

"We will promote the mental and physical health of residents of the Evacuation Areas, etc."

Fukushima Prefecture has been conducting the Mental Health and Lifestyle Survey with the aim of accurately ascertaining the mental and physical problems of residents who have been facing difficulties due to the Great East Japan Earthquake and the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS in order to provide them with proper health, medical and welfare services, and also handing down to future generations accumulated knowledge on better mental care in an emergency or in the event of a natural disaster.

Prepared based on the website of the Radiation Medical Science Center for the Fukushima Health Management Survey, Fukushima Medical University, "Information on the Mental Health and Lifestyle Survey"

Many of the residents whose houses are located in municipalities designated as Evacuation Areas were forced to evacuate and live as refugees for a prolonged period of time. They have experienced drastic changes in their living environment and must have been forced to change their individual lifestyles as well. In order to carefully watch not only the physical disorders but also mental problems of these residents and offer them appropriate support and build a better system, Fukushima Prefecture has been conducting the Mental Health and Lifestyle Survey.

Included in this reference material on March 31, 2013

Updated on March 31, 2016

[Coverage]

Residents who were registered at any of the municipalities designated as Restricted Areas, Deliberate Evacuation Areas or Evacuation-Prepared Areas in Case of Emergency or at any of the areas containing Specific Spots Recommended for Evacuation as of 2011 (approx. 210,000 people) and residents who were found to require the Comprehensive Health Checkup as a result of the Basic Survey

(= The entire areas of Tamura City, Minamisoma City, Kawamata Town, Hirono Town, Naraha Town, Tomioka Town, Kawauchi Village, Okuma Town, Futaba Town, Namie Town, Katsurao Village and Iitate Village, and parts of Date City)

[Method]

Prepare inquiry sheets by age bracket (self-reporting questionnaires or those to be filled in by guardians) and send them to the survey targets (responses are received by post or online)

[Major survey items]

- Present physical and mental status
- Lifestyle (diet, sleep, and smoking, drinking and exercise habits)
- Present living conditions (the public)

[Measures after receiving responses]

For respondents who are deemed to require support based on their responses, clinical psychotherapists, public health nurses, or clinical nurses, etc. of the Mental Health Support Team make a phone call to give advice and support concerning problems with their mental health and lifestyles.

Prepared based on the website of the Radiation Medical Science Center for the Fukushima Health Management Survey, Fukushima Medical University, "Information on the Mental Health and Lifestyle Survey"

As in the case of the Comprehensive Health Checkup, the Mental Health and Lifestyle Survey also covers residents who were registered, as of March 11, 2011, and as of April 1 of the relevant survey year, at any of the municipalities that were designated as Restricted Areas, Deliberate Evacuation Areas or Evacuation-Prepared Areas in Case of Emergency or at any of the areas containing Specific Spots Recommended for Evacuation* at the time of the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS.

These residents are to respond to questions in an inquiry sheet concerning their mental and physical health conditions. Their responses are compiled into indicators to check their need for support.

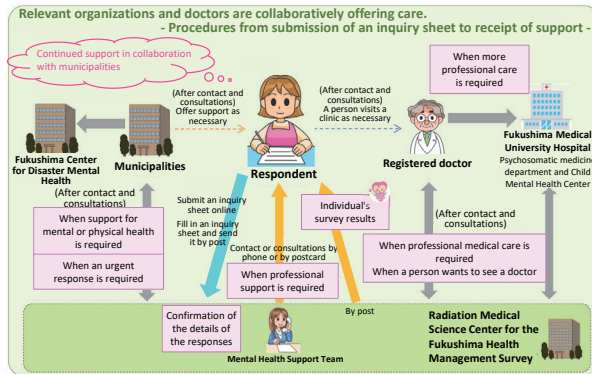
Different inquiry sheets are prepared depending on the age brackets, with the aim of taking required measures more appropriately. Children are divided into four age brackets: those aged zero to 3; those aged 4 to 6; elementary school students; and junior high school students. People aged 16 or older are categorized as the general public.

In addition to questions concerning present mental and physical health conditions, the survey items include questions about changes in lifestyles, such as diet, sleep, drinking, smoking, and exercise habits, as respondents must have experienced drastic changes in their living environment.

Included in this reference material on March 31, 2013

Updated on December 1, 2017

Mental Health and Lifestyle Survey: Outline (2/2)



* For people who are deemed to require continued support, care is provided on an ongoing basis through collaboration among regional registered doctors, municipalities and the Fukushima Center for Disaster Mental Health.

* Survey results are sent individually from FY2014.

[Registered doctors] Psychiatrists and pediatricians, etc., who have received lectures concerning disaster mental health and radiation medical science: As of the end of December 2017, there are 130 registered doctors in 81 medical institutions.

| | Number of people who received support by phone | | Number of people who received support in writing | |
|--------|--|-------------------------|--|-------------------------|
| | Children | People aged 16 or older | Children | People aged 16 or older |
| FY2011 | 1,180 | 6,310 | 1,066 | 10,898 |
| FY2012 | 623 | 5,991 | 800 | 10,168 |
| FY2013 | 473 | 3,913 | 752 | 7,664 |
| FY2014 | 327 | 3,053 | 517 | 6,244 |
| FY2015 | 250 | 2,567 | 435 | 6,075 |

Prepared based on the materials for the 11th, 15th, 19th, 22nd, 26th and 27th Prefectural Oversight Committee Meetings for Fukushima Health Management Survey

Analysis results are individually sent to people who have submitted inquiry sheets.

For respondents who are considered to require professional support as a result of analyzing their responses, clinical psychotherapists, public health nurses, or clinical nurses, etc. make a phone call to give advice and support concerning problems with their mental health and lifestyles. For people who did not enter their telephone numbers in inquiry sheets, contact is made in writing.

Remarks by people who have received support by phone include, "I am glad that I can confess what I cannot say to my family," or, "I am relieved to know that I can call this number to make consultations whenever I feel depressed."

Regarding those in need of continued support or professional medical care, relevant information is shared among municipalities, the Fukushima Center for Disaster Mental Health and registered doctors, on a case-by-case basis, to create a more positive support network.

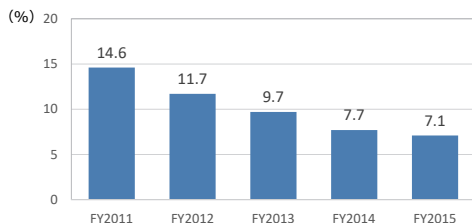
Included in this reference material on March 31, 2013

Updated on December 28, 2017

Mental Health and Lifestyle Survey: What Has Become Clear (1/4)

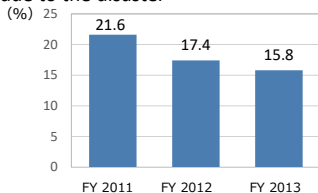
Latest Survey Results: <http://www.pref.fukushima.lg.jp/site/portal/kenkocycosa-kentoinkai.html> (in Japanese)

- Percentage of people who are considered to require support for their depressions and anxieties

Measurement scale: **K6***

* Respondents reply to each question of a six-item questionnaire concerning their depression and anxieties with a score from zero to four points. When the total is 13 points or over, a mood disorder or anxiety disorder is suspected.

- Percentage of people who are considered to require support for their traumatic stresses due to the disaster

Measurement scale: **PCL***

* Respondents reply to each question of a 17-item questionnaire concerning their frequently arising problems and need arising from their disaster experience (traumatic stress) with a score from zero to five. When the total is 44 points or over, PTSD is suspected.

* In order to ease psychological burdens associated with replying to the questionnaire, the FY2014 and FY2015 surveys did not include PCL-related questions.

Prepared based on the materials for the 11th, 15th, 19th and 23rd and 27th Prefectural Oversight Committee Meetings for Fukushima Health Management Survey

- K6*1 remains at a high level, although the values have been declining compared with the FY2011 survey and the FY2012 survey.
- Females show higher values than males. The gap by age bracket was the smallest in FY2015 compared with the results of the past surveys.
- PCL*2 remains at a high level, although the values have been declining compared with the FY2011 survey and the FY2012 survey.

*1: K6 = Scale to measure the levels of depression and anxieties

Respondents reply to each question of a six-item questionnaire concerning the frequencies with which they felt depressed or anxious during the past 30 days (such as "Have you felt extremely nervous?" or "Have you felt desperate and helpless?"). This survey targets people aged 16 or older to ascertain whether any mood or anxiety disorder poses a problem in their daily lives, based on their responses.

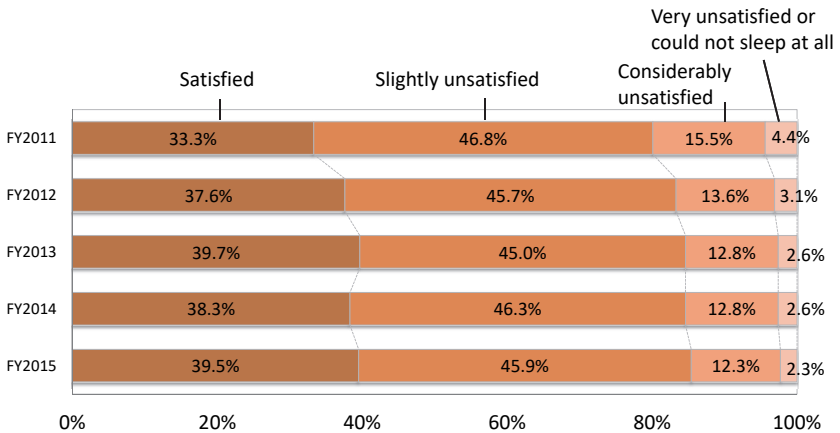
*2: PCL (Post-Traumatic Stress Disorder Checklist) = Scale to measure traumatic stresses

Respondents reply to each question of a 17-item questionnaire concerning how often they had problems and needs arising from their disaster experience (traumatic stress) during the past 30 days (such as "Repeatedly remembered disturbing memories, ideas, images (scenes) of the relevant stress experience" or "Repeatedly had disturbing dreams of the relevant stress experience"). Through this survey, individuals' levels of traumatic stress are ascertained.

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Updated on December 1, 2017

[Levels of satisfaction regarding sleep during the latest one month period] Those aged 16 or older



Prepared based on the materials for the 11th, 15th, 19th, 23rd and 27th Prefectural Oversight Committee Meetings for Fukushima Health Management Survey

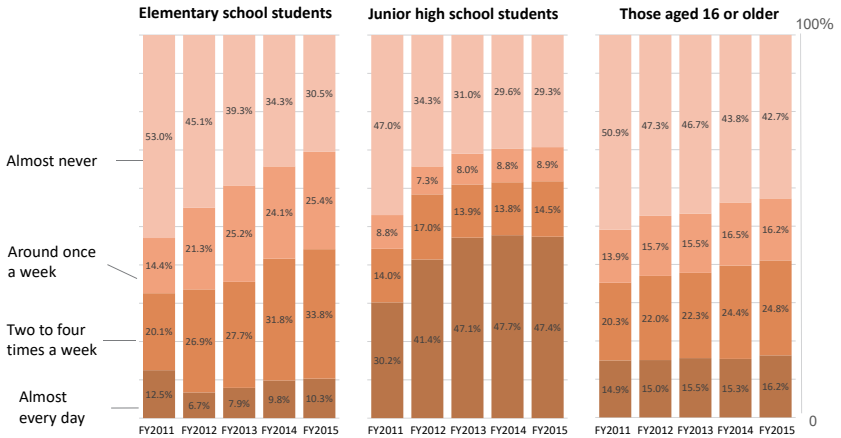
Sleep is a significant factor that exerts influence on various chronic diseases such as high blood pressure or diabetes, as well as affecting people's mental health.

It should be noted that approximately 60% of the respondents are somewhat unsatisfied with their sleep to some degree.

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Updated on December 1, 2017

[Percentages concerning daily exercises]



Prepared based on the materials for the 11th, 15th, 19th, 23rd and 27th Prefectural Oversight Committee Meetings for Fukushima Health Management Survey

Not only those aged 16 or older, but also elementary school students and junior high school students have come to have more chances for exercises, showing an improving trend.

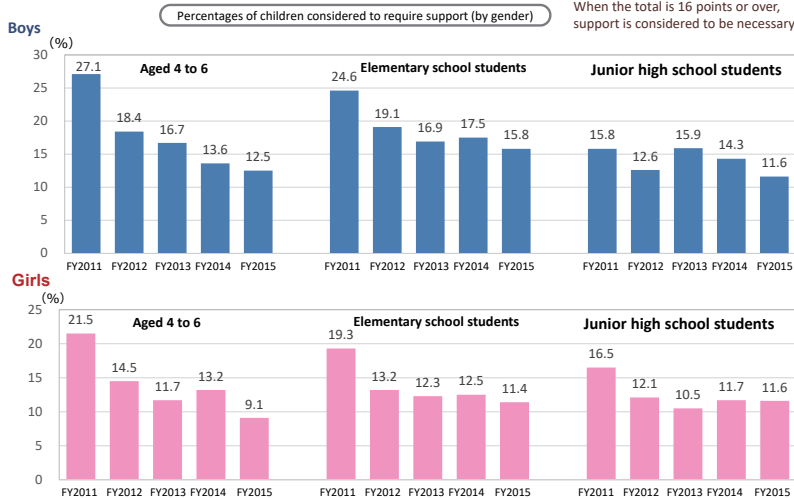
In particular, exercises are considered to exert a significant influence on the growth of elementary school students and junior high school students.

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Updated on December 1, 2017

[Children's mental health conditions]

Measurement scale: SDQ*
When the total is 16 points or over,
support is considered to be necessary.



Prepared based on the materials for the 11th, 15th, 19th, 23rd and 27th Prefectural Oversight Committee Meetings for Fukushima Health Management Survey

- As an indicator to evaluate children's mental health conditions, SDQ* is utilized.
- In a prior study targeting the public in Japan who did not experience the nuclear disaster, people showing SDQ points over 16 accounted for 9.5% of the total. Compared with this, percentages of children showing SDQ points over 16 were higher for all groups except for girls aged 4 to 6 in the FY2015 survey, as was the case in the surveys in previous fiscal years.
- In the FY2015 survey, percentages of high SDQ points decreased for all groups compared with the results of the FY2011 survey. However, the improvement slowed down and the percentages remained almost unchanged from those of the FY2012 survey.
- Hours of sleep in the FY2015 survey were almost the same as those in the FY2012 survey and were approaching the level shown in the preceding study. Furthermore, the FY2015 survey shows a declining trend in percentages of children who seldom do exercise, but suggests poorer exercise habits compared with the results of a nationwide survey, although a direct comparison is difficult due to differences in survey content.

* SDQ (Strengths and Difficulties Questionnaire) = Scale to measure children's mental health conditions

Respondents reply to each question of a 25-item questionnaire concerning children's moods and behavior during the past six months (such as "Gives due consideration to other's feelings" or "Is restless and cannot stay still for a long time"). This survey covers those aged 4 to 15 to judge whether they need professional support or not.

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Updated on December 1, 2017