

# Factual Investigation of Changes in Physical Condition Following the Nuclear Accident

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## 1. Background and Objectives

The immediate outcome of the four-reactor nuclear accident that began on March 12 2011 was the alarming fear that Japan as a country might not survive to see another day, and the minds of the citizens and the focus of the media were naturally turned to coping with the disaster.

Our organization, which is known to have participated in Chernobyl relief efforts, was contacted with numerous reports of unexplained health problems from people in the Kanto region over 250km away. Many of the patients had consulted with local doctors, only to be turned away with the assurance that such a small amount of radiation exposure could not possibly have any adverse effects on their health.

In answer to their concerns and to help bring peace of mind, we decided to hold a medical conference in Tokyo from June 3 2011. The moment we listed this information on our organization’s website we received over 20,000 views and were inundated with phone calls. The predicted 20 participants had grown to 200, so the conference was extended by 2 days.

Our primary objectives were to conduct consultations with medical professionals and to document the symptoms of patients in the Greater Kanto Area (which is home to more than 40 million residents).

Detailed analysis of the collected data will be conducted separately by specialists in the medical field.

## 2. Medical Consultation Conference

Children and parents were given questionnaire sheets on which to document their symptoms along with the length of time since the changes began. Completion of the survey was followed by a consultation with a doctor who recorded their information for later analysis. The total number of survey participants was 524, and the consultations were held in various locations from June 2011 to March 2012.

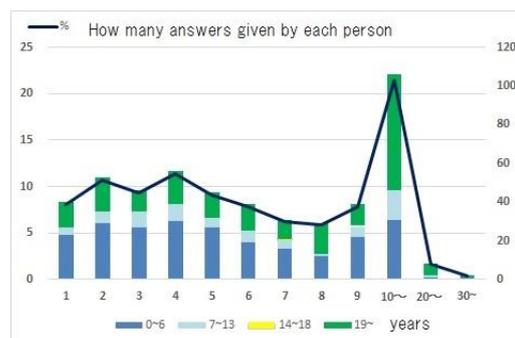
Eliminating incomplete data (for example, where age or region were missing) left us with a total of 483 complete surveys to consolidate.

The target regions were divided as follows: Fukushima Prefecture, Miyagi Prefecture, Chiba and Gunma Prefectures, Tokyo and surrounds (other prefectures in the Kanto region).

The majority of participants were local mothers and children who had noticed unusual changes to their health. The target age groups were divided as follows: 0 – 6 years old, 7 – 13 years old, 14 – 18 years old (with the majority of the conference falling on weekdays, there were only 2 participants from this group) and over 19 years old.

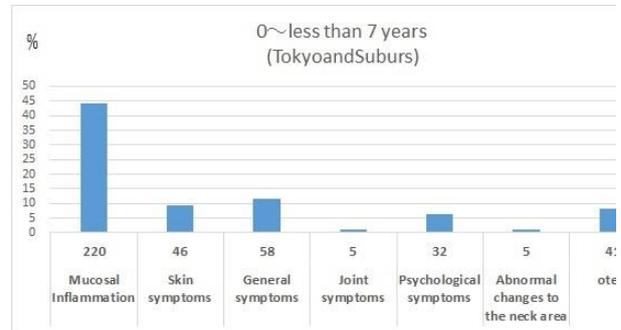
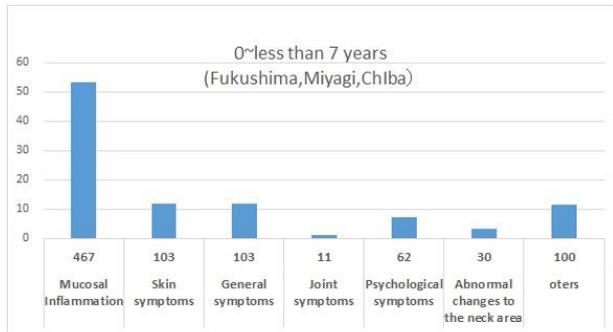
Further detailed analysis of the length of continuation of symptoms, worsening of existing chronic illnesses and particularly unique symptoms are being conducted by qualified medical personnel.

	0~6years	7~13	14~18	19~	total
Fukushima	39	19	0	29	87
Miyagi	32	8	1	18	59
TokyouandSuburb	62	12	0	67	141
Chiba	106	19	1	70	196
	239	58	2	184	483



### 3. Results

- i. Many participants reported multiple symptoms.
- ii. There was little variation between results from the 4 regions through which the radioactive plume had passed.
  - From as close as 60km (Fukushima) to as far as 250km (Tokyo) from the nuclear power plant
  - The 3 age groups all showed abnormal symptoms relating to the mucous membranes (eyes, respiratory organs and digestive system)



### 4. Discussion

Without a proper measurement of the level of radiation brought about when the plume passed through and the air was filled with radioactive particles, there is no way for the citizens to ascertain whether or not they were exposed.

It was the will of mothers that made this conference happen. Problems such as coughing, nosebleeds and diarrhea show no signs of improvement despite the treatment and medication they have received from clinics. Cold-like symptoms return again and again, and their quality of life is suffering as a result.

Across all 4 regions there was very little variation in the symptoms reported. In all age groups, at least 40% showed signs of problems with mucous membranes, presenting as abnormalities with the eyes, respiratory organs and digestive system. Further, in the 0 – 6 year age group this number exceeded 50% of the participants in each location. There was no observable difference in this trend between the region closest to the site of the accident (Fukushima, 60km) and the farthest (Tokyo, 250km).

On the first day of the conference, Dr Shuntaro Hida led the team of 3 medical practitioners and also took part in the consultations himself. Dr Hida witnessed the atomic bomb dropped on Hiroshima in 1945 and has been treating victims of radiation exposure ever since, still practicing at the age of 93. He encouraged all participants to note the details of all symptoms, no matter how insignificant they might seem. He also said that if any of these symptoms were to leave lasting damage or disability they could be considered “signs of exposure.”

Additionally, Dr Valentina Smolnikova (a pediatrician from Gomel, Belarus) has remarked on the similarities between these symptoms as reported by Japanese citizens and those documented after the Chernobyl accident.

I would finally like to add that some of the people who have evacuated to non-irradiated areas and kept away from contaminated food have reported seeing an improvement in their health condition and peace of mind.

Citizens in the Kanto region measured hot spots at levels of 1-15 Curies, comparable to Chernobyl's controlled-access zone.