

# Progress Report of the Pregnancy and Birth Survey

Reported on 6 June 2016

## 1. Purpose of the Pregnancy and Birth Survey

Our goal is to comprehend the mental and physical health status of expectant and nursing mothers so that we can alleviate their anxiety and provide them with necessary care. The survey also aims to improve perinatal care in Fukushima Prefecture by listening to their current situation, needs and expectations.

## 2. Progress report of FY 2015 survey

### 2.1 Survey population

- Those who received Maternal and Child Health Handbooks from municipal governments in Fukushima Prefecture between 1 August 2014 and 31 July 2015.
- Those who received Maternal and Child Health Handbooks from locations outside Fukushima during the above time period, and then returned to give birth in Fukushima.

### 2.2 Implementation status

#### 2.2-1 Response rates

Respondents were asked to submit the survey form after filling out the information on the baby's one-month old checkup results. The survey forms have been sent three times since FY 2014 at the convenience of respondents. The response rate surpassed that of the survey around the same time in FY 2014. We continue to receive responses from participants.

Survey year	Number of surveys sent	Responses (Response rate)
FY 2015*	14,569	5,868 (40.3)
FY 2014	15,125	7,132 (47.2)**
FY 2013	15,218	7,260 (47.7)
FY 2012	14,516	7,181 (49.5)
FY 2011	16,001	9,316 (58.2)

\*As of 30 April 2016

\*\*The response rate as of 30 April 2015 is 38.2%.

#### 2.2-2 Status of support provision

Survey responses were used to identify mothers in need of support, and to provide them with an opportunity to consult midwives and public health nurses through telephone counseling, regarding concerns about their health- or childcare-related matters. We have also established a support system through e-mail to give advice to those in need.

a. Telephone counseling

Survey year	Responses	Support		
		Participants requiring support (%) <sup>1</sup>	Type of response that prompted support	
			Depressive symptoms** (Proportion of support given) <sup>1</sup>	Free comments (Proportion of support given) <sup>1</sup>
FY 2015*	5,868	770 (13.1)	447 (7.6)	323 (5.5)
FY 2014	7,132	830 (11.6)	645 (9.0)	185 (2.6)
FY 2013	7,260	1,101 (15.2)	744 (10.2)	357 (4.9)
FY 2012	7,181	1,104 (15.4)	751 (10.5)	353 (4.9)
FY 2011	9,316	1,401 (15.0)	1,224 (13.1)	177 (1.9)

1) Percentage of total responses.

\*As of 30 April 2016

\*\* Participants who said they had depressive mood or had a hard time enjoying things.

b. E-mail counseling

Survey year	Number of consultations (Participants)
FY 2015*	16 (5)
FY 2014**	26 (10)
FY 2013	3 (3)
FY 2012	6 (6)
FY 2011	13 (13)

\*As of 30 April 2016

\*\* These results were amended from those reported at the 22<sup>nd</sup> Proceedings of the Prefectural Oversight Committee Meeting for the Fukushima Health Management Survey on 15 February 2016.

c. Other matters

A booklet containing information about survey results and support services has been sent with the survey form to all eligible residents.

2.3 Major survey items (concerning next pregnancy)

Data to be collected:

(FY 2015 survey) 5,406 valid responses from 24 November 2015 through 31 March 2016

(The number is approximate due to ongoing data examination.)

(FY 2014 survey) 7,085 valid responses from 20 November 2014 through 18 December 2015

(FY 2013 survey) 7,214 valid responses from 24 December 2013 through 26 December 2014

(FY 2012 survey) 7,139 valid responses from 14 December 2012 through 30 November 2013

Are you planning a next pregnancy?

Response	FY 2015	FY 2014	FY 2013	FY 2012
Yes	2,894 (53.5)	4,044 (57.1)	3,811 (52.8)	3,775 (52.9)
No	2,454 (45.4)	2,928 (41.3)	3,292 (45.6)	3,239 (45.4)
No/invalid answer	58 (1.1)	113 (1.6)	111 (1.5)	125 (1.8)

Services requested by those who were planning a pregnancy (Multiple answers allowed)

Response	FY 2015		FY 2014		FY 2013		FY 2012	
Improved childcare facilities, extended- hours childcare, sick child care	2,180	(75.3)	2,866	(73.3)	2,577	(70.5)	2,435	(66.2)
Childcare-/pediatric medicine-related services	1,921	(66.4)	2,695	(68.9)	2,436	(66.6)	2,613	(71.0)
Improved maternity and parental leave systems	1,735	(60.0)	2,205	(56.4)	2,086	(57.1)	1,893	(51.4)
Information on radiation and its health risks	845	(29.2)	1,477	(37.8)	1,508	(41.2)	2,220	(60.3)
Other	319	(11.0)	406	(10.4)	259	(7.1)	247	(6.7)

\*Denominator is the number of valid responses (2,894 in FY 2015; 3,909 in FY 2014; 3,656 in FY 2013; 3,681 in FY 2012).

The reasons for not planning a pregnancy (Multiple answers allowed)

Response	FY 2015		FY 2014		FY 2013		FY 2012	
No desire	1,135	(46.3)	1,830	(62.6)	1,774	(54.4)	1,690	(52.6)
Age- or health-related issue	836	(34.1)	889	(30.4)	1,173	(35.9)	1,012	(31.5)
Busy with ongoing childcare	837	(34.1)	834	(28.5)	1,195	(36.6)	1,153	(35.9)
Lack of financial stability	526	(21.4)	511	(17.5)	772	(23.7)	828	(25.8)
Lack of support with housework or childcare	244	(9.9)	273	(9.3)	343	(10.5)	310	(9.7)
Lack of childcare facilities/services	248	(10.1)	183	(6.3)	219	(6.7)	222	(6.9)
Worried about radiation effect	37	(1.5)	114	(3.9)	183	(5.6)	475	(14.8)
Living away from family members	41	(1.7)	56	(1.9)	59	(1.8)	78	(2.4)
Living as an evacuee	7	(0.3)	20	(0.7)	32	(1.0)	78	(2.4)
Other	441	(18.0)	214	(7.3)	81	(2.5)	81	(2.5)

\*Denominator is the number of valid responses (2,454 in FY 2015; 2,924 in FY 2014; 3,263 in FY 2013; 3,212 in FY 2012).

## 2.4 Evaluation of survey results

The response rate of the survey in FY 2015 was roughly two points higher than the previous year. In FY 2014, the survey questionnaire was simplified for the respondents, and sent three times according to when the participants are able to respond (after the baby's one-month old checkup). In the FY 2015 survey, the formatting of the survey was reduced to four pages. We plan to send out the questionnaire once again in July (as last year) to those who have yet to respond or have lost the survey forms.

## 3. Other surveys

### 3.1 Follow-up survey

**Purpose:** The Pregnancy and Birth Survey is a cross-sectional study that collects data of different groups every year. In order to assess the need to provide continued support, we conduct a follow-up survey for the respondents of the Pregnancy and Birth Survey in FY 2011. Many of them tended to have depressive symptoms and wrote serious issues in the comment section of the survey. The age of children born at the

time would now be around four years old, when the number of mothers who lose confidence in child rearing increases\*. Among the survey population of the FY 2011 survey, there were participants who were newly assessed to be in need of support.

\* Results of the Health Survey on Infants and Young Children in FY 2000 and FY 2010.

**Survey population:** Respondents to the Pregnancy and Birth Survey for FY 2011 who delivered babies and were confirmed to be alive at the time when the survey forms were sent out (7,252).

**Survey period:** We sent survey questionnaire on 11 September 2015, and continue to receive responses from participants.

**Method:** We referred to municipal registers for participants' information to confirm that the mothers and their children were alive, and sent them the questionnaire. Midwives and public health nurses are providing telephone counseling sessions to those who are screened to be in need of support based on their answers.

**Response:** The number of respondents is 2,550 (35.2%) as of 30 April, 2016.

**Support:** The number of respondents who need support is 375 (14.7% of the respondents).

**Interim results:** Roughly 10% of the participants had low self-reported health (not so healthy or not healthy), and nearly a quarter of the respondents tended to have depressive symptoms. The most frequently mentioned issue in the comment section was effects of radiation on the fetus and child, followed by positive comments or gratitude for the survey and telephone support services. Other mentioned issues included request for information on radiation, and request for thyroid ultrasound examination for children.

### 3.2 Response survey

**Purpose:** We conducted the survey to increase the response rate and plan the future of the Pregnancy and Birth Survey by understanding the mothers' reasons for responding or not responding.

**Survey population:** Among the survey population of the FY 2014 Pregnancy and Birth Survey (those who received Maternal and Child Health Handbooks from municipal governments in Fukushima Prefecture between August 1, 2013 and July 31, 2014), 76 mothers of children who participate in three- or four-month checkups in designated municipalities were surveyed\*.

\* We asked for cooperation of 59 municipalities in Fukushima Prefecture and selected three municipalities from the regions of Hamadori, Nakadori, and Aizu to conduct the survey.

**Survey period:** May 2015

**Method:** Fukushima Medical University staff explained the purpose of the survey to mothers at the baby's three- or four-month checkup held by municipalities, handed the questionnaire and collected them.

**Result:** The survey revealed that 70-80% of the respondents did not know about the telephone counseling services or release of the survey results. However, those who answered the Pregnancy and Birth Survey questions included a higher percentage of people familiar with them than those who did not respond. It is necessary for us to disseminate information about the survey as well as the telephone counseling services and release of the survey results.

## 4. Implementation plan for FY 2016 survey

### 4.1 Survey in FY 2016

#### 4.1-1 Pregnancy and Birth Survey for FY 2016

**Purpose:** The response rate of the survey started from FY 2011 has been around 50%, which is high for a

postal survey, showing an increased public interest in the health of mothers and children. We will continue to conduct the survey to improve perinatal care in Fukushima Prefecture by addressing the anxiety of pregnant women and mothers, and providing necessary support through assessing their physical and mental health.

**Survey population:**

A: Those who receive Maternal and Child Health Handbooks from municipal governments in Fukushima Prefecture between 1 August 2015 and 31 July 2016.

B: Those who receive Maternal and Child Health Handbooks from locations outside Fukushima Prefecture during the above time period, and then returned to give birth in Fukushima.

**Survey period:** We plan to send out the questionnaire to those mentioned above (A) three times from November 2016 through March 2017, depending on the time when they receive the Maternal and Child Health Handbook.

**Method:** To those mentioned above (A), we will refer to 59 municipalities for current information, and mail the self-completed survey questionnaire. For the survey population (B), the survey form will be distributed at obstetrics clinics in Fukushima Prefecture. Midwives and public health nurses will provide telephone counseling sessions as well as online support services to those who are screened to require support.

#### 4.1-2 Follow-up survey

**Purpose:** Since the follow-up survey for respondents of the FY 2011 survey showed that the proportion of those who had depressive symptoms or who were concerned about health effects of radiation was high, it is important to help lessen the anxiety and provide necessary care. We will continue to conduct the survey for respondents of the FY 2012 survey to provide continued support. We will also monitor the physical and mental health of the participants or their child-care situation to offer appropriate care.

**Survey population:** Respondents of the Pregnancy and Birth Survey for FY 2012 who delivered babies and are confirmed to be alive at the time when the survey forms are sent out (approximately 7,000).

**Survey period:** October 2016 (TBA)

**Method:** We will refer to municipal registers for the participants' information, to confirm that the mothers and their children are alive, and send them the questionnaire. Midwives and public health nurses will provide telephone counseling sessions to those who are assessed to require support based on their answers.