

Pregnancy and Birth Survey: Purpose

"We will promote the health of pregnant women in Fukushima Prefecture."

Many pregnant women intending to give birth and raise children in Fukushima Prefecture have been forced to live as refugees due to the Great East Japan Earthquake and the accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi NPS, and have stresses from changes in their lifestyles and worries concerning radiation.

Therefore, Fukushima Prefecture has been conducting the Pregnancy and Birth Survey with the aim of properly ascertaining those pregnant women's current status, mental and physical health conditions, as well as opinions and wishes in order to alleviate their worries, provide necessary care and ensure peace of mind and, to utilize the obtained data for improving obstetric and perinatal care in Fukushima Prefecture.

Pregnancy and Birth Survey: Outline (1/2)

[Coverage]

Pregnant women who obtained a maternity handbook within Fukushima Prefecture and those who obtained a maternity handbook somewhere else but gave birth in the prefecture during the survey period for every fiscal year

Fiscal year	Coverage	Responses from	
FY2011	16,001 people	9,316 people (58.2%)	<p>Conducted a follow-up survey in approx. 4 years after delivery</p> <p>Coverage</p> <p>7,252 people</p> <p>Responses from</p> <p>2,554 people (35.2%)</p> <hr/> <p>5,602 people</p> <p>2,021 people (36.1%)</p>
FY2012	14,516 people	7,181 people (49.5%)	
FY2013	15,218 people	7,260 people (47.7%)	
FY2014	15,125 people	7,132 people (47.2%)	
FY2015	14,569 people	6,866 people (47.1%)	
FY2016*	14,138 people	6,069 people (42.9%)	

* Provisional values (as of April 30, 2017)

[Survey method]

Inquiry sheets are sent to the targeted pregnant women, asking them to fill in the sheets and send them back.

(From the FY2016 survey, responses are accepted by post or online.)

Major survey items are as follows:

- Pregnant women's mental health conditions
- Present living conditions (circumstances of a refugee life or forced separation from family members)
- Situations during delivery and pregnant women's physical health conditions
- Confidence in raising children
- Attitude toward the next pregnancy

Pregnancy and Birth Survey: Outline (2/2)

[Survey procedures]

Radiation Medical Science Center
for the Fukushima Health
Management Survey, Fukushima
Medical University

Survey targets

Main survey

Approximately
1 year after
reporting
pregnancy



Major survey items

- Pregnant women's mental health conditions
- Present living conditions and status of child rearing
- Developments concerning pregnancy and delivery
- Attitude toward the next pregnancy

Sending of
inquiry sheets

Response

Consultations by phone or mail



Follow-up survey

Approximately
4 years after
delivery



Sending of inquiry sheets for the follow-up survey

Response

Consultations by phone or mail



- Coverage of the FY2017 main survey
 - Pregnant women who obtained a maternity handbook in any municipality in Fukushima Prefecture from August 1, 2016, to July 31, 2017
 - Pregnant women who obtained a maternity handbook outside Fukushima Prefecture during the period mentioned above but gave birth in Fukushima Prefecture
- Coverage of the FY2017 follow-up survey

Respondents of the FY2013 survey who gave birth from August 1, 2012, to April 8, 2014

→ Since the FY2016 survey, responses can also be submitted online.

On the website of the Radiation Medical Science Center for the Fukushima Health Management Survey, responses can be made using personal computers or smartphones.

Pregnancy and Birth Survey: Achievement and Content of Support

[Changes in coverage]

Out of all respondents, for those who were judged to be in need of support from the content of their responses, support has been offered by full-time midwives, etc. by phone or mail.

Fiscal year	Number of people who received support by phone	Percentage of those who received support among all respondents		Number of people who received support by phone	Percentage of those who received support among all respondents
FY2011	1,401 people	15.0%	Survey following up the FY2011 survey	375 people	14.7 %
FY2012	1,104 people	15.4%	Survey following up the FY2011 survey	255 people	12.7 %
FY2013	1,101 people	15.2%			
FY2014	830 people	11.6%			
FY2015	913 people	13.0%			
FY2016*	782 people	12.9%			

* Provisional values (as of April 30, 2017)

[Topics of the consultations by phone]

	FY2011	FY2012	FY2013	FY2014 to FY2015 (the same ranking for both years)	Survey following up the FY2011 survey
1st	Worries over radiation and its effects	Mothers' mental and physical health	Mothers' mental and physical health	Mothers' mental and physical health	Mothers' mental and physical health
2nd	Mothers' mental and physical health	Matters concerning child rearing	Matters concerning child rearing	Matters concerning child rearing	Worries over radiation and its effects
3rd	Matters concerning child rearing	Worries over radiation and its effects	Children's mental and physical health	Matters concerning family life	Matters concerning child rearing

Matters concerning child rearing include concerns about baby food, night crying, constipation, vaccination, etc.

Pregnancy and Birth Survey: What Has Become Clear (1/2)

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

[Percentages of premature births, low birth-weight babies, and congenital abnormalities or anomalies]

Percentages of premature births, low birth-weight babies, and congenital abnormalities or anomalies obtained through the Pregnancy and Birth Survey were almost the same as the general level and those obtained through nationwide surveys.

(%)

	Percentage of premature births		Percentage of low birth-weight babies		Percentage of congenital abnormalities or anomalies	
	Main survey	Nationwide survey	Main survey	Nationwide survey	Main survey	General level
FY2011	4.8	5.7	8.9	9.6	2.85	3 to 5 (based on the 2014 Obstetric Care Guidelines)
FY2012	5.7	5.7	9.6	9.6	2.39	
FY2013	5.4	5.8	9.9	9.6	2.35	
FY2014	5.4	5.7	10.1	9.5	2.30	
FY2015	5.8	5.6	9.8	9.5	2.24	

Nationwide surveys: Percentages based on the Vital Statistics Premature births: Babies born at a gestational age from 22 weeks to less than 37 weeks
 Low birth-weight babies: Babies born smaller than 2500g

Pregnancy and Birth Survey: What Has Become Clear (2/2)

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

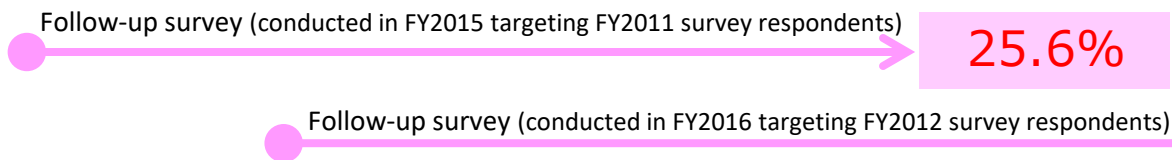
[Changes in pregnant women's depressive tendencies]

The percentage of respondents who replied that they tend to feel depressed and/or that they are not interested in things



Pregnant women's depressive tendencies have been weakening gradually but are still strong.

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Main survey	27.1%	25.5%	24.5%	23.4%	22.0%	



[Changes in percentage of respondents who answered "Yes" to the question "Are you considering another pregnancy?"]

Nationwide survey	Pregnancy and Birth Survey				
	FY2012	FY2013	FY2014	FY2015	FY2016*
FY2010	52.9%	52.8%	57.1%	53.3%	55.4%

Percentage of respondents who are married for less than 10 years and plan to have a child in the nationwide survey, "Fourteenth Japanese National Fertility Survey in 2010" (when having any children already)

* The 2011 survey did not contain the relevant question.
* Provisional values (as of March 31, 2017)