Pregnancy and Birth Survey

Pregnancy and Birth Survey: Purpose

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

The Pregnancy and Birth Survey was commenced in order to ascertain mental and physical health conditions of pregnant women in Fukushima Prefecture after the Great East Japan Earthquake and the subsequent accident at TEPCO's Fukushima Daiichi NPS, with the aim of alleviating their anxieties and providing necessary care, and also improving obstetric and gynecological care in Fukushima Prefecture.

Prepared based on the website of the Radiation Medical Science Center for the Fukushima Health Management Survey, Fukushima Medical University (information on the Pregnancy and Birth Survey)

Pregnancy and Birth Survey

Pregnancy and Birth Survey: Outline (1/2)

[Eligible persons]

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	Eligible persons	Responses from		Conducted the first follow-up survey in approx. 4 years after delivery		Conducted the second follow-up survey in approx. 8 years after delivery	
				Eligible persons	Responses from	Eligible persons	Responses from
FY2011	16,001 people	9,316 people	(58.2%)				
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	14,572 people	7,031 people	(48.3%)	7,252 people	2,554 people (35.2%)		
FY2016	14,154 people	7,326 people	(51.8%)	5,602 people	2,021 people (36.1%)		
FY2017	13,552 people	6,449 people	(47.6%)	5,734 people	2,706 people (47.2%)		
FY2018	12,838 people	6,649 people	(51.8%)	5,856 people	2,719 people (46.4%)		
FY2019	11,909 people	6,328 people	(53.1%)			6,643 people	2,354 people (35.4%)
FY2020	11,382 people	6,359 people	(55.9%)			5,152 people	2,178 people (42.3%)
FY2021	（The main survey ended in FY2020.）					5,402 people	2,492 people (46.1%)
FY2022						5,248 people	2,266 people (43.2%)

[Survey method]

Inquiry sheets were 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:

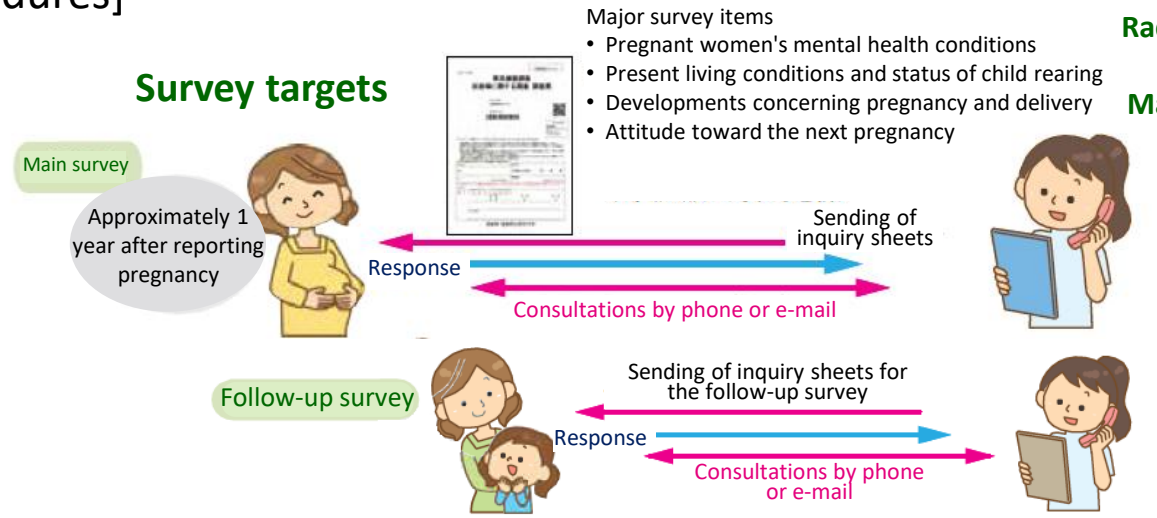
- Pregnant women's mental health conditions
- Present living conditions (circumstances of a refugee life or forced separation from family members)
- Situations during delivery and pregnant women's physical health conditions
- Confidence in raising children
- Attitude toward the next pregnancy

Prepared based on the website of the Radiation Medical Science Center for the Fukushima Health Management Survey, Fukushima Medical University and the materials for the 51st Prefectural Oversight Committee Meetings for Fukushima Health Management Survey

Pregnancy and Birth Survey

Pregnancy and Birth Survey: Outline (2/2)

[Survey procedures]



First survey (4 years after delivery): Conducted in FY2015 to FY2018 targeting respondents of the surveys conducted in FY2011 to FY2014
Second survey (8 years after delivery): Conducted in FY2019 to FY2022 targeting respondents of the surveys conducted in FY2011 to FY2014

[Pregnancy and Birth Survey] Responses were also accepted online from the FY2016 survey to the last survey.

- Main survey

  Ended with the FY2020 survey
- First follow-up survey

  Ended with the FY2018 survey
- Second follow-up survey

  Ended with the FY2022 survey

Prepared based on the leaflet on the Pregnancy and Birth Survey, and the website of the Radiation Medical Science Center for the Fukushima Health Management Survey, Fukushima Medical University

Pregnancy and Birth Survey

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 was 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
FY2011	1,401 people	15.0%
FY2012	1,104 people	15.4%
FY2013	1,101 people	15.2%
FY2014	830 people	11.6%
FY2015	913 people	13.0%
FY2016	951 people	13.0%
FY2017	799 people	12.4%
FY2018	711 people	10.7%
FY2019	668 people	10.6%
FY2020	688 people	10.8%

	Number of people who received support by phone	Percentage of those who received support among all respondents
First survey following up the FY2011 survey	375 people	14.7%
First survey following up the FY2012 survey	256 people	12.7%
First survey following up the FY2013 survey	393 people	14.5%
First survey following up the FY2014 survey	380 people	14.0%

	Number of people who received support by phone	Percentage of those who received support among all respondents
Second survey following up the FY2011 survey	421 people	17.9%
Second survey following up the FY2012 survey	386 people	17.7%
Second survey following up the FY2013 survey	469 people	18.8%
Second survey following up the FY2014 survey	414 people	18.3%

[Topics of the consultations by phone]

	Main survey						First follow-up survey			Second follow-up survey
	FY2011	FY2012	FY2013	FY2014 to FY2017 (the ranking remained unchanged)	FY2018 to FY2019 (the ranking remained unchanged)	FY2020	FY2015 FY2011 survey respondents	FY2016 FY2012 survey respondents	FY2017 to FY2018 (the ranking remained unchanged) FY2013-2014 survey respondents	FY2019 to FY2022 (the ranking remained unchanged) FY2011-2014 survey respondents
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	Matters concerning child rearing	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	Matters concerning child rearing	Mothers' mental and physical health	Worries over radiation and its effects	Matters concerning child rearing	Matters concerning child rearing	Matters concerning child rearing
3rd	Matters concerning child rearing	Worries over radiation and its effects	Children's mental and physical health	Matters concerning family life	Children's mental and physical health	Matters concerning family life	Matters concerning child rearing	Children's mental and physical health	Matters concerning family life	Children's mental and physical health

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

Prepared based on the material for the 44th and 51st Prefectural Oversight Committee Meeting for Fukushima Health Management Survey

Pregnancy and Birth Survey

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

Latest Survey Results: https://www.pref.fukushima.lg.jp/site/portal/kenkocyosa-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	4.6	5.7	8.6	9.6	2.85	
FY2012	5.6	5.7	9.2	9.6	2.39	
FY2013	5.2	5.8	9.6	9.6	2.35	
FY2014	5.3	5.7	9.8	9.5	2.30	2 to 3 (based on the Obstetrics and Gynecology Clinical Practice Guidelines: Obstetrics 2023)
FY2015	5.6	5.6	9.4	9.5	2.24	
FY2016	5.3	5.6	9.2	9.4	2.55	
FY2017	5.3	5.7	9.2	9.4	2.38	
FY2018	5.2	5.6	9.0	9.4	2.19	
FY2019	5.1	5.6	9.1	9.4	2.71	
FY2020	4.4	5.5	8.1	9.2	2.21	

* As percentages are retabulated by excluding cases of dead births, values differ from those in the reports on the surveys in FY2011 to FY2018.
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
Nationwide surveys: Annual percentages based on the Vital Statistics

Prepared based on the material for he 44th and 51st Prefectural Oversight Committee Meeting for Fukushima Health Management Survey

Pregnancy and Birth Survey

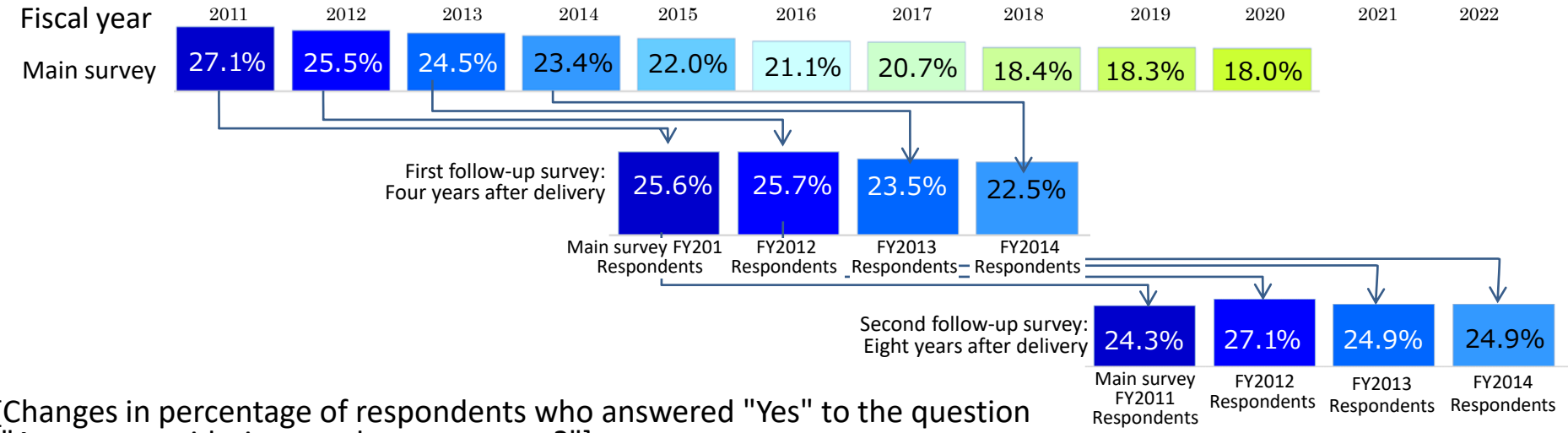
Pregnancy and Birth Survey: What Has Become Clear (2/2)

Latest Survey Results: https://www.pref.fukushima.lg.jp/site/portal/kenkocyosa-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 decreasing gradually, but those who gave birth within one to two years after the disaster showed higher depressive tendencies even after four years compared with those who gave birth later.



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

Nationwide survey		Main survey								
FY2010	FY2015	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
51.0%	50.0%	52.9%	52.8%	57.1%	53.3%	54.6%	52.4%	52.2%	51.3%	50.0%

Nationwide survey 2010 : 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)

Nationwide survey 2015 : Percentage of respondents who are married for less than 10 years and plan to have a child in the nationwide survey, “Fifteenth Japanese National Fertility Survey in 2015" (when having any children already)

* The 2011 survey did not contain the relevant question.

Prepared based on the material for the 44th and 51st Prefectural Oversight Committee Meeting for Fukushima Health Management Survey