

[Top](#) > [Press Releases](#) > [June 2011](#) > Results of sampling survey on radioactivity levels in textile products

[Press Releases](#)

[Back Issues](#)

## Results of sampling survey on radioactivity levels in textile products

- Domestic and international comparisons -

In connection with the accident at the TEPCO's Fukushima Dai-ichi Nuclear Power Station, the Ministry of Economy, Trade and Industry (METI) carried out a sampling survey of radioactivity levels in textile products produced in various parts of Japan and the world in order to ascertain the impact of radioactivity in Japanese textile products.

As a result, radioactivity levels significantly higher than background radiation level were detected in none of the samples and no significant differences in radioactivity level were found between the places of production of samples (both between different places in Japan and between places in Japan and those outside Japan).

### 1. Survey objective

Following the accident at the TEPCO's Fukushima Dai-ichi Nuclear Power Station, METI realized the need to assess the impact of radiation on Japanese textile products. For this reason, METI performed a sampling survey of radioactivity levels in textile products produced in various parts of Japan and the world in an effort to provide accurate information to the textile industry and consumers.

### 2. Survey method

#### (1) Measuring method

Radioactivity levels in textile products produced in selected areas were measured by the end-window GM survey meter to calculate the surface concentration of radioactivity (in Bq/cm<sup>2</sup>), which indicates radioactivity per unit area.

#### (2) Measuring instrument

Aloka GM survey meter TGS-146

### 3. Survey period

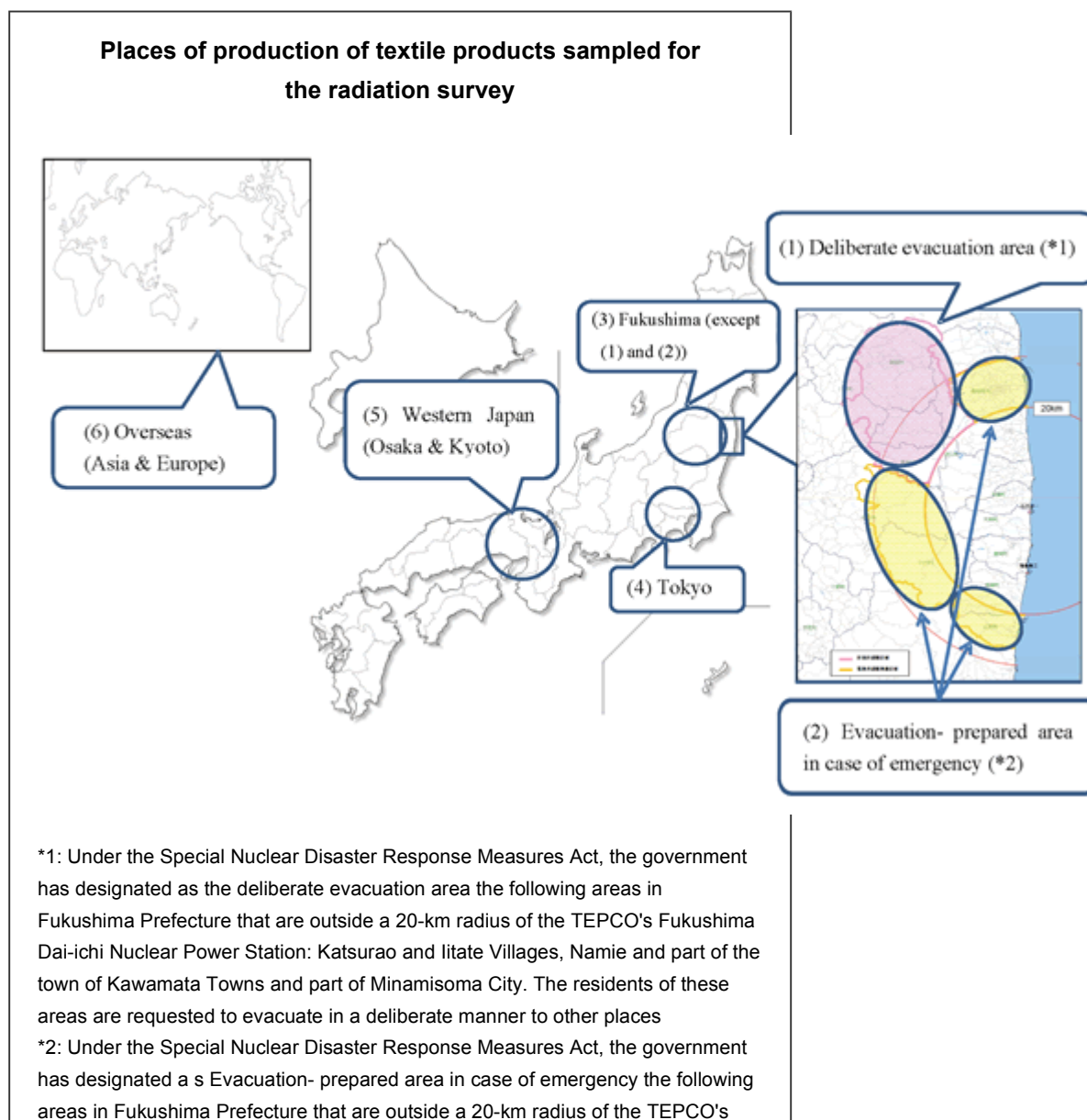
From April to May 2011

### 4. Items surveyed

Textile products (knitted products, sewn fabric products and silk fabrics/products)

### 5. Places of sample production (see map below)

Six areas were selected for sampling: the deliberate evacuation area, the evacuation-prepared area in case of emergency, Fukushima (except Restricted Area), the deliberate evacuation area, and evacuation-prepared area in case of emergency), Tokyo, western Japan (Osaka and Kyoto), and overseas (Asia and Europe).



Fukushima Dai-ichi Nuclear Power Station: the towns of Hirono and Naraha, the village of Kawauchi and part of the cities of Tamura and Minamisoma. The residents of these areas are required to enable in-house stay or evacuation by themselves urgently at any given moment.

---

## 6. Survey institution

---

Kaken Test Center (Kawaguchi City, Saitama Prefecture, JAPAN)

---

## 7. Survey results

---

The selected types of textile products were sampled for each place of production listed in Section 5 and their radioactivity levels were measured. As a result, radioactivity levels significantly higher than background radiation (environmental radioactivity level measured at the site of the survey institution in Section 6) were not detected in all of the samples. At the same time, no significant differences in radioactivity levels were found between the places of production.

The survey results for each type of sample are summarized below. The following figures of surface concentration of radioactivity indicate measurement values minus the background radiation level.

### **(1) Knitted products (synthetic fiber)**

The measured (average) surface radioactivity concentration levels ranged from 0.01 Bq/cm<sup>2</sup> (minimum) to 0.02 Bq/cm<sup>2</sup> (maximum). Radioactivity above the background level was detected in none of the samples.

### **(2) Knitted products (natural fiber)**

The measured (average) surface radioactivity concentration levels ranged from 0.00 Bq/cm<sup>2</sup> (minimum) to 0.14 Bq/cm<sup>2</sup> (maximum). Radioactivity above the background level was detected in none of the samples.

### **(3) Sewn fabric products (synthetic fiber)**

The measured (average) surface radioactivity concentration levels ranged from 0.02 Bq/cm<sup>2</sup> (minimum) to 0.02 Bq/cm<sup>2</sup> (maximum). Radioactivity above the background level was detected in none of the samples.

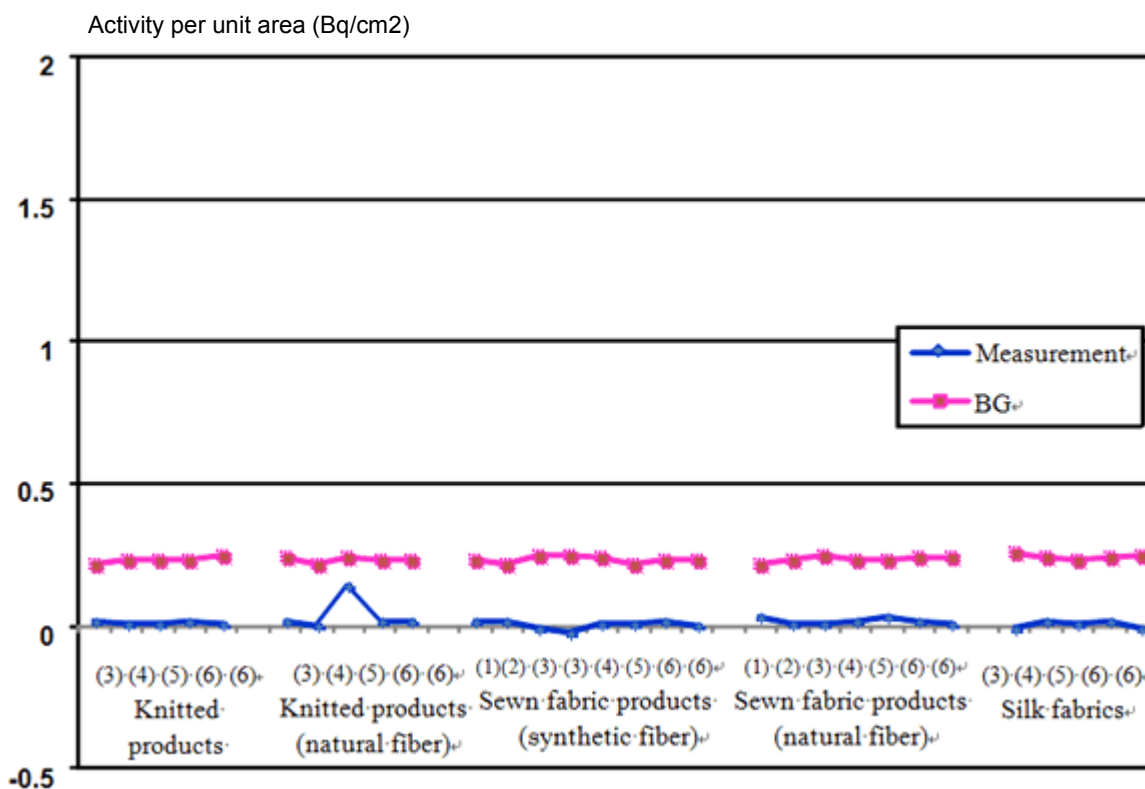
### **(4) Sewn fabric products (natural fiber)**

The measured (average) surface radioactivity concentration levels ranged from 0.01 Bq/cm<sup>2</sup> (minimum) to 0.03 Bq/cm<sup>2</sup> (maximum). Radioactivity above the background level was detected in none of the samples.

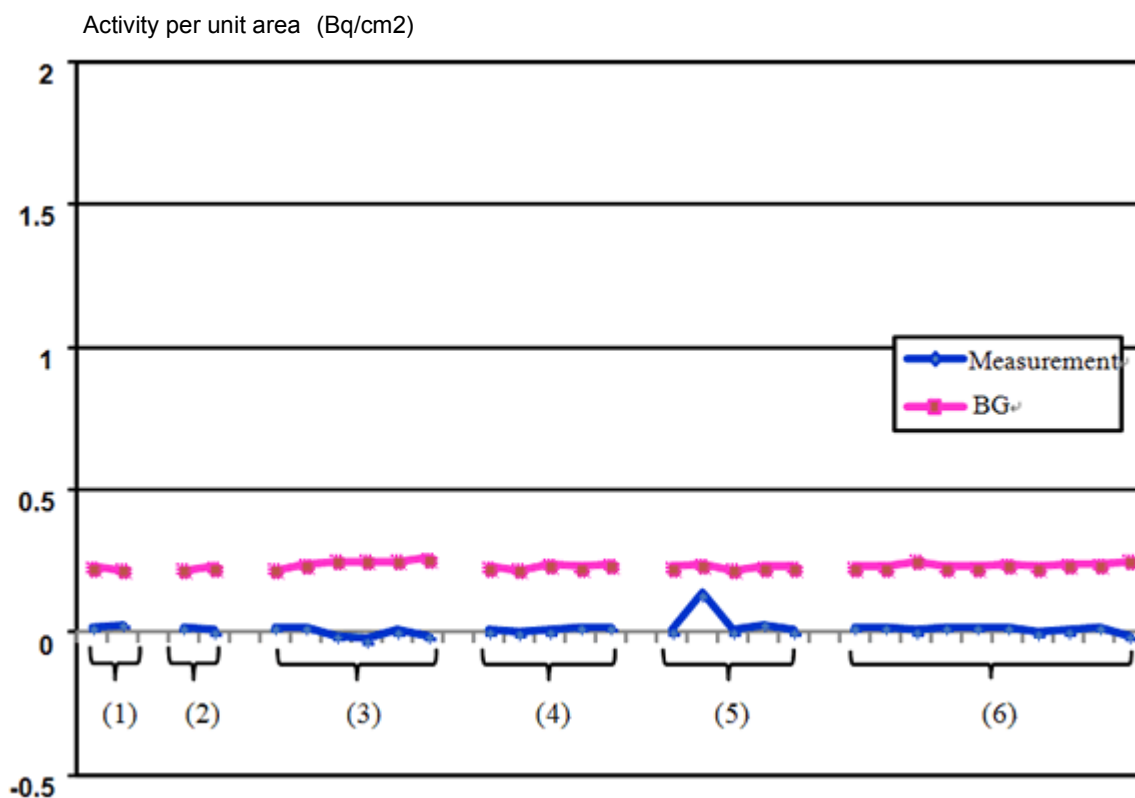
### **(5) Silk fabrics/products**

The measured (average) surface radioactivity concentration levels ranged from 0.01 Bq/cm<sup>2</sup> (minimum) to 0.02 Bq/cm<sup>2</sup> (maximum). Radioactivity above the background level was detected in none of the samples.

### Surface radioactivity concentration, by type of sample



### Surface radioactivity concentration, by place of production



Note 1: (1) Deliberate evacuation area, (2) Evacuation- prepared area in case of emergency, (3) Fukushima (except cautious area, the deliberate evacuation area, and

evacuation-prepared area in case of emergency), (4) Tokyo, (5) Western Japan (Osaka and Kyoto), (6) Overseas

Note 2: The plotted data indicates measurement values minus background radiation levels (BG).

---

## Release Date

---

June 6, 2011

---

## Division in Charge

---

Textile and Clothing Division, Manufacturing Industries Bureau

---

[Page top](#)