

# Progress Report of the Comprehensive Health Check

Reported on 5 June 2017

## 1. Purpose

The Fukushima Daiichi Nuclear Power Plant accident caused by the Great East Japan Earthquake in March 2011 led to a large-scale evacuation of residents in surrounding areas, especially the government-designated Evacuation Zones and Evacuation Warning Zones. Many of the Fukushima evacuees have since been concerned about their own health due primarily to the sudden and notable changes in their lifestyle, diet and exercise habits, in addition to the loss of opportunity to undergo necessary health check-ups.

In order to promote the health of Fukushima residents, it is important for them to know their current health status. This is essential for not only prevention of lifestyle diseases, but also early detection and early treatment of various illnesses. To this end, the Comprehensive Health Check is available for all residents of the Evacuation Zones.

## 2. Survey Population

Residents of Evacuation Zones at the time they were designated in 2011 (hereafter, Designated Areas), as well as those assessed to require the service based on the result of the Basic Survey.

### 【Designated Areas】

All of Tamura City, Minami-Soma City, Kawamata Town, Hirono Town, Naraha Town, Tomioka Town, Kawauchi Village, Okuma Town, Futaba Town, Namie Town, Katsurao Village, Iitate Village and parts of Date City (belonging to designated evacuation areas)

## 3. Implementation Status

### 3.1 Items of the Comprehensive Health Check

Examination items have been selected for each age group in order to allow residents of the Designated Areas to know their own health status, which is essential for not only prevention of lifestyle diseases but also early detection and early treatment of various illnesses.

For those aged 16 years and older, examination items of the Specific Comprehensive Health Check will be implemented based on Article 20 of the Act on Assurance of Medical Care for Elderly People (Act No. 80, 1982), including other additional items such as complete blood count.

### 【Examination items by age group】

| Age group (years)                      | Examination Items   |
|--|---|
| 0-6<br>(Infant before entering school) | Height, weight,<br>Additional items if requested:<br>CBC (Number of red blood cells, hematocrit, hemoglobin, platelet count, number of white blood cells, differential white blood count.)  |
| 7-15<br>(From 1st to 9th grade)        | Height, weight, blood pressure,<br>CBC (Number of red blood cells, hematocrit, hemoglobin, platelet count, number of white blood cells, differential white blood count.)<br>Additional items on requested:<br>Blood biochemistry (AST, ALT, $\gamma$ GT, TG, HDL-C, LDL-C, HbA1c, plasma glucose, serum creatinine, uric acid)  |
| 16 and older                           | Height, weight, abdominal circumference or BMI, blood pressure<br><u>CBC (Number of red blood cells, hematocrit, hemoglobin, platelet count, number of white blood cells, differential white blood count.)</u><br>Urinary test (urine protein, urinary sugar, <u>urine occult blood</u> )<br>Blood biochemistry (AST, ALT, $\gamma$ GT, TG, HDL-C, LDL-C, HbA1c, plasma glucose, <u>serum creatinine, estimated glomerular filtration rate [eGFR], uric acid</u> )<br>The underlined values are not routinely measured during regular health exams. |

### 3.2. The implementation status in FY 2016

#### ◆Methods of FY 2016

| Age group   | Area                   | Methods   |
|---|------------------------|---|
| $\geq 16$<br>years<br>old   | Within the prefecture  | Additional check-ups in specific health examinations held by target municipalities (Health Check conducted by municipalities within the prefecture)   |
|   |                        | Individual health examinations at designated medical institutions within the prefecture (Individual health examinations within the prefecture)<br>* Number of cooperating medical institutions is 482   |
|   |                        | Group health examinations conducted by FMU (Group health examinations within the prefecture)<br>* 28 locations within the prefecture (conducted 51 times)   |
|   | Outside the prefecture | Additional check-ups in specific health examinations held by target municipalities (Other <sup>1</sup> )  |
| Individual health examinations at designated medical institutions outside the prefecture (Individual health examinations outside the prefecture)<br>* Number of cooperating medical institutions is 719 (including 283 medical institutions that could accommodate $\leq 15$ years old) |                        |   |
| $\leq 15$<br>years<br>old   | Within the prefecture  | Children's health examinations at designated medical institutions within the prefecture (Children's health examinations within the prefecture)<br>* Number of cooperating medical institutions is 96  |
|   | Outside the prefecture | Children's health examinations at designated medical institutions outside the prefecture (Children's health examinations outside the prefecture)<br>* Number of cooperating medical institutions is 411 (including 283 medical institutions that could accommodate $\geq 16$ years old) |

- 1) conducted outside the prefecture (cases where the municipality delegated the examination to examination agencies)

### 3.3 Changes in the Participants of the FY 2011-2016 Survey

#### Progress Report for FY 2011-2016 (Ages 16 and older)

(Unit: person, percentage)

|   | FY 2011                            | FY 2012                           | FY 2013                           | FY 2014                           | FY 2015                        | FY 2016                                |
|---|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------|--|
|   | Revised value<br>as of 11 Sep 2012 | Revised value<br>as of 5 Jul 2013 | Revised value<br>as of 1 Sep 2014 | Revised value<br>as of 1 Sep 2015 | Revised value<br>of 1 Sep 2016 | Preliminary value<br>as of 31 Mar 2017 |
| Survey population   | 182,370                            | 184,910                           | 186,970                           | 188,328                           | 190,019                        | 191,101                                |
| Health Check conducted by municipalities within the prefecture    | 8,798                              | 23,907                            | 25,604                            | 25,913                            | 26,195                         | 26,644                                 |
| Individual examinations conducted within the prefecture           | —                                  | 6,692                             | 5,806                             | 4,927                             | 4,443                          | 3,941                                  |
| Group examinations conducted within the prefecture                | 41,949                             | 10,603                            | 6,767                             | 5,808                             | 5,183                          | 4,341                                  |
| Individual examinations conducted outside the prefecture          | 3,815                              | 3,055                             | 3,205                             | 3,418                             | 3,332                          | 2,118                                  |
| Other <sup>1,2</sup>  | 2,045                              | 3,206                             | 2,017                             | 1,846                             | 2,113                          | 2,108                                  |
| Number of overlapping examinees within and outside the prefecture | 208                                | 454                               | 359                               | 38                                | 55                             | *                                      |
| Total (Excluding the number of overlapping examinees)             | 56,399                             | 47,009                            | 43,040                            | 41,874                            | 41,211                         | 39,152                                 |
| Proportion of participants (%)                                    | 30.9%                              | 25.4%                             | 23.0%                             | 22.2%                             | 21.7%                          | 20.5%                                  |

1) conducted within the prefecture (cases where the municipality delegated the examination to medical institutions or county/city medical associations)

2) conducted outside the prefecture (cases where the municipality delegated the examination to examination agencies)

\* Because we are finding and removing duplicate records, the result is unconfirmed.

#### Progress Report for FY 2011-2016 (Ages 15 and younger)

(Unit: person, percentage)

|   | FY 2011                            | FY 2012                           | FY 2013                           | FY 2014                           | FY 2015                           | FY 2016                                |
|---|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--|
|   | Revised value<br>as of 11 Sep 2012 | Revised value<br>as of 5 Jul 2013 | Revised value<br>as of 1 Sep 2014 | Revised value<br>as of 1 Sep 2015 | Revised value<br>as of 1 Sep 2016 | Preliminary value<br>as of 31 Mar 2017 |
| Survey population   | 27,819                             | 27,077                            | 26,474                            | 25,883                            | 25,296                            | 24,600                                 |
| Children's health examination within the prefecture               | 15,002                             | 9,534                             | 8,432                             | 7,432                             | 6,206                             | 5,191                                  |
| Children's health examination outside the prefecture              | 2,949                              | 2,283                             | 1,822                             | 1,792                             | 1,403                             | 1,226                                  |
| Number of overlapping examinees within and outside the prefecture | 17                                 | 37                                | 6                                 | 8                                 | 6                                 | *                                      |
| Total (excluding the number of overlapping examinees)             | 17,934                             | 11,780                            | 10,248                            | 9,216                             | 7,603                             | 6,417                                  |
| Proportion of participants (%)                                    | 64.5%                              | 43.5%                             | 38.7%                             | 35.6%                             | 30.1%                             | 26.1%                                  |

\* Because we are finding and removing duplicate records, the result is unconfirmed.

#### **4. Evaluation**

In the  $\geq 16$ -year age group, 20.5% of the eligible residents underwent the health check-up in FY 2016, down from 21.7% in FY 2015 by 1.2 points. Likewise, in the  $\leq 15$ -year age group, the participation rate was 26.1% in FY 2016, down from 30.1% in FY 2015 by 4.0 points.

One possible reason is that the annual Comprehensive Health Check has become widely accepted since its initiation in FY 2011, creating a sense of security and a resultant lack of urgency among the eligible residents. Some might have declined invitation to attend the health check because the examination items were similar to those at work, or they made doctors' visits regularly. Especially, it is thought that young children have more difficulties than those  $\geq 16$  years old with group health exams on Saturdays or Sundays and prefer doctors' visits on weekdays.

#### **5. Implementation Plan for FY 2017 (Tentative plan)**

##### **【People residing within the prefecture】**

Continuing on from FY 2016, the additional examination items will be made available for eligible residents in specific health exams provided by municipal governments. At the same time, we will conduct group health exams, individual health exams and children's health exams at medical institutions.

##### **【People living outside the prefecture】**

Continuing on from FY 2016, we will conduct individual health exams and children's health exams at medical institutions outside Fukushima.

|               |                        | Apr | May   | Jun  | Jul | Aug | Sep | Oct | Nov | Dec | Jan                       | Feb | Mar |  |  |
|---------------|------------------------|-----|---|--|-----|-----|-----|-----|-----|-----|---------------------------|-----|-----|--|--|
| ≥16 years old | Within the prefecture  |     | Additional check-ups in specific health examinations held by municipalities * |  |     |     |     |     |     |     | Group health examinations |     |     | Individual health examinations at medical institutions |  |
|               | Outside the prefecture |     |   | Health examinations at designated medical organizations outside the prefecture           |     |     |     |     |     |     |                           |     |     |  |  |
| ≤15 years old | Within the prefecture  |     |   | Children's health examinations in designated medical institutions within the prefecture  |     |     |     |     |     |     |                           |     |     |  |  |
|               | Outside the prefecture |     |   | Children's health examinations at designated medical institutions outside the prefecture |     |     |     |     |     |     |                           |     |     |  |  |

\* Iitate (from 10 May), Tamura (from 22 May), Katsurao (from 4 Jun), Kawamata (from 12 Jun), Minami-soma (from 21 Jun), Hirono (from 4 Jul), Futaba (from 25 Aug), Kawauchi (from 4 Sep), Naraha (from 11 Sep), Namie (from 14 Sep), Tomioka (from 19 Sep), Okuma (from 16 Oct)