foliage, or other possibly contaminated substances. In the event of high pollen flight, forest fires or natural disasters such as earthquakes, flooding or

storms, they should exercise caution. FFP-breathing masks, as well as staying indoor, can offer relative protection against inhalation of radioactive particles. Visitors should make sure to pay attention to and follow the instructions issued by local authorities.

Japan is a country with high seismic activity and earthquakes are a common occurrence, as are forest fires in the summer and storms at any time of the year. To familiarize foreign visitors with the right behavior during emergencies, the Japanese tourism agency has established a website as well as a mobile app called "Safety Tips" with up-to-date information and safety advice: **www.jnto.go.jp/safety-tips**

## What you eat

The official dose limits for radioactivity in food in Japan are currently stricter than those in the European Union. This means that contaminated foodstuff not fit for sale on the Japanese markets could very well be sold in Europe without any special labeling or warnings. The dose limit for general foodstuff Japan is 500 Becquerel (Bq) per kilogram, while in the EU it is 600 Bq/kg. One example of this difference: blueberry jam sold in the EU had to be taken off the shelves in Japan due to excessive cesium levels (originating from the Chernobyl disaster). For more information on this subject, go to **ippnw.de/bit/foodwatch.**

Food controls in Japan are rather meticulous, but naturally, it can never be guaranteed that no contaminated foodstuff reaches the shelf. The individual measurement data can be seen at **www.new-fukushima.jp,** but it cannot be excluded that conspicuous values were prefiltered and do not show up in the statistics. At best, this website can help understand which foodstuffs are regularly tested in Japan.

We strongly recommend avoiding products bought directly from farmers in the contaminated regions, since they are often not monitored. Also, dubious "solidarity events" specifically offering foodstuffs from the contaminated regions should be avoided. Apart from these excpetions, it can be assumed that foodstuff declared safe for sale in Japan complies with high safety standards.

## Summary note

In summary, it can be said that the health risk for visitors and athletes participating in the Olympics for short periods of time is small – as long as there is no specific individual sensitivity to radiation. Pregnant women and small children should avoid long-distance flights and trips to Fukushima to protect themselves against radiation.

At the same time, we should all be aware of the continuing problems facing the population in the radioactively contaminated regions in the Northeast of Japan, who has to live with the ongoing nuclear catastrophe on a daily basis.

The Olympic Games should not be abused to distract from their fate but rather to make sure their needs, worries, and demands are properly addressed. The German affiliate of IPPNW is trying to do just that with its campaign **"Tokyo 2020 – The Radioactive Olympics".**

**More information at:**
**www.radioactive-olympics.org**

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