Basic Survey (Radiation Dose Estimates)

Reported on 20 February 2017

1. Response Rates and Radiation Dose Estimates

1.1 Response Rates of Residents

The overall effective response rate to the Basic Survey (radiation dose estimates), for the entire population of Fukushima Prefecture, was 27.5% (566,043 of 2,055,305) as of 31 December 2016. Among the respondents, 72,615 answered through the simplified questionnaire. (See Table 1.)

Table 2 shows the response rates by age group.

Table 1 Response rates to the Basic Survey

As of 31 December 2016

		2,055,305	
Responses	Original questionnaire	493,428	24.0%
	Simplified questionnaire*	72,615	3.5%
	Total	566,043	27.5%

*Preliminary figures

Fractions have been rounded.

Table 2 Response rates by age group

As of 31 December 2016

Age group (years)	0-9	10-19	20-29	30-39	40-49	50-59	60-	Total
Response rate	46.5%	35.7%	18.1%	24.7%	22.4%	22.9%	27.9%	27.5%

1.2 Radiation Dose Estimates

Doses have been estimated for 551,874 of 566,043 respondents (97.5%) as of 31 December 2016, and results have been returned to 551,387 respondents. (See Table 3.)

Table 3 Response rates to the Basic Survey

As of 31 December 2016

Area	Survey population a	Responses b	Response rate c=b/a	Completed dose estimates d	Proportion e=d/b	Returned results f	Proportion g=f/b
Kempoku	504,038	152,159	30.2%	149,233	98.1%	148,904	97.9%
Kenchu	557,218	136,235	24.4%	133,147	97.7%	133,087	97.7%
Kennan	152,228	35,131	23.1%	34,230	97.4%	34,222	97.4%
Aizu	267,202	57,790	21.6%	55,590	96.2%	55,577	96.2%
Minami-aizu	30,789	6,387	20.7%	6,078	95.2%	6,077	95.1%
Soso	195,591	90,058	46.0%	87,389	97.0%	87,322	97.0%
Iwaki	348,239	88,283	25.4%	86,207	97.6%	86,198	97.6%
Total	2,055,305	566,043	27.5%	551,874	97.5%	551,387	97.4%

Including areas covered by the initial survey of people in Yamakiya, Namie and Iitate.

* Table 3 provides a more detailed view of the responses summarized in Table 1.

* In case uncertainties in the action record of a questionnaire prevented a radiation dose estimate, further inquiry was made to facilitate an estimate. This supplemental effort has been proceeding as much as possible, but failure to make contact with residents has prevented around 13,500 dose estimates from being completed.

We have been estimating doses for non-residents who were visiting or staying in Fukushima Prefecture at the time of the accident. (See Table 4.)

Table 4 Response rates to the Basic Survey (Visitors)

As of 31 December 2016

Number of requests a	Responses b	Response rate c=b/a	Completed dose estimates d	Proportion e=d/b	Returned results f	Proportion g=f/b
3,984	2,227	55.9%	2,014	90.4%	2,007	90.1%

* Table 3, 4, and Appendix 1 include the data in the estimation period less than four months.

2. Results of Radiation Dose Estimates

Table 5 shows a breakdown of completed dose estimates (from Table 3), excluding cases of data covering less than four months.

Radiation doses for a total of 473,196 residents have been estimated to date. The results for 464,012 respondents (excluding radiation workers) suggest that the doses for about 87% of the respondents in Kempoku area and about 92% in Kenchu area were <2 mSv. The doses for approximately 88% of the respondents in Kennan area and more than 99% of those in Aizu and Minami-aizu areas were <1 mSv. Doses for about 77 % of respondents in the Soso area and more than 99% of respondents in Iwaki were also <1 mSv.

Table 5 Estimated external radiation doses (initial and full-scale surveys) As of 31 December 2016

Effective Dose (mSv)	Total	Excluding radiation workers				By area (excluding radiation workers)													
						Kempoku *		Kenchu		Kennan		Aizu		Minami-aizu		Soso **		Iwaki	
<1	294,229	288,511	62.2%	93.8%		24,931	20.0%	58,139	51.5%	25,954	88.3%	45,699	99.3%	4,947	99.3%	55,783	77.3%	73,058	99.1%
1-2	149,242	146,899	31.7%			83,750	67.0%	46,064	40.8%	3,421	11.6%	308	0.7%	36	0.7%	12,688	17.6%	632	0.9%
2-3	26,009	25,636	5.5%	5.8%	99.8%	15,694	12.6%	8,182	7.3%	17	0.1%	25	0.1%	0	-	1,688	2.3%	30	0.0%
3-4	1,575	1,495	0.3%			472	0.4%	423	0.4%	0	-	1	0.0%	0	-	595	0.8%	4	0.0%
4-5	551	505	0.1%	0.2%		40	0.0%	5	0.0%	0	-	0	-	0	-	459	0.6%	1	0.0%
5-6	441	389	0.1%		0.2%	19	0.0%	3	0.0%	0	-	0	-	0	-	366	0.5%	1	0.0%
6-7	268	230	0.0%	0.1%		10	0.0%	1	0.0%	0	-	1	0.0%	0	-	218	0.3%	0	-
7-8	155	116	0.0%			1	0.0%	0	-	0	-	0	-	0	-	115	0.2%	0	-
8-9	118	78	0.0%	0.0%		1	0.0%	0	-	0	-	0	-	0	-	77	0.1%	0	-
9-10	72	41	0.0%			0	-	0	-	0	-	0	-	0	-	41	0.1%	0	-
10-11	69	36	0.0%	0.0%		0	-	0	-	0	-	0	-	0	-	36	0.0%	0	-
11-12	52	30	0.0%			1	0.0%	0	-	0	-	0	-	0	-	29	0.0%	0	-
12-13	37	13	0.0%	0.0%	0.0%	0	-	0	-	0	-	0	-	0	-	13	0.0%	0	-
13-14	36	12	0.0%			0	-	0	-	0	-	0	-	0	-	12	0.0%	0	-
14-15	27	6	0.0%	0.0%		0	-	0	-	0	-	0	-	0	-	6	0.0%	0	-
≥15	315	15	0.0%		0.0%	0	-	0	-	0	-	0	-	0	-	15	0.0%	0	-
Total	473,196	464,012	100.0%	100.0%	100.0%	124,919	100%	112,817	100%	29,392	100%	46,034	100%	4,983	100%	72,141	100%	73,726	100%
Max	66mSv	25mSv				11mSv		6.3mSv		2.6mSv		6.0mSv		1.9mSv		25mSv		5.9mSv	
Mean value	0.9mSv	0.8mSv				1.4mSv		1.0mSv		0.6mSv		0.2mSv		0.1mSv		0.8mSv		0.3mSv	
Median	0.6mSv	0.6mSv				1.4mSv		0.9mSv		0.5mSv		0.2mSv		0.1mSv		0.5mSv		0.3mSv	

* Including Yamakiya.

** Including Namie and Iitate.

Percentages have been rounded and may not total to 100%.

Excluding those with estimation period less than four months.

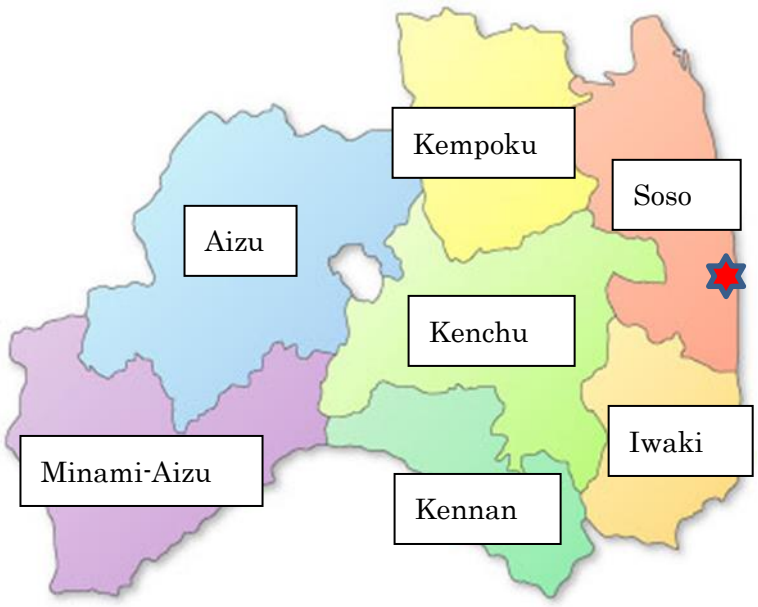
3. Evaluation of the results

The latest effective radiation dose estimates showed similar trends to those observed so far.

Since previous epidemiological studies[1] indicate no significant health effects at doses ≤100 mSv, we concluded that radiation doses estimated so far are unlikely to cause adverse effects on health, although this conclusion is based on external radiation doses estimated only for the first four months following the accident.

Reference

1) Sources and effects of ionizing radiation, United Nations Scientific Committee on the Effects of Atomic Radiation, UNSCEAR 2008 Report to the General Assembly, with scientific annexes.



Appendix 1

Response rates to the Basic Survey by district

Initial and full-scale surveys

As of 31 December 2016

Area	District	Survey population a	Responses b	Response rate c=b/a	Completed dose estimates d	Proportion e=d/b	Returned results f	Proportion g=f/b
Kempoku	Fukushima	295,643	93,852	31.7%	92,335	98.4%	92,121	98.2%
	Nihonmatsu	60,857	16,912	27.8%	16,546	97.8%	16,536	97.8%
	Date	67,577	18,283	27.1%	17,816	97.4%	17,761	97.1%
	Motomiya	31,761	9,104	28.7%	8,935	98.1%	8,927	98.1%
	Kori	13,207	3,883	29.4%	3,774	97.2%	3,770	97.1%
	Kunimi	10,316	3,028	29.4%	2,940	97.1%	2,935	96.9%
	Kawamata	15,885	5,175	32.6%	5,009	96.8%	4,983	96.3%
	Otama	8,792	1,922	21.9%	1,878	97.7%	1,871	97.3%
	Subtotal	504,038	152,159	30.2%	149,233	98.1%	148,904	97.9%
Kenchu	Koriyama	339,705	86,782	25.5%	85,018	98.0%	84,998	97.9%
	Sukagawa	80,157	17,151	21.4%	16,714	97.5%	16,711	97.4%
	Tamura	41,723	10,547	25.3%	10,191	96.6%	10,156	96.3%
	Kagamiishi	13,109	2,887	22.0%	2,824	97.8%	2,824	97.8%
	Tenei	6,470	1,229	19.0%	1,198	97.5%	1,198	97.5%
	Ishikawa	17,488	4,202	24.0%	4,100	97.6%	4,100	97.6%
	Tamakawa	7,337	1,500	20.4%	1,452	96.8%	1,452	96.8%
	Hirata	7,053	1,655	23.5%	1,599	96.6%	1,599	96.6%
	Asakawa	7,163	1,508	21.1%	1,473	97.7%	1,472	97.6%
	Furudono	6,319	1,309	20.7%	1,274	97.3%	1,274	97.3%
	Miharu	18,993	4,860	25.6%	4,763	98.0%	4,763	98.0%
	Ono	11,701	2,605	22.3%	2,541	97.5%	2,540	97.5%
	Subtotal	557,218	136,235	24.4%	133,147	97.7%	133,087	97.7%
Kennan	Shirakawa	65,428	16,058	24.5%	15,644	97.4%	15,639	97.4%
	Nishigo	20,089	4,977	24.8%	4,858	97.6%	4,857	97.6%
	Izumizaki	6,931	1,381	19.9%	1,341	97.1%	1,340	97.0%
	Nakajima	5,306	1,001	18.9%	976	97.5%	976	97.5%
	Yabuki	18,341	4,092	22.3%	3,982	97.3%	3,982	97.3%
	Tanagura	15,384	3,026	19.7%	2,961	97.9%	2,961	97.9%
	Yamatsuri	6,491	1,464	22.6%	1,415	96.7%	1,415	96.7%
	Hanawa	10,062	2,313	23.0%	2,262	97.8%	2,261	97.8%
	Samegawa	4,196	819	19.5%	791	96.6%	791	96.6%
	Subtotal	152,228	35,131	23.1%	34,230	97.4%	34,222	97.4%
Aizu	Aizuwakamatsu	127,817	29,596	23.2%	28,624	96.7%	28,621	96.7%
	Kitakata	53,199	11,055	20.8%	10,628	96.1%	10,623	96.1%
	Kitashiobara	3,276	607	18.5%	584	96.2%	584	96.2%
	Nishiaizu	7,725	1,453	18.8%	1,351	93.0%	1,351	93.0%
	Bandai	3,888	793	20.4%	775	97.7%	774	97.6%
	Inawashiro	16,271	3,647	22.4%	3,515	96.4%	3,514	96.4%
	Aizubange	17,881	3,261	18.2%	3,117	95.6%	3,114	95.5%
	Yugawa	3,513	713	20.3%	680	95.4%	680	95.4%
	Yanaizu	4,077	719	17.6%	687	95.5%	687	95.5%
	Mishima	2,031	373	18.4%	339	90.9%	339	90.9%
	Kaneyama	2,544	629	24.7%	573	91.1%	573	91.1%
	Showa	1,569	354	22.6%	327	92.4%	327	92.4%
	Aizumisato	23,411	4,590	19.6%	4,390	95.6%	4,390	95.6%
	Subtotal	267,202	57,790	21.6%	55,590	96.2%	55,577	96.2%
Minami-aizu	Shimogo	6,650	1,251	18.8%	1,191	95.2%	1,191	95.2%
	Hinoemata	614	142	23.1%	133	93.7%	133	93.7%
	Tadami	5,030	1,143	22.7%	1,081	94.6%	1,081	94.6%
	Minami-aizu	18,495	3,851	20.8%	3,673	95.4%	3,672	95.4%
	Subtotal	30,789	6,387	20.7%	6,078	95.2%	6,077	95.1%
Soso	Soma	37,363	13,294	35.6%	12,775	96.1%	12,768	96.0%
	Minami-soma	70,011	30,232	43.2%	29,472	97.5%	29,443	97.4%
	Hirono	5,164	2,219	43.0%	2,140	96.4%	2,138	96.3%
	Naraha	7,963	4,184	52.5%	4,022	96.1%	4,020	96.1%
	Tomioka	15,750	8,619	54.7%	8,411	97.6%	8,405	97.5%
	Kawauchi	2,996	1,539	51.4%	1,487	96.6%	1,487	96.6%
	Okuma	11,473	6,080	53.0%	5,860	96.4%	5,860	96.4%
	Futaba	7,051	3,949	56.0%	3,845	97.4%	3,843	97.3%
	Namie	21,335	12,968	60.8%	12,670	97.7%	12,660	97.6%
	Katsurao	1,541	824	53.5%	768	93.2%	768	93.2%
	Shinchi	8,356	2,706	32.4%	2,606	96.3%	2,604	96.2%
	Iitate	6,588	3,444	52.3%	3,333	96.8%	3,326	96.6%
	Subtotal	195,591	90,058	46.0%	87,389	97.0%	87,322	97.0%
Iwaki	Iwaki	348,239	88,283	25.4%	86,207	97.6%	86,198	97.6%
Total		2,055,305	566,043	27.5%	551,874	97.5%	551,387	97.4%

Basic Survey, Fukushima Health Management Survey

Appendix 2

Estimated external radiation doses in the first four months (from 11 March through 11 July)

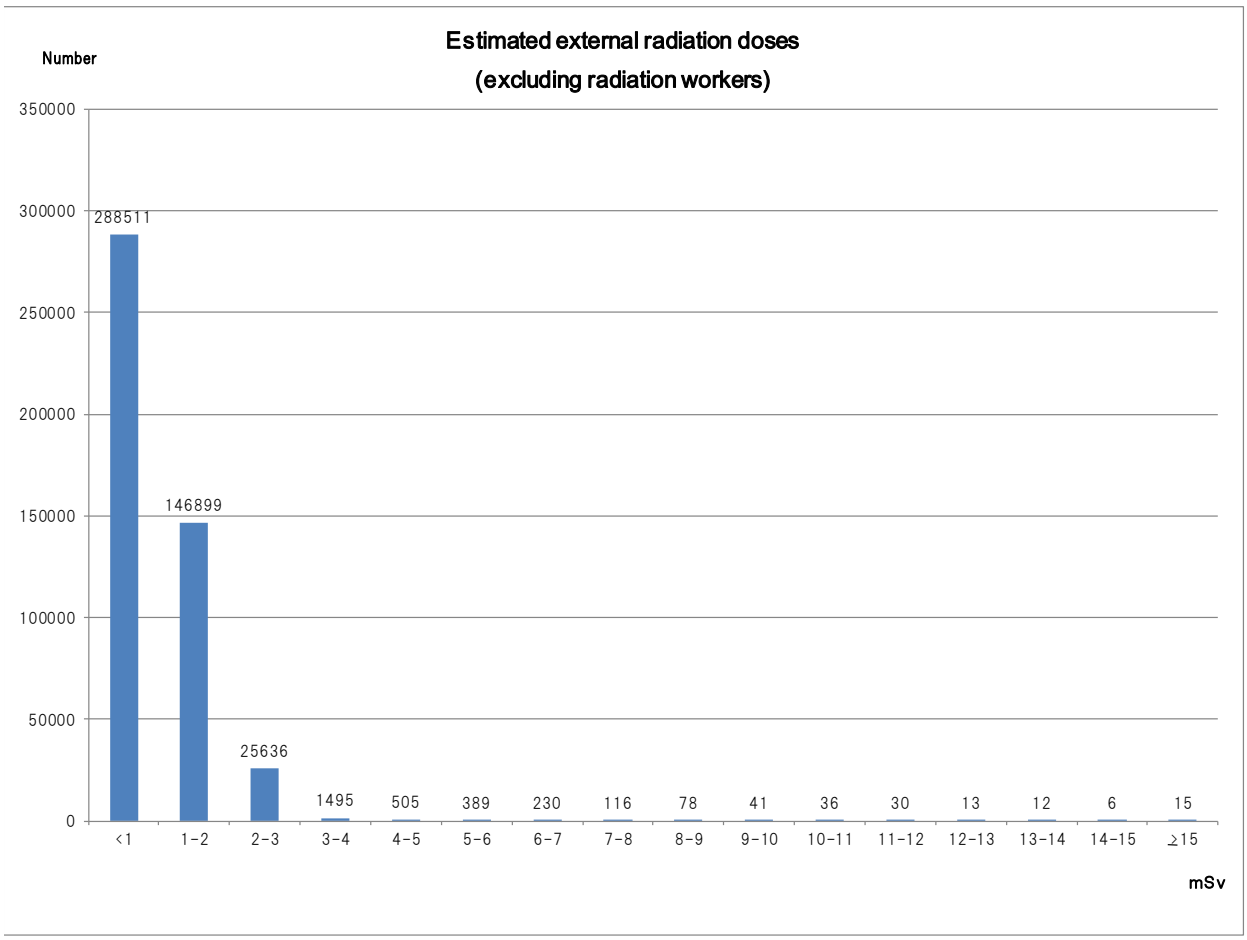
Initial and full-scale surveys

As of 31 December 2016

Estimated external radiation doses by region

Effective Dose (mSv)	Total	Excluding radiation workers	By region							Proportion (%) excluding radiation workers		
			Kempoku	Kenchu	Kennan	Aizu	Minami-aizu	Soso	Iwaki			
<1	294,229	288,511	24,931	58,139	25,954	45,699	4,947	55,783	73,058	62.2	93.8	99.8
1-2	149,242	146,899	83,750	46,064	3,421	308	36	12,688	632	31.7		
2-3	26,009	25,636	15,694	8,182	17	25	0	1,688	30	5.5	5.8	
3-4	1,575	1,495	472	423	0	1	0	595	4	0.3		
4-5	551	505	40	5	0	0	0	459	1	0.1	0.2	
5-6	441	389	19	3	0	0	0	366	1	0.1		0.2
6-7	268	230	10	1	0	1	0	218	0	0.0	0.1	
7-8	155	116	1	0	0	0	0	115	0	0.0		
8-9	118	78	1	0	0	0	0	77	0	0.0	0.0	
9-10	72	41	0	0	0	0	0	41	0	0.0		
10-11	69	36	0	0	0	0	0	36	0	0.0	0.0	0.0
11-12	52	30	1	0	0	0	0	29	0	0.0		
12-13	37	13	0	0	0	0	0	13	0	0.0	0.0	
13-14	36	12	0	0	0	0	0	12	0	0.0		
14-15	27	6	0	0	0	0	0	6	0	0.0	0.0	
≥15	315	15	0	0	0	0	0	15	0	0.0	0.0	0.0
Total	473,196	464,012	124,919	112,817	29,392	46,034	4,983	72,141	73,726	100.0	100.0	100.0
Max	66	25	11	6.3	2.6	6.0	1.9	25	5.9			
Mean value	0.9	0.8	1.4	1.0	0.6	0.2	0.1	0.8	0.3			
Median	0.6	0.6	1.4	0.9	0.5	0.2	0.1	0.5	0.3			

Percentages have been rounded and may not total to 100%.



Appendix 3

As of 31 December 2016

Estimated external radiation doses by age group (excluding radiation workers)

Effective Dose (mSv)	Age at the time of the disaster (years)									Total
	0 - 9	10 - 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 -	
<1	48,010	44,480	21,278	34,173	28,577	32,843	36,305	25,718	17,127	288,511
1-2	22,970	21,662	10,117	18,279	16,630	18,535	19,487	12,285	6,934	146,899
2-3	6,437	4,256	1,135	2,337	2,243	2,970	3,423	1,995	840	25,636
3-4	250	157	81	158	153	230	233	164	69	1,495
4-5	19	47	35	39	75	95	81	76	38	505
5-6	14	13	29	34	46	86	73	66	28	389
6-7	3	6	10	22	24	45	52	47	21	230
7-8	4	4	8	9	13	35	22	14	7	116
8-9	2	6	2	7	8	16	16	12	9	78
9-10	0	1	2	3	3	12	11	5	4	41
10-11	1	1	1	2	6	11	5	6	3	36
11-12	0	0	1	3	0	5	8	11	2	30
12-13	0	0	0	0	1	6	4	1	1	13
13-14	0	0	1	1	1	4	3	2	0	12
14-15	0	0	0	0	0	3	3	0	0	6
≥15	0	0	0	0	3	3	6	1	2	15
Total	77,710	70,633	32,700	55,067	47,783	54,899	59,732	40,403	25,085	464,012

Estimated external radiation doses by sex (excluding radiation workers)

Effective Dose (mSv)	By sex				Total	Proportion (%)
	Male	Proportion (%)	Female	Proportion (%)		
<1	128,766	60.6	159,745	63.5	288,511	62.2
1-2	68,077	32.0	78,822	31.3	146,899	31.7
2-3	13,920	6.5	11,716	4.7	25,636	5.5
3-4	951	0.4	544	0.2	1,495	0.3
4-5	282	0.1	223	0.1	505	0.1
5-6	199	0.1	190	0.1	389	0.1
6-7	130	0.1	100	0.0	230	0.0
7-8	64	0.0	52	0.0	116	0.0
8-9	49	0.0	29	0.0	78	0.0
9-10	24	0.0	17	0.0	41	0.0
10-11	22	0.0	14	0.0	36	0.0
11-12	16	0.0	14	0.0	30	0.0
12-13	6	0.0	7	0.0	13	0.0
13-14	8	0.0	4	0.0	12	0.0
14-15	3	0.0	3	0.0	6	0.0
≥15	12	0.0	3	0.0	15	0.0
Total	212,529	100.0	251,483	100.0	464,012	100.0

Percentages have been rounded and may not total to 100%.

Basic Survey, Fukushima Health Management Survey

Appendix 4

Estimated external radiation doses (initial and full-scale surveys)

As of 31 December 2016

Estimated external radiation doses by region in the first four months (from 11 March through 11 July) excluding radiation workers

Area/region		Effective Doses (mSv)																Total
		<1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	≥15	
Kempoku	Fukushima	16,171	52,556	9,376	151	13	10	4	0	0	0	0	0	0	0	0	0	78,281
	Nihonmatsu	1,318	8,662	3,530	90	1	0	0	0	0	0	0	0	0	0	0	0	13,601
	Date	4,385	9,074	1,135	147	8	2	3	1	1	0	0	0	0	0	0	0	14,756
	Motomiya	745	5,458	1,257	24	1	0	0	0	0	0	0	0	0	0	0	0	7,485
	Kori	315	2,751	66	2	0	1	0	0	0	0	0	0	0	0	0	0	3,135
	Kunimi	967	1,436	12	0	0	0	0	0	0	0	0	0	0	0	0	0	2,415
	Kawamata	639	2,750	185	56	17	6	3	0	0	0	0	1	0	0	0	0	3,657
	Otama	391	1,063	133	2	0	0	0	0	0	0	0	0	0	0	0	0	1,589
Kempoku Subtotal		24,931	83,750	15,694	472	40	19	10	1	1	0	0	1	0	0	0	0	124,919
Kenchu	Koriyama	23,946	40,538	7,735	413	5	3	1	0	0	0	0	0	0	0	0	0	72,641
	Sukagawa	10,747	3,187	334	4	0	0	0	0	0	0	0	0	0	0	0	0	14,272
	Tamura	7,673	681	24	3	0	0	0	0	0	0	0	0	0	0	0	0	8,381
	Kagamiishi	2,337	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,411
	Tenei	395	573	57	1	0	0	0	0	0	0	0	0	0	0	0	0	1,026
	Ishikawa	3,165	38	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3,204
	Tamakawa	1,175	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1,196
	Hirata	1,292	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,326
	Asakawa	1,212	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,227
	Furudono	1,059	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1,075
	Miharu	3,117	809	24	2	0	0	0	0	0	0	0	0	0	0	0	0	3,952
	Ono	2,021	83	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2,106
Kenchu Subtotal		58,139	46,064	8,182	423	5	3	1	0	0	0	0	0	0	0	0	0	112,817
Kennan	Shirakawa	12,293	1,269	9	0	0	0	0	0	0	0	0	0	0	0	0	0	13,571
	Nishigo	2,224	1,970	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4,196
	Izumizaki	1,102	21	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1,124
	Nakajima	823	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	836
	Yabuki	3,347	79	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3,427
	Tanagura	2,524	28	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2,555
	Yamatsuri	1,139	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,148
	Hanawa	1,852	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,875
	Samegawa	650	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	660
Kennan Subtotal		25,954	3,421	17	0	0	0	0	0	0	0	0	0	0	0	0	0	29,392
Aizu	Aizuwakamatsu	23,631	160	13	0	0	0	1	0	0	0	0	0	0	0	0	0	23,805
	Kitakata	8,888	56	3	1	0	0	0	0	0	0	0	0	0	0	0	0	8,948
	Kitashiobara	475	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	479
	Nishiaizu	1,012	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,014
	Bandai	654	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	664
	Inawashiro	2,840	30	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2,873
	Aizubange	2,613	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,628
	Yugawa	579	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	583
	Yanaizu	544	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	548
	Mishima	246	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	246
	Kaneyama	405	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	408
	Showa	245	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	246
	Aizumisato	3,567	22	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3,592
Aizu Subtotal		45,699	308	25	1	0	0	1	0	0	0	0	0	0	0	0	0	46,034
Minami-aizu	Shimogo	961	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	966
	Hinoemata	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103
	Tadami	874	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	879
	Minami-aizu	3,009	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,035
Minami-aizu Subtotal		4,947	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,983
Soso	Soma	10,009	458	87	20	5	0	0	0	0	2	0	0	0	0	0	0	10,581
	Minami-soma	19,115	6,221	513	99	35	3	7	4	1	0	0	1	0	0	0	0	25,999
	Hirono	1,836	58	2	0	0	0	1	0	1	0	0	0	0	0	0	0	1,898
	Naraha	3,393	131	13	2	0	1	1	0	0	0	0	0	0	0	0	0	3,541
	Tomioka	5,826	1,102	98	18	3	2	0	3	2	0	0	1	0	0	0	0	7,055
	Kawauchi	962	350	16	1	0	1	1	1	0	0	0	0	0	0	0	0	1,332
	Okuma	3,370	1,284	112	17	6	4	4	3	0	2	2	1	0	4	0	1	4,810
	Futaba	2,671	468	77	18	6	4	3	6	2	1	0	2	0	0	0	2	3,260
	Namie	5,739	2,117	383	68	40	17	12	13	9	6	11	7	5	4	3	8	8,442
	Katsurao	502	162	24	4	0	1	0	0	0	0	0	0	0	0	0	0	693
	Shinchi	2,174	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,194
	Iitate	186	317	363	348	364	333	189	85	62	30	23	17	8	4	3	4	2,336
Soso Subtotal		55,783	12,688	1,688	595	459	366	218	115	77	41	36	29	13	12	6	15	72,141
Iwaki	Iwaki	73,058	632	30	4	1	1	0	0	0	0	0	0	0	0	0	0	73,726
Total		288,511	146,899	25,636	1,495	505	389	230	116	78	41	36	30	13	12	6	15	464,012
Proportion (%)		62.2	31.7	5.5	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
		93.8		5.8		0.2		0.1		0.0		0.0		0.0		0.0		100.0
		99.8					0.2					0.0					0.0	100.0
Visitors		1,455	271	18	2	0	0	0	0	0	0	0	0	0	0	0	1	1,747
Total+Visitors		289,966	147,170	25,654	1,497	505	389	230	116	78	41	36	30	13	12	6	16	465,759

Percentages have been rounded and may not total to 100%.

Report of Second-Round Thyroid Ultrasound Examinations
(First Full-Scale Thyroid Screening Program)

Reported on 20 February 2017

1. Summary

1.1 Purpose

In order to monitor the long-term health of children, we are now engaged in a Full-Scale Thyroid Screening Program (second round), to assess the condition of their thyroid glands following first round Preliminary Baseline Screening.

1.2 Group

Residents of Fukushima Prefecture including visitors who were born between 2 April 1992 and 1 April 2011 (Preliminary Baseline Screening), and those who were born between 2 April 2011 and 1 April 2012.

1.3 Implementation Period

Full-scale Screening started 2 April 2014 and proceeded for two years.

Thereafter we will repeat the examination every two years until the age of 20, and every five years afterwards. We will endeavor to make sure they do not let more than five years pass between the exams through age 25.

1.4 Responsible Organizations

Fukushima Prefecture commissioned Fukushima Medical University (FMU) to conduct the survey in cooperation with institutions inside and outside Fukushima.

As of 31 December 2016, we provide the primary examination at 58 medical institutions under contract, and try to have more institutions inside Fukushima Prefecture.

One hundred five institutions outside Fukushima Prefecture have agreed to cooperate as of 31 December 2016.

The confirmatory examination has been conducted in Koriyama and Iwaki in Fukushima Prefecture from July 2013, Aizuwakamatsu from August 2014, Date from October 2016, and several institutions outside Fukushima Prefecture from November 2013. There are 36 institutions that provide the examination as of 31 December 2016.

1.5 Method

1.5-1 Primary Examination

We use ultrasonography for examination of the thyroid gland.

Assessments are made by specialists on the basis of the following criteria.

-Diagnostic Criteria (A)

Those with A1 and A2 test results are recommended for watchful waiting until they undergo the next screening starting from April 2016.

A1: No nodules / cysts

A2: Nodules $\leq$5.0 mm or cysts $\leq$20.0 mm

-Diagnostic Criteria (B)

Those with B test results are advised to take the confirmatory examination.

B: Nodules ≥5.1 mm or cysts ≥20.1 mm

Some A2 test results may be re-classified as B results when clinically indicated.

-Diagnostic Criteria (C)

Those with C test results are advised to take the confirmatory examination.

C: Immediate need for confirmatory examination.

1.5-2 Confirmatory Examination

We conduct ultrasonography, blood test, urine test, and fine-needle aspiration cytology (FNAC) if needed for those with B or C test results. Priority is given to those in urgent clinical need.

1.5-3 Flow chart

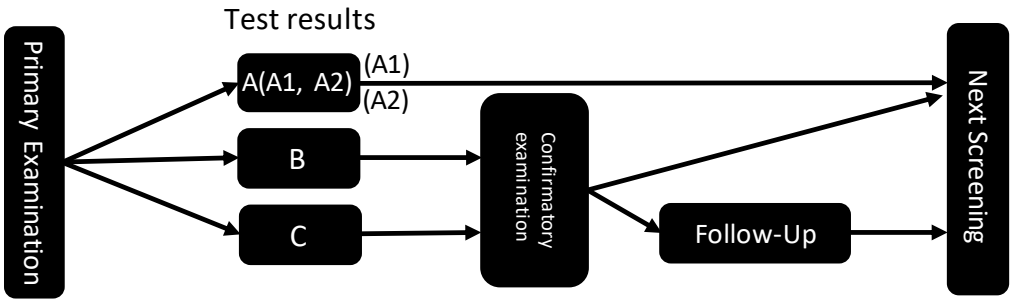


Fig.1 Flow chart

1.6 Target Municipalities

25 target municipalities for FY 2014

34 target municipalities for FY 2015

Fig.2 Target Municipalities

2. Results as of 31 December 2016

2.1 Results of Primary Examination

2.1-1 Progress Report

The Primary Examination started 2 April 2014, and the participation rate is 70.9 % (270,489 of 381,282) from 59 municipalities (25 municipalities in FY 2014, and 34 in FY 2015). (See Appendix 1 and 2.)

The results have been returned to 100.0% (270,468) of the participants. (See Appendix 3.)

Those with A1 or A2 test results were 268,242 (99.2%), B were 2,226 (0.8%), and C was 0.

Table 1. Screening test coverage as of 31 December 2016

	Survey Population	Participants		Test results				
		Proportion (%)	Screened outside Fukushima	Proportion (%)	Class (%)			
					A		Requiring confirmatory test	
	a	b (b/a)		c (c/b)	A1 d (d/c)	A2 e (e/c)	B f (f/c)	C g (g/c)
FY 2014	216,876	159,148 (73.4)	11,407	159,136 (100.0)	66,433 (41.7)	91,396 (57.4)	1,307 (0.8)	0 (0.0)
FY 2015	164,406	111,341 (67.7)	4,224	111,332 (100.0)	42,255 (38.0)	68,158 (61.2)	919 (0.8)	0 (0.0)
Total	381,282	270,489 (70.9)	15,631	270,468 (100.0)	108,688 (40.2)	159,554 (59.0)	2,226 (0.8)	0 (0.0)

Table 2. Number and proportion of children with nodules/cysts as of 31 December 2016

	Number of confirmed screening results	Number and proportion of children with nodules/cysts			
		Nodules		Cysts	
	a	≥5.1 mm b (b/a)	≤5.0 mm c (c/a)	≥20.1 mm d (d/a)	≤20.0 mm e (e/a)
FY 2014	159,136	1,303 (0.8)	1,007 (0.6)	2 (0.0)	91,812 (57.7)
FY 2015	111,332	915 (0.8)	563 (0.5)	4 (0.0)	68,520 (61.5)
Total	270,468	2,218 (0.8)	1,570 (0.6)	6 (0.0)	160,332 (59.3)

Fractions have been rounded and may not total to 100%.

In the case of residents age 25 with no prior visits for the First Full-Scale Thyroid Screening, they are added to the number of participants, so the numbers are expected to increase.

2.1-2 Participation rates by age group

Participation rate of age group 18-21 (as of 1 April 2014) in target municipalities for FY 2014 was 27.8%, which was lower than other age groups.

Participation rate of age group 18-22 (as of 1 April 2015) in target municipalities for FY 2015 was 23.4%, which was lower than other age groups.

Participation rate of the age group of 18 and older in target municipalities for FY 2014 and FY 2015 in total was 25.7 %, which was lower than other age groups.

Table 3. Participation rates in target municipalities by age group

As of 31 December 2016

		Total	Age group (years)			
FY 2014 target municipalities	Age group (years)		2-7	8-12	13-17	18-21
	Survey population (a)	216,876	56,485	53,374	57,781	49,236
	Participants (b)	159,148	45,329	49,783	50,338	13,698
	Proportion (%) (b/a)	73.4	80.2	93.3	87.1	27.8
FY 2015 target municipalities	Age group (years)		3-7	8-12	13-17	18-22
	Survey population (a)	164,406	33,763	38,762	44,020	47,861
	Participants (b)	111,341	25,837	36,189	38,106	11,209
	Proportion (%) (b/a)	67.7	76.5	93.4	86.6	23.4
Total	Survey population (a)	381,282	90,248	92,136	101,801	97,097
	Participants (b)	270,489	71,166	85,972	88,444	24,907
	Proportion (%) (b/a)	70.9	78.9	93.3	86.9	25.7

2.1-3 Comparison with the Preliminary Baseline Screening (Initial Screening)

Among 245,296 participants who were diagnosed as A1 or A2 in the Preliminary Baseline Screening, 243,964 (99.5%) had A1 or A2 results, and 1,332 (0.5%) were diagnosed as B from the Full-scale Survey.

Among 1,369 participants who were diagnosed as B in the Preliminary Baseline Screening, 638 (46.6%) had A1 or A2 results, and 731 (53.4%) were diagnosed as B from the Full-scale Thyroid Screening Program.

Table 4. Comparison with the Preliminary Baseline Screening

As of 31 December 2016

			Number of test results of the Preliminary Baseline Screening* (%) a	Results of the Full-scale Thyroid Screening			
				A		B	C
				A1 b b/a (%)	A2 c c/a (%)	d d/a (%)	e e/a (%)
Results of the Preliminary Baseline Screening	A	A1	125,908 (100.0)	83,478 (66.3)	42,037 (33.4)	393 (0.3)	0 (0.0)
		A2	119,388 (100.0)	11,495 (9.6)	106,954 (89.6)	939 (0.8)	0 (0.0)
	B		1,369 (100.0)	108 (7.9)	530 (38.7)	731 (53.4)	0 (0.0)
	C		0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Non-participants		23,803 (100.0)	13,607 (57.2)	10,033 (42.2)	163 (0.7)	0 (0.0)
Total			270,468 (100.0)	108,688 (40.2)	159,554 (59.0)	2,226 (0.8)	0 (0.0)

* Results of the participants with confirmed test results of the Full-scale survey.

This is not the breakdown of the total (300,476) of confirmed screening results from the Preliminary Baseline Screening.

2.2 Results of Confirmatory Examination

2.2-1 Progress Report

The number of those who required further testing (started in June 2014) was 2,226, of whom 1,770 (79.5%) underwent confirmatory testing. Among them, 1,681 (95.0%) have completed the tests. (See Appendix 5.)

Of 1,681 participants, 405 (A1 and A2 results from Table 5) were found to be back within the range of A1 and A2, and were advised to take their next regularly scheduled examination (24.1%).

Those who require 6- or 12-month follow-up provided by health insurance were 1,276 (75.9%).

Table 5. Confirmatory testing coverage and results as of 31 December 2016

	Number of those requiring confirmatory test	Participants	Confirmatory test coverage (%)	Confirmed test results			
		Proportion (%)		Next screening advised		Follow-up advised	
				A1	A2		Cytology
	a	b (b/a)	c (c/b)	d (d/c)	e (e/c)	f (f/c)	g (g/f)
FY 2014	1,307	1,085 (83.0)	1,050 (96.8)	37 (3.5)	241 (23.0)	772 (73.5)	149 (19.3)
FY 2015	919	685 (74.5)	631 (92.1)	20 (3.2)	107 (17.0)	504 (79.9)	46 (9.1)
Total	2,226	1,770 (79.5)	1,681 (95.0)	57 (3.4)	348 (20.7)	1,276 (75.9)	195 (15.3)

Those confirmed within the range of A1 and A2 (including those with other thyroid conditions) were advised to take their next regularly scheduled examination.

Those who require 6- or 12-month follow-up provided by health insurance and those beyond the specified level of A2 were categorized as “Follow-up advised.”

2.2-2 Results of Fine Needle Aspiration Biopsy and Cytology (FNAC)

Among those who underwent FNAC, 69 had nodules classified as suspicious or malignant.

Thirty-one of them were male, and 38 were female. Age at the time of the confirmatory testing ranged from 9 to 23 years (mean age: 16.9 ±3.3 years). The minimum and maximum tumor size was 5.3-35.6 mm in diameter. Mean tumor diameter was 11.0 ±5.6 mm.

Results from the Preliminary Baseline Screening show that 63 of the 69 participants were categorized as A (A1: 32; A2: 31), 5 as B and one other had no record.

Table 6. Results of FNAC

Target municipalities in FY 2014

Suspicious or malignant	52 *
Male to female ratio	21: 31
Mean age (SD, min-max)	17.3 (3.2, 10-23) 13.2 (3.1, 6-18) at the time of the disaster
Mean tumor size	9.4 mm (3.1 mm, 5.3-17.4 mm)

Target municipalities in FY 2015

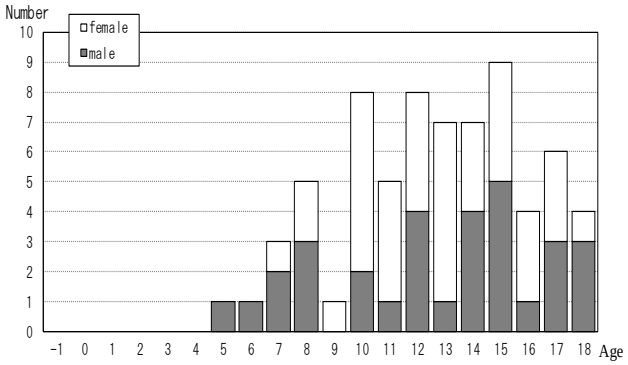
Suspicious or malignant	17 *
Male to female ratio	10: 7
Mean age (SD, min-max)	15.9 (3.6, 9-21) 11.1 (3.3, 5-16) at the time of the disaster
Mean tumor size	16.0 mm (8.3 mm, 5.7-35.6 mm)

Target municipalities in FY 2014-2015

Suspicious or malignant	69 *
Male to female ratio	31: 38
Mean age (SD, min-max)	16.9 (3.3, 9-23) 12.7 (3.3, 5-18) at the time of the disaster
Mean tumor size	11.0 mm (5.6 mm, 5.3-35.6 mm)

* See Appendix 6 for details.

2.2-3 Suspicious or malignant cases per FNAC by age and sex



The horizontal axis begins at -1 to include residents of Fukushima Prefecture born between 2 April 2011 and 1 April 2012.

Fig.3 Age as of 11 March 2011

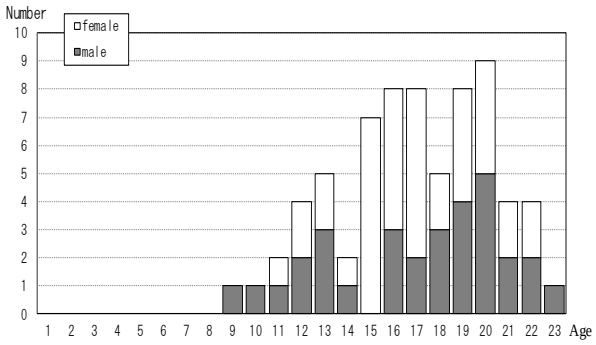


Fig. 4 Age as the date of confirmatory examination

2.2-4 Suspicious or malignant cases per FNAC by estimated radiation dose

Thirty-six (52.2%) of the 69 people participated in the Basic Survey (radiation dose estimates), and 36 received the results. The highest effective dose documented was 2.1 mSv.

Table 7. A breakdown of dose estimates for participants of the Basic Survey As of 31 December 2016

Effective dose (mSv)	Age at the time of the disaster									
	0-5		6-10		11-15		16-18		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<1	0	0	4	1	3	5	2	0	9	6
1-1.9	0	0	0	1	4	4	3	4	7	9
2-4.9	0	0	1	0	0	2	1	1	2	3
5-9.9	0	0	0	0	0	0	0	0	0	0
10-19.9	0	0	0	0	0	0	0	0	0	0
≥20	0	0	0	0	0	0	0	0	0	0
Total	0	0	5	2	7	11	6	5	18	18

Estimates are based on effective external radiation doses.

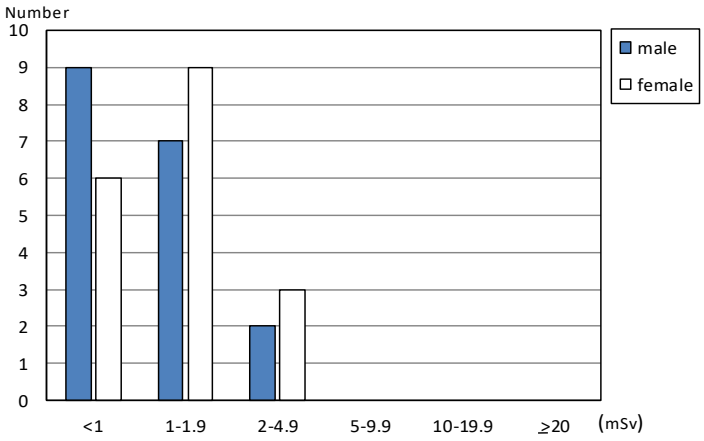


Fig. 5 Effective dose of the respondents

2.2-5 Blood and urinary iodine test results as of 31 December 2016

Table 8. Blood test results Mean±SD (Abnormal value)

	FT4 1) (ng/dL)	FT3 2) (pg/mL)	TSH 3) (μIU/mL)	Tg 4) (ng/mL)	TgAb 5) (IU/mL)	TPOAb 6) (IU/mL)
Reference Range	0.95-1.74 7)	2.13-4.07 7)	0.340-3.880 7)	≦32.7	<28.0	<16.0
69 suspicious or malignant	1.2 ± 0.2 (4.3%)	3.5 ± 0.4 (2.9%)	1.6 ± 1.0 (11.6%)	43.7 ± 110.6 (20.3%)	− (23.2%)	− (14.5%)
Other 1,610	1.2 ± 0.2 (7.3%)	3.5 ± 0.7 (6.4%)	1.3 ± 0.9 (8.1%)	28.5 ± 137.9 (13.7%)	− (9.5%)	− (8.5%)

Table 9. Urinary iodine (μg/day)

	Minimum	25th percentile	Median	75th percentile	Maximum
69 suspicious or malignant	43	124.5	190	437.5	2520
Other 1,604	17	116.3	183	357	36600

1) FT4: Free Thyroxine; higher among patients with thyrotoxicosis (representative disease: Graves' disease) and lower with hypothyroidism (representative disease: Hashimoto's thyroiditis).
2) FT3: Free Triiodothyronine; higher among patients with thyrotoxicosis (representative disease: Graves' disease) and lower with hypothyroidism (representative disease: Hashimoto's thyroiditis).
3) TSH: Thyroid Stimulating Hormone; higher among patients with Hashimoto's disease and lower with Graves' disease.
4) Tg: Thyroglobulin; higher when thyroid tissue is destroyed or when thyroid cancer produces thyroglobulin.
   Laboratory reference range revised to ≤33.7 ng/mL as of 30 March 2015.
5) TgAb: Anti-Thyroglobulin Antibody; higher among patients with Hashimoto's disease and Graves' disease.
6) TPOAb: Anti-Thyroid Peroxidase Antibody; higher among patients with Hashimoto's disease or Graves' disease.
7) Reference range differs according to age.

2.2-6 Confirmatory test results by municipality as of 31 December 2016

The proportion of suspicious or malignant diagnoses was 0.03% in FY 2014 target municipalities (13 municipalities in the nationally designated evacuation zones and 12 towns of the Kempoku area), 0.02% in FY 2015 target municipalities (34 towns of Iwaki, the Kennan and Aizu areas).

Table 10.

Confirmatory test results by municipality in FY 2014

	Number of those screened	Participants who required confirmatory test	Proportion who required confirmatory test (%)	Number who underwent confirmatory test	Suspicious or malignant cases	Proportion of suspicious or malignant cases (%)
Kawamata	1,763	23	1.3	20	0	0.00
Namie	2,510	28	1.1	22	2	0.08
Iitate	765	14	1.8	11	0	0.00
Minami-soma	8,908	81	0.9	70	4	0.04
Date	9,111	86	0.9	78	7	0.08
Tamura	5,006	51	1.0	43	2	0.04
Hirono	680	9	1.3	9	0	0.00
Naraha	1,001	5	0.5	5	0	0.00
Tomioka	2,002	25	1.2	21	0	0.00
Kawauchi	213	2	0.9	2	0	0.00
Okuma	1,758	16	0.9	15	2	0.11
Futaba	685	2	0.3	1	0	0.00
Katsurao	150	2	1.3	2	0	0.00
Fukushima	42,700	349	0.8	296	10	0.02
Nihonmatsu	7,885	59	0.7	51	1	0.01
Motomiya	4,809	31	0.6	26	3	0.06
Otama	1,264	6	0.5	6	0	0.00
Koriyama	48,042	365	0.8	295	18	0.04
Kori	1,635	14	0.9	10	1	0.06
Kunimi	1,240	9	0.7	8	0	0.00
Tenei	793	11	1.4	6	0	0.00
Shirakawa	9,667	63	0.7	49	1	0.01
Nishigo	3,178	28	0.9	21	1	0.03
Izumizaki	997	4	0.4	3	0	0.00
Miharu	2,386	24	1.0	15	0	0.00
Subtotal	159,148	1,307	0.8	1,085	52	0.03

Confirmatory test results by municipality in FY 2015

	Number of those screened	Participants who required confirmatory test	Proportion who required confirmatory test (%)	Number who underwent confirmatory test	Suspicious or malignant cases	Proportion of suspicious or malignant cases (%)
Iwaki	45,260	377	0.8	276	7	0.02
Sukagawa	11,449	105	0.9	85	1	0.01
Soma	4,749	32	0.7	27	1	0.02
Kagamiishi	1,979	16	0.8	14	1	0.05
Shinchi	1,038	13	1.3	11	0	0.00
Nakajima	754	5	0.7	4	1	0.13
Yabuki	2,412	16	0.7	14	0	0.00
Ishikawa	2,028	14	0.7	12	0	0.00
Yamatsuri	740	6	0.8	4	0	0.00
Asakawa	1,030	9	0.9	8	0	0.00
Hirata	855	7	0.8	5	0	0.00
Tanagura	2,160	17	0.8	12	1	0.05
Hanawa	1,166	11	0.9	11	0	0.00
Samegawa	495	6	1.2	5	0	0.00
Ono	1,262	12	1.0	10	0	0.00
Tamakawa	964	9	0.9	5	0	0.00
Furudono	794	5	0.6	5	0	0.00
Hinoemata	66	0	0.0	0	0	0.00
Minami-aizu	1,762	16	0.9	12	0	0.00
Kaneyama	121	0	0.0	0	0	0.00
Showa	93	0	0.0	0	0	0.00
Mishima	121	1	0.8	1	0	0.00
Shimogo	614	4	0.7	2	0	0.00
Kitakata	5,727	44	0.8	34	3	0.05
Nishiaizu	654	5	0.8	4	0	0.00
Tadami	458	7	1.5	4	1	0.22
Inawashiro	1,730	12	0.7	10	0	0.00
Bandai	401	4	1.0	4	0	0.00
Kitashiobara	377	2	0.5	2	0	0.00
Aizumisato	2,538	21	0.8	15	0	0.00
Aizubange	2,063	18	0.9	13	0	0.00
Yanaizu	386	0	0.0	0	0	0.00
Aizuwakamatsu	14,579	121	0.8	74	1	0.01
Yugawa	516	4	0.8	2	0	0.00
Subtotal	111,341	919	0.8	685	17	0.02

Total	270,489	2,226	0.8	1,770	69	0.03

2.3 Mental Health Care

2.3-1 Support for participants of primary examination

Summary support results from the First and Second Full-Scale Thyroid Screening Programs are aggregated into the Report of Third-Round Thyroid Ultrasound Examinations.

2.3-2 Support for participants of confirmatory examination

Summary support results from the First and Second Full-Scale Thyroid Screening Programs are aggregated into the Report of Third-Round Thyroid Ultrasound Examinations.

Appendix 1

Thyroid Ultrasound Examination (TUE) coverage by municipality

As of 31 December 2016

	Survey Population	Participants		Proportion (%)	Number and proportion of participants by age group				Participants living outside Fukushima	Proportion (%)
			Screened outside Fukushima 3)		2-7	8-12	13-17	≥18		
	a	b		b/a					c	c/b
Screening coverage by municipality in FY 2014										
Kawamata	2,460	1,763	57	71.7	428	574	596	165 1)	74	4.2
					24.3	32.6	33.8	9.4 2)		
Namie	3,772	2,510	725	66.5	655	723	761	371	794	31.6
					26.1	28.8	30.3	14.8		
Iitate	1,123	765	38	68.1	186	275	239	65	49	6.4
					24.3	35.9	31.2	8.5		
Minami-soma	12,982	8,908	1,831	68.6	2,314	2,924	2,668	1,002	1,890	21.2
					26.0	32.8	30.0	11.2		
Date	11,741	9,111	348	77.6	2,263	2,748	2,972	1,128	375	4.1
					24.8	30.2	32.6	12.4		
Tamura	7,320	5,006	150	68.4	1,160	1,638	1,693	515	149	3.0
					23.2	32.7	33.8	10.3		
Hirono	1,108	680	111	61.4	167	194	220	99	100	14.7
					24.6	28.5	32.4	14.6		
Naraha	1,490	1,001	139	67.2	238	296	327	140	145	14.5
					23.8	29.6	32.7	14.0		
Tomioka	3,101	2,002	461	64.6	473	548	665	316	490	24.5
					23.6	27.4	33.2	15.8		
Kawauchi	360	213	23	59.2	49	75	69	20	22	10.3
					23.0	35.2	32.4	9.4		
Okuma	2,499	1,758	396	70.3	536	541	481	200	442	25.1
					30.5	30.8	27.4	11.4		
Futaba	1,258	685	260	54.5	182	229	190	84	266	38.8
					26.6	33.4	27.7	12.3		
Katsurao	241	150	15	62.2	34	56	47	13	12	8.0
					22.7	37.3	31.3	8.7		
Fukushima	55,737	42,700	2,464	76.6	11,035	12,769	13,355	5,541	3,028	7.1
					25.8	29.9	31.3	13.0		
Nihonmatsu	10,596	7,885	321	74.4	1,925	2,499	2,665	796	326	4.1
					24.4	31.7	33.8	10.1		
Motomiya	6,345	4,809	172	75.8	1,229	1,510	1,550	520	180	3.7
					25.6	31.4	32.2	10.8		
Otama	1,684	1,264	31	75.1	355	398	387	124	38	3.0
					28.1	31.5	30.6	9.8		
Koriyama	66,762	48,042	3,178	72.0	11,418	15,487	15,464	5,673	3,878	8.1
					23.8	32.2	32.2	11.8		
Kori	2,137	1,635	67	76.5	380	503	551	201	57	3.5
					23.2	30.8	33.7	12.3		
Kunimi	1,624	1,240	45	76.4	238	382	443	177	45	3.6
					19.2	30.8	35.7	14.3		
Tenei	1,101	793	27	72.0	214	264	251	64	29	3.7
					27.0	33.3	31.7	8.1		
Shirakawa	12,742	9,667	335	75.9	2,547	2,942	3,124	1,054	407	4.2
					26.3	30.4	32.3	10.9		
Nishigo	4,173	3,178	122	76.2	889	1,006	944	339	148	4.7
					28.0	31.7	29.7	10.7		
Izumizaki	1,337	997	24	74.6	265	314	304	114	21	2.1
					26.6	31.5	30.5	11.4		
Miharu	3,183	2,386	67	75.0	533	682	808	363	71	3.0
					22.3	28.6	33.9	15.2		
Subtotal	216,876	159,148	11,407	73.4	39,713	49,577	50,774	19,084	13,036	8.2
					25.0	31.2	31.9	12.0		

1) Number of participants. 2) Number of participants in the age group/Number of participants.

3) Number of participants who underwent the test outside Fukushima, as of 30 November 2016 .

Fractions have been rounded and may not total to100%. Ages are at the time when the participants underwent the testing.

Thyroid Ultrasound Examination (TUE) coverage by municipality

As of 31 December 2016

	Survey Population	Participants		Proportion (%)	Number and proportion of participants by age group				Participants living outside Fukushima	Proportion (%)
			Screened outside Fukushima 3)		2-7	8-12	13-17	≥18		
	a	b		b/a					c	c/b
Screening coverage by municipality in FY 2015										
Iwaki	64,309	45,252	2,244	70.4	8,299	14,274	15,528	7,151	2,439	5.4
					18.3	31.5	34.3	15.8		
Sukagawa	15,879	11,447	308	72.1	2,651	3,676	3,737	1,383	360	3.1
					23.2	32.1	32.6	12.1		
Soma	7,087	4,749	291	67.0	1,121	1,540	1,597	491	381	8.0
					23.6	32.4	33.6	10.3		
Kagamiishi	2,705	1,978	35	73.1	526	625	624	203	55	2.8
					26.6	31.6	31.5	10.3		
Shinchi	1,476	1,037	44	70.3	205	347	373	112	55	5.3
					19.8	33.5	36.0	10.8		
Nakajima	1,115	754	8	67.6	135	251	290	78	11	1.5
					17.9	33.3	38.5	10.3		
Yabuki	3,422	2,412	68	70.5	629	757	800	226	65	2.7
					26.1	31.4	33.2	9.4		
Ishikawa	2,956	2,027	42	68.6	482	592	718	235	60	3.0
					23.8	29.2	35.4	11.6		
Yamatsuri	1,056	740	26	70.1	195	225	232	88	15	2.0
					26.4	30.4	31.4	11.9		
Asakawa	1,389	1,030	43	74.2	209	317	362	142	45	4.4
					20.3	30.8	35.1	13.8		
Hirata	1,272	855	17	67.2	202	274	297	82	19	2.2
					23.6	32.0	34.7	9.6		
Tanagura	3,089	2,160	63	69.9	519	681	723	237	68	3.1
					24.0	31.5	33.5	11.0		
Hanawa	1,715	1,166	30	68.0	246	362	409	149	35	3.0
					21.1	31.0	35.1	12.8		
Samegawa	723	495	19	68.5	128	157	153	57	17	3.4
					25.9	31.7	30.9	11.5		
Ono	1,990	1,262	29	63.4	238	420	440	164	32	2.5
					18.9	33.3	34.9	13.0		
Tamakawa	1,372	964	15	70.3	208	339	319	98	11	1.1
					21.6	35.2	33.1	10.2		
Furudono	1,084	794	32	73.2	194	224	255	121	25	3.1
					24.4	28.2	32.1	15.2		
Hinoemata	110	66	4	60.0	8	20	35	3	3	4.5
					12.1	30.3	53.0	4.5		
Minami-aizu	2,913	1,762	48	60.5	365	578	640	179	45	2.6
					20.7	32.8	36.3	10.2		
Kaneyama	203	121	5	59.6	16	43	49	13	5	4.1
					13.2	35.5	40.5	10.7		
Showa	134	93	3	69.4	24	28	32	9	4	4.3
					25.8	30.1	34.4	9.7		
Mishima	197	121	0	61.4	15	45	50	11	2	1.7
					12.4	37.2	41.3	9.1		
Shimogo	1,011	614	15	60.7	101	204	240	69	13	2.1
					16.4	33.2	39.1	11.2		
Kitakata	9,236	5,727	129	62.0	1,016	1,939	2,176	596	133	2.3
					17.7	33.9	38.0	10.4		
Nishiaizu	1,055	654	10	62.0	136	175	271	72	13	2.0
					20.8	26.8	41.4	11.0		
Tadami	735	458	6	62.3	98	157	158	45	8	1.7
					21.4	34.3	34.5	9.8		
Inawashiro	2,757	1,730	51	62.7	349	570	602	209	59	3.4
					20.2	32.9	34.8	12.1		
Bandai	628	401	10	63.9	77	151	128	45	8	2.0
					19.2	37.7	31.9	11.2		
Kitashiobara	581	377	11	64.9	99	126	119	33	12	3.2
					26.3	33.4	31.6	8.8		
Aizumisato	3,790	2,538	57	67.0	522	801	903	312	58	2.3
					20.6	31.6	35.6	12.3		
Aizubange	3,183	2,063	39	64.8	388	669	760	246	37	1.8
					18.8	32.4	36.8	11.9		
Yanaizu	612	386	4	63.1	81	132	136	37	4	1.0
					21.0	34.2	35.2	9.6		
Aizuwakamatsu	23,926	14,578	491	60.9	2,533	4,951	5,430	1,664	566	3.9
					17.4	34.0	37.2	11.4		
Yugawa	696	516	16	74.1	109	156	183	68	17	3.3
					21.1	30.2	35.5	13.2		
Subtotal	164,406	111,327	4,213	67.7	22,124	35,806	38,769	14,628	4,680	4.2
					19.9	32.2	34.8	13.1		
Total	381,282	270,489	15,631	70.9	61,837	85,383	89,543	33,726	17,716	6.5
					22.9	31.6	33.1	12.5		

Appendix 2

Thyroid Ultrasound Examination (TUE) coverage by prefecture

As of 30 November 2016

Prefecture	Number of test venues	Participants*
Hokkaido	6	**415**
Aomori	1	**179**
Iwate	3	**361**
Miyagi	2	**2,936**
Akita	1	**281**
Yamagata	3	**808**
Ibaraki	4	**896**
Tochigi	7	**908**
Gunma	2	**266**
Saitama	2	**782**
Chiba	4	**835**
Tokyo	12	**2,661**
Kanagawa	5	**1,374**
Niigata	2	**907**
Toyama	1	**25**
Ishikawa	1	**61**

Prefecture	Number of test venues	Participants*
Fukui	1	**20**
Yamanashi	2	**147**
Nagano	2	**157**
Gifu	1	**37**
Shizuoka	2	**135**
Aichi	3	**245**
Mie	1	**37**
Shiga	1	**27**
Kyoto	3	**124**
Osaka	7	**272**
Hyogo	1	**142**
Nara	2	**31**
Wakayama	1	**8**
Tottori	1	**10**
Shimane	1	**6**
Okayama	3	**65**

Prefecture	Number of test venues	Participants*
Hiroshima	1	**42**
Yamaguchi	1	**20**
Tokushima	1	**11**
Kagawa	1	**22**
Ehime	1	**17**
Kochi	1	**14**
Fukuoka	3	**89**
Saga	1	**15**
Nagasaki	2	**36**
Kumamoto	1	**29**
Oita	1	**35**
Miyazaki	1	**36**
Kagoshima	1	**26**
Okinawa	1	**81**

Total	105	**15,631**

* Participants who underwent testing at venues outside Fukushima carried out either by Fukushima Medical University staff (once in Niigata and Yamagata, Saitama, Chiba, and twice in Kanagawa) or by local specialists.

Appendix 3

Results of primary examination by municipality — As of 31 December 2016

	Participants	Confirmed results b	Number by test results				Nodules		Cysts	
			Proportion (%)				Proportion (%)		Proportion (%)	
			A		B	C				
	a	Proportion (%) b/a (%)	A1	A2			≥5.1 mm	≤5.0 mm	≥20.1 mm	≤20.0 mm
Screening coverage by municipality in FY 2014										
Kawamata	1,763	1,763	779	961	23	0	22	13	1	972
		100.0	44.2	54.5	1.3	0.0	1.2	0.7	0.1	55.1
Namie	2,510	2,508	1,023	1,457	28	0	28	18	0	1,467
		99.9	40.8	58.1	1.1	0.0	1.1	0.7	0.0	58.5
Iitate	765	765	360	391	14	0	14	3	0	396
		100.0	47.1	51.1	1.8	0.0	1.8	0.4	0.0	51.8
Minami-soma	8,908	8,908	3,815	5,012	81	0	81	62	0	5,037
		100.0	42.8	56.3	0.9	0.0	0.9	0.7	0.0	56.5
Date	9,111	9,111	3,958	5,067	86	0	86	69	0	5,092
		100.0	43.4	55.6	0.9	0.0	0.9	0.8	0.0	55.9
Tamura	5,006	5,006	2,050	2,905	51	0	51	30	0	2,924
		100.0	41.0	58.0	1.0	0.0	1.0	0.6	0.0	58.4
Hirono	680	680	286	385	9	0	9	6	0	385
		100.0	42.1	56.6	1.3	0.0	1.3	0.9	0.0	56.6
Naraha	1,001	1,001	418	578	5	0	5	8	0	578
		100.0	41.8	57.7	0.5	0.0	0.5	0.8	0.0	57.7
Tomioka	2,002	2,002	820	1,157	25	0	25	19	0	1,166
		100.0	41.0	57.8	1.2	0.0	1.2	0.9	0.0	58.2
Kawauchi	213	213	69	142	2	0	2	1	0	143
		100.0	32.4	66.7	0.9	0.0	0.9	0.5	0.0	67.1
Okuma	1,758	1,758	760	982	16	0	16	12	0	985
		100.0	43.2	55.9	0.9	0.0	0.9	0.7	0.0	56.0
Futaba	685	685	283	400	2	0	2	7	0	399
		100.0	41.3	58.4	0.3	0.0	0.3	1.0	0.0	58.2
Katsurao	150	150	74	74	2	0	2	1	0	74
		100.0	49.3	49.3	1.3	0.0	1.3	0.7	0.0	49.3
Fukushima	42,700	42,696	18,066	24,281	349	0	347	265	0	24,407
		100.0	42.3	56.9	0.8	0.0	0.8	0.6	0.0	57.2
Nihonmatsu	7,885	7,885	3,436	4,390	59	0	59	55	0	4,400
		100.0	43.6	55.7	0.7	0.0	0.7	0.7	0.0	55.8
Motomiya	4,809	4,809	2,090	2,688	31	0	31	20	0	2,698
		100.0	43.5	55.9	0.6	0.0	0.6	0.4	0.0	56.1
Otama	1,264	1,264	568	690	6	0	6	8	0	690
		100.0	44.9	54.6	0.5	0.0	0.5	0.6	0.0	54.6
Koriyama	48,042	48,037	19,248	28,424	365	0	365	280	0	28,540
		100.0	40.1	59.2	0.8	0.0	0.8	0.6	0.0	59.4
Kori	1,635	1,635	703	918	14	0	14	11	0	921
		100.0	43.0	56.1	0.9	0.0	0.9	0.7	0.0	56.3
Kunimi	1,240	1,240	492	739	9	0	8	10	1	740
		100.0	39.7	59.6	0.7	0.0	0.6	0.8	0.1	59.7
Tenei	793	793	328	454	11	0	11	11	0	462
		100.0	41.4	57.3	1.4	0.0	1.4	1.4	0.0	58.3
Shirakawa	9,667	9,666	4,161	5,442	63	0	63	50	0	5,461
		100.0	43.0	56.3	0.7	0.0	0.7	0.5	0.0	56.5
Nishigo	3,178	3,178	1,356	1,794	28	0	28	25	0	1,802
		100.0	42.7	56.5	0.9	0.0	0.9	0.8	0.0	56.7
Izumizaki	997	997	369	624	4	0	4	10	0	624
		100.0	37.0	62.6	0.4	0.0	0.4	1.0	0.0	62.6
Miharu	2,386	2,386	921	1,441	24	0	24	13	0	1,449
		100.0	38.6	60.4	1.0	0.0	1.0	0.5	0.0	60.7
Subtotal	159,148	159,136	66,433	91,396	1,307	0	1,303	1,007	2	91,812
		100.0	41.7	57.4	0.8	0.0	0.8	0.6	0.0	57.7

Fractions have been rounded and may not total to 100%.

Results of primary examination by municipality

As of 31 December 2016

	Participants	Confirmed results	Number by test results				Nodules		Cysts	
			Proportion (%)				Proportion (%)		Proportion (%)	
			A		B	C				
	a	Proportion (%) b/a (%)	A1	A2			≥5.1 mm	≤5.0 mm	≥20.1 mm	≤20.0 mm
Screening coverage by municipality in FY 2015										
Iwaki	45,260	45,255	16,907	27,971	377	0	373	233	4	28,097
		100.0	37.4	61.8	0.8	0.0	0.8	0.5	0.0	62.1
Sukagawa	11,449	11,448	4,440	6,903	105	0	105	56	0	6,956
		100.0	38.8	60.3	0.9	0.0	0.9	0.5	0.0	60.8
Soma	4,749	4,749	2,008	2,709	32	0	32	26	0	2,717
		100.0	42.3	57.0	0.7	0.0	0.7	0.5	0.0	57.2
Kagamiishi	1,979	1,978	787	1,175	16	0	16	10	0	1,179
		99.9	39.8	59.4	0.8	0.0	0.8	0.5	0.0	59.6
Shinchi	1,038	1,037	412	612	13	0	13	2	0	619
		99.9	39.7	59.0	1.3	0.0	1.3	0.2	0.0	59.7
Nakajima	754	754	305	444	5	0	5	4	0	444
		100.0	40.5	58.9	0.7	0.0	0.7	0.5	0.0	58.9
Yabuki	2,412	2,412	955	1,441	16	0	16	8	0	1,449
		100.0	39.6	59.7	0.7	0.0	0.7	0.3	0.0	60.1
Ishikawa	2,028	2,027	827	1,186	14	0	14	13	0	1,190
		100.0	40.8	58.5	0.7	0.0	0.7	0.6	0.0	58.7
Yamatsuri	740	740	269	465	6	0	6	1	0	467
		100.0	36.4	62.8	0.8	0.0	0.8	0.1	0.0	63.1
Asakawa	1,030	1,030	444	577	9	0	9	4	0	580
		100.0	43.1	56.0	0.9	0.0	0.9	0.4	0.0	56.3
Hirata	855	855	362	486	7	0	7	3	0	491
		100.0	42.3	56.8	0.8	0.0	0.8	0.4	0.0	57.4
Tanagura	2,160	2,160	862	1,281	17	0	17	10	0	1,289
		100.0	39.9	59.3	0.8	0.0	0.8	0.5	0.0	59.7
Hanawa	1,166	1,166	459	696	11	0	11	8	0	699
		100.0	39.4	59.7	0.9	0.0	0.9	0.7	0.0	59.9
Samegawa	495	495	185	304	6	0	6	4	0	307
		100.0	37.4	61.4	1.2	0.0	1.2	0.8	0.0	62.0
Ono	1,262	1,262	409	841	12	0	12	5	0	844
		100.0	32.4	66.6	1.0	0.0	1.0	0.4	0.0	66.9
Tamakawa	964	964	369	586	9	0	9	8	0	591
		100.0	38.3	60.8	0.9	0.0	0.9	0.8	0.0	61.3
Furudono	794	794	312	477	5	0	5	4	0	479
		100.0	39.3	60.1	0.6	0.0	0.6	0.5	0.0	60.3
Hinoemata	66	66	28	38	0	0	0	1	0	37
		100.0	42.4	57.6	0.0	0.0	0.0	1.5	0.0	56.1
Minami-aizu	1,762	1,762	688	1,058	16	0	16	5	0	1,069
		100.0	39.0	60.0	0.9	0.0	0.9	0.3	0.0	60.7
Kaneyama	121	121	39	82	0	0	0	0	0	82
		100.0	32.2	67.8	0.0	0.0	0.0	0.0	0.0	67.8
Showa	93	93	36	57	0	0	0	1	0	57
		100.0	38.7	61.3	0.0	0.0	0.0	1.1	0.0	61.3
Mishima	121	121	27	93	1	0	1	0	0	94
		100.0	22.3	76.9	0.8	0.0	0.8	0.0	0.0	77.7
Shimogo	614	614	250	360	4	0	4	3	0	362
		100.0	40.7	58.6	0.7	0.0	0.7	0.5	0.0	59.0
Kitakata	5,727	5,727	2,126	3,557	44	0	44	23	0	3,581
		100.0	37.1	62.1	0.8	0.0	0.8	0.4	0.0	62.5
Nishiaizu	654	654	288	361	5	0	5	5	0	361
		100.0	44.0	55.2	0.8	0.0	0.8	0.8	0.0	55.2
Tadami	458	458	176	275	7	0	7	2	0	278
		100.0	38.4	60.0	1.5	0.0	1.5	0.4	0.0	60.7
Inawashiro	1,730	1,730	689	1,029	12	0	12	9	0	1,036
		100.0	39.8	59.5	0.7	0.0	0.7	0.5	0.0	59.9
Bandai	401	401	157	240	4	0	4	1	0	243
		100.0	39.2	59.9	1.0	0.0	1.0	0.2	0.0	60.6
Kitashiobara	377	377	143	232	2	0	2	2	0	232
		100.0	37.9	61.5	0.5	0.0	0.5	0.5	0.0	61.5
Aizumisato	2,538	2,538	1,009	1,508	21	0	21	10	0	1,516
		100.0	39.8	59.4	0.8	0.0	0.8	0.4	0.0	59.7
Aizubange	2,063	2,063	705	1,340	18	0	18	18	0	1,347
		100.0	34.2	65.0	0.9	0.0	0.9	0.9	0.0	65.3
Yanaizu	386	386	154	232	0	0	0	1	0	232
		100.0	39.9	60.1	0.0	0.0	0.0	0.3	0.0	60.1
Aizuwakamatsu	14,579	14,579	5,247	9,211	121	0	121	80	0	9,261
		100.0	36.0	63.2	0.8	0.0	0.8	0.5	0.0	63.5
Yugawa	516	516	181	331	4	0	4	3	0	334
		100.0	35.1	64.1	0.8	0.0	0.8	0.6	0.0	64.7
Subtotal	111,341	111,332	42,255	68,158	919	0	915	563	4	68,520
		100.0	38.0	61.2	0.8	0.0	0.8	0.5	0.0	61.5
Total	270,489	270,468	108,688	159,554	2,226	0	2,218	1,570	6	160,332
		100.0	40.2	59.0	0.8	0.0	0.8	0.6	0.0	59.3

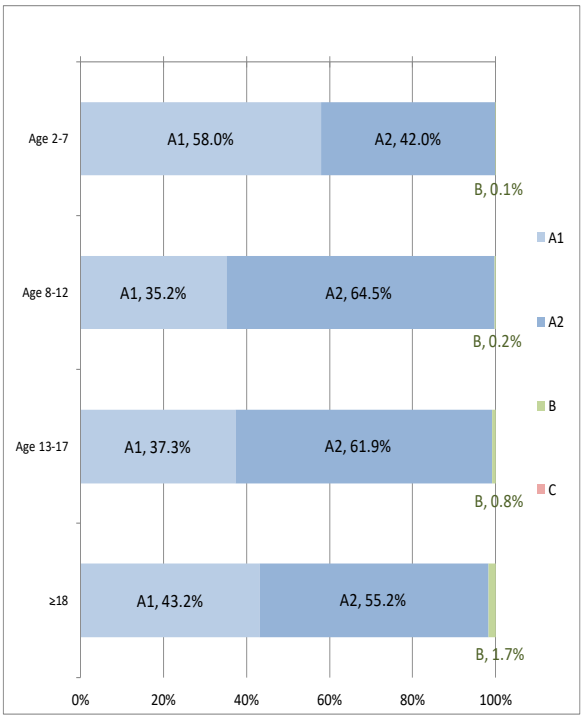
Appendix 4

1. Thyroid Ultrasound Examination results by age and sex

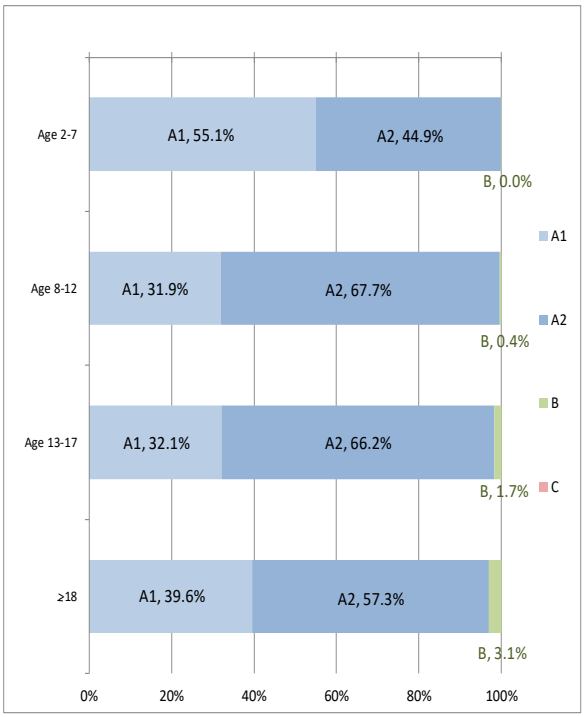
As of 31 December 2016

Ages	A						B			C			Total		
	A1			A2											
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
2-7	18,413	16,563	34,976	13,332	13,496	26,828	19	14	33	0	0	0	31,764	30,073	61,837
8-12	15,391	13,308	28,699	28,187	28,216	56,403	107	174	281	0	0	0	43,685	41,698	85,383
13-17	16,985	14,130	31,115	28,183	29,152	57,335	358	735	1,093	0	0	0	45,526	44,017	89,543
≥18	6,649	7,249	13,898	8,495	10,493	18,988	256	563	819	0	0	0	15,400	18,305	33,705
Total	57,438	51,250	108,688	78,197	81,357	159,554	740	1,486	2,226	0	0	0	136,375	134,093	270,468

Test results by age group (Male)



Test results by age group (Female)



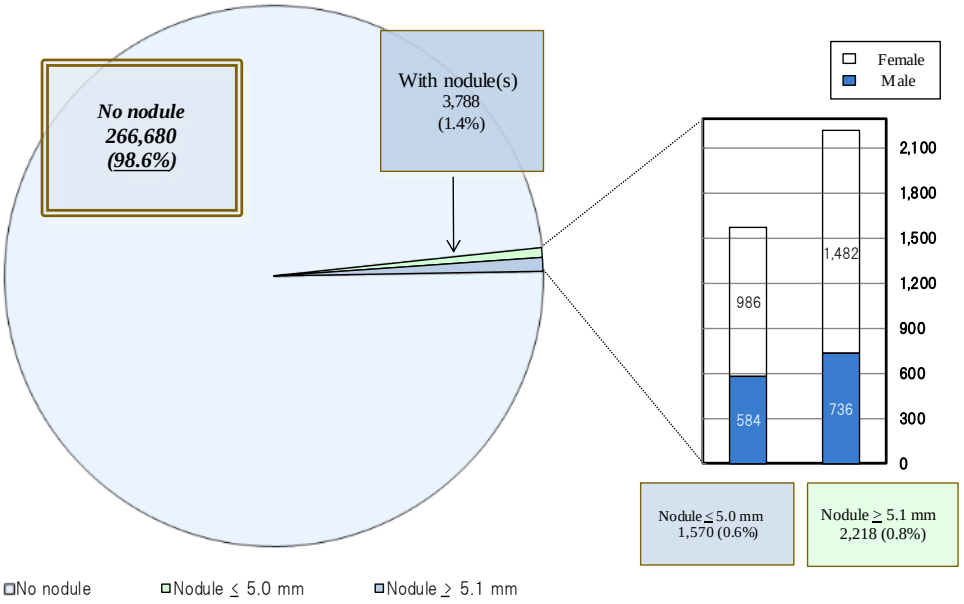
Percentages have been rounded and may not total to 100%.

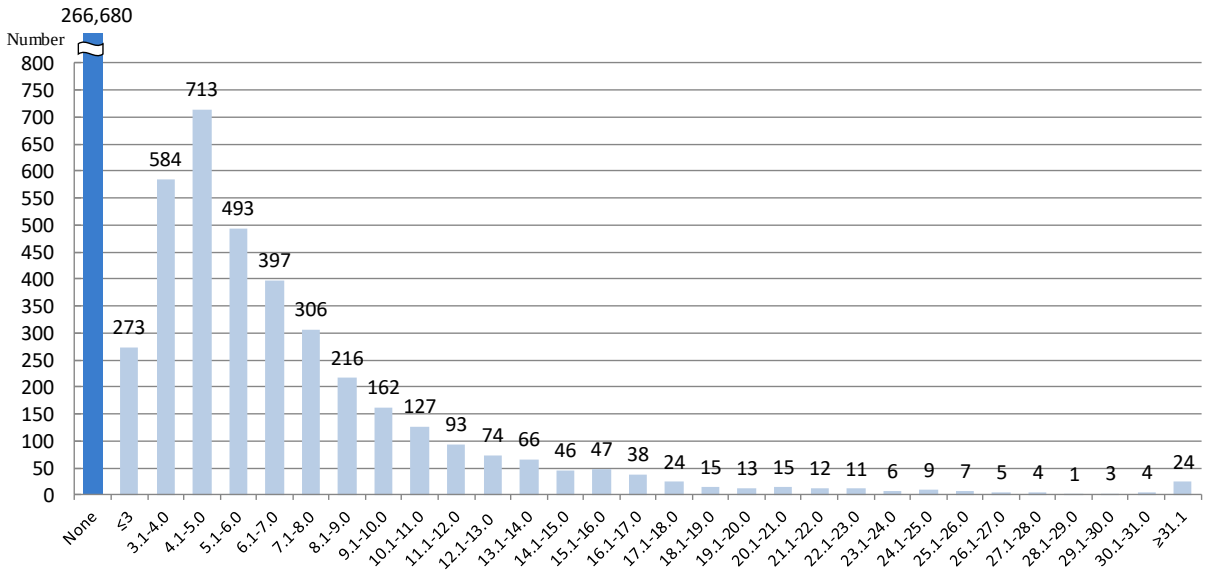
Ages are at the time when the participants underwent the testing.

2. Nodule size

As of 31 December 2016

Nodule size	Total	Male	Female	Class	Proportion
None	266,680	135,055	131,625	A1	98.6%
≤ 3.0 mm	273	117	156	A2	0.6%
3.1-5.0 mm	1,297	467	830		
5.1-10.0 mm	1,574	515	1,059	B	0.8%
10.1-15.0 mm	406	144	262		
15.1-20.0 mm	137	55	82		
20.1-25.0 mm	53	8	45		
≥ 25.1 mm	48	14	34		
Total	270,468	136,375	134,093		

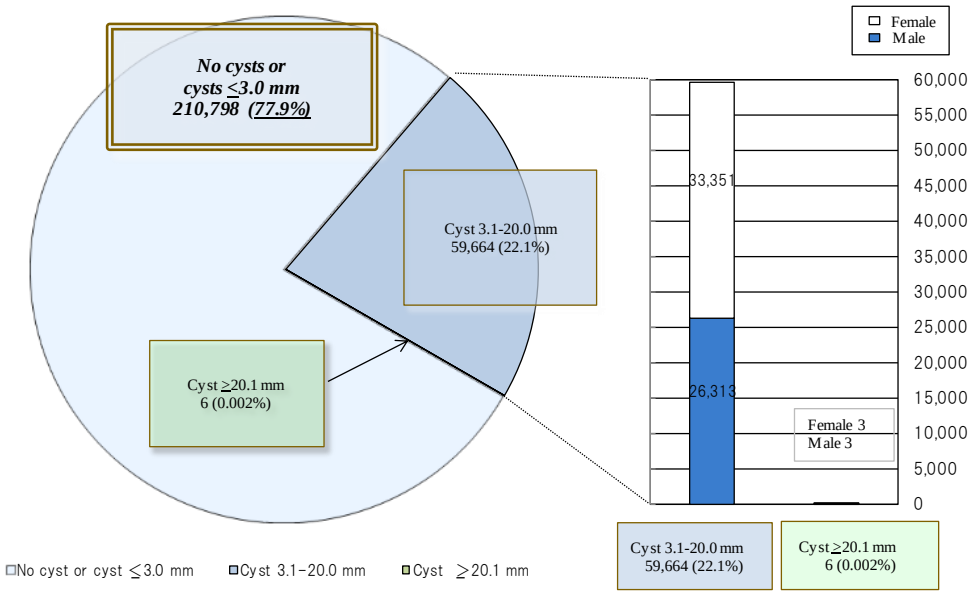


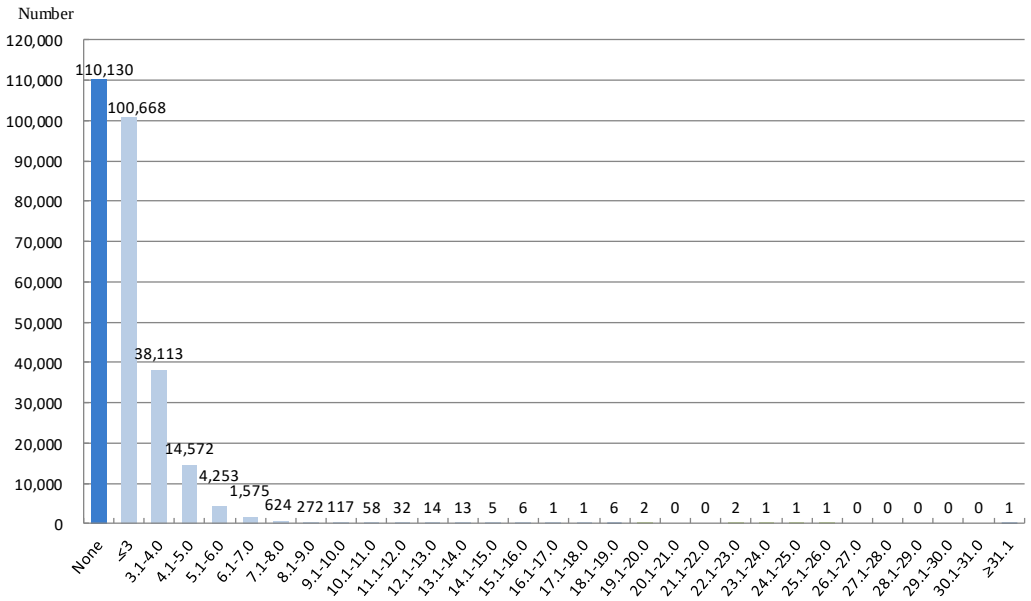


3. Cyst size

As of 31 December 2016

Cyst size	Total	Male	Female	Class	Proportion
None	110,130	57,959	52,171	A 1	77.9%
≤ 3.0 mm	100,668	52,100	48,568	A 2	22.1%
3.1-5.0 mm	52,685	23,934	28,751		
5.1-10.0 mm	6,841	2,336	4,505		
10.1-15.0 mm	122	39	83		
15.1-20.0 mm	16	4	12		
20.1-25.0 mm	4	2	2	B	0.002%
≥ 25.1 mm	2	1	1		
Total	270,468	136,375	134,093		





Appendix 5

Confirmatory test results by municipality

As of 31 December 2016

District	Number of those screened	Participants who required confirmatory test	Number of those who underwent confirmatory test					Number of confirmed results				
			Total	Ages 2-7	Ages 8-12	Ages 13-17	≥ 18	Total	Next screening advised		Follow-up advised	
									A1	A2		Aspiration biopsy cytology
	a	b	c	d	e	f	g	h	i	j	k	l
		Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)
Screening coverage by municipality in FY 2014												
Kawamata	1,763	23	20	0	3	12	5	20	3	7	10	1
		1.3	87.0	0.0	15.0	60.0	25.0	100.0	15.0	35.0	50.0	10.0
Namie	2,510	28	22	0	2	9	11	22	0	2	20	3
		1.1	78.6	0.0	9.1	40.9	50.0	100.0	0.0	9.1	90.9	15.0
Iitate	765	14	11	0	2	6	3	11	2	3	6	1
		1.8	78.6	0.0	18.2	54.5	27.3	100.0	18.2	27.3	54.5	16.7
Minami-soma	8,908	81	70	2	10	27	31	68	4	16	48	14
		0.9	86.4	2.9	14.3	38.6	44.3	97.1	5.9	23.5	70.6	29.2
Date	9,111	86	78	1	17	38	22	76	0	27	49	9
		0.9	90.7	1.3	21.8	48.7	28.2	97.4	0.0	35.5	64.5	18.4
Tamura	5,006	51	43	1	3	29	10	41	1	10	30	6
		1.0	84.3	2.3	7.0	67.4	23.3	95.3	2.4	24.4	73.2	20.0
Hirono	680	9	9	0	1	4	4	8	0	4	4	0
		1.3	100.0	0.0	11.1	44.4	44.4	88.9	0.0	50.0	50.0	0.0
Naraha	1,001	5	5	0	0	1	4	5	0	0	5	0
		0.5	100.0	0.0	0.0	20.0	80.0	100.0	0.0	0.0	100.0	0.0
Tomioka	2,002	25	21	0	3	4	14	20	1	5	14	1
		1.2	84.0	0.0	14.3	19.0	66.7	95.2	5.0	25.0	70.0	7.1
Kawauchi	213	2	2	0	0	1	1	2	0	0	2	0
		0.9	100.0	0.0	0.0	50.0	50.0	100.0	0.0	0.0	100.0	0.0
Okuma	1,758	16	15	0	1	6	8	14	0	2	12	3
		0.9	93.8	0.0	6.7	40.0	53.3	93.3	0.0	14.3	85.7	25.0
Futaba	685	2	1	0	0	0	1	1	1	0	0	0
		0.3	50.0	0.0	0.0	0.0	100.0	100.0	100.0	0.0	0.0	0.0
Katsurao	150	2	2	0	2	0	0	2	0	2	0	0
		1.3	100.0	0.0	100.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0
Fukushima	42,700	349	296	5	39	140	112	287	12	53	222	50
		0.8	84.8	1.7	13.2	47.3	37.8	97.0	4.2	18.5	77.4	22.5
Nihonmatsu	7,885	59	51	1	6	23	21	50	1	9	40	4
		0.7	86.4	2.0	11.8	45.1	41.2	98.0	2.0	18.0	80.0	10.0
Motomiya	4,809	31	26	0	1	15	10	24	0	4	20	5
		0.6	83.9	0.0	3.8	57.7	38.5	92.3	0.0	16.7	83.3	25.0
Otama	1,264	6	6	0	0	4	2	6	0	3	3	0
		0.5	100.0	0.0	0.0	66.7	33.3	100.0	0.0	50.0	50.0	0.0
Koriyama	48,042	365	295	7	31	133	124	284	9	57	218	42
		0.8	80.8	2.4	10.5	45.1	42.0	96.3	3.2	20.1	76.8	19.3
Kori	1,635	14	10	0	1	5	4	9	0	3	6	1
		0.9	71.4	0.0	10.0	50.0	40.0	90.0	0.0	33.3	66.7	16.7
Kunimi	1,240	9	8	1	1	0	6	8	0	1	7	0
		0.7	88.9	12.5	12.5	0.0	75.0	100.0	0.0	12.5	87.5	0.0
Tenei	793	11	6	0	0	3	3	6	1	1	4	1
		1.4	54.5	0.0	0.0	50.0	50.0	100.0	16.7	16.7	66.7	25.0
Shirakawa	9,667	63	49	1	4	24	20	47	1	18	28	4
		0.7	77.8	2.0	8.2	49.0	40.8	95.9	2.1	38.3	59.6	14.3
Nishigo	3,178	28	21	0	2	13	6	21	0	8	13	4
		0.9	75.0	0.0	9.5	61.9	28.6	100.0	0.0	38.1	61.9	30.8
Izumizaki	997	4	3	0	0	1	2	3	0	0	3	0
		0.4	75.0	0.0	0.0	33.3	66.7	100.0	0.0	0.0	100.0	0.0
Miharu	2,386	24	15	0	0	10	5	15	1	6	8	0
		1.0	62.5	0.0	0.0	66.7	33.3	100.0	6.7	40.0	53.3	0.0
Subtotal	159,148	1,307	1085	19	129	508	429	1050	37	241	772	149
		0.8	83.0	1.8	11.9	46.8	39.5	96.8	3.5	23.0	73.5	19.3

h) Excluding participants who have not received the test results.

Fractions have been rounded and may not total to 100%. Ages are at the time when the participants underwent the testing.

Confirmatory test results by municipality

As of 31 December 2016

District	Number of those screened	Participants who required confirmatory test	Number of those who underwent confirmatory test					Number of confirmed results				
			Total	Ages 2-7	Ages 8-12	Ages 13-17	≥ 18	Total	Next screening advised		Follow-up advised	
									A1	A2		Aspiration biopsy cytology
	a	b	c	d	e	f	g	h	i	j	k	l
		Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)
Screening coverage by municipality in FY 2015												
Iwaki	45,260	377	276	2	25	112	137	251	10	40	201	19
		0.8	73.2	0.7	9.1	40.6	49.6	90.9	4.0	15.9	80.1	9.5
Sukagawa	11,449	105	85	2	10	39	34	80	2	19	59	5
		0.9	81.0	2.4	11.8	45.9	40.0	94.1	2.5	23.8	73.8	8.5
Soma	4,749	32	27	3	2	14	8	27	0	6	21	3
		0.7	84.4	11.1	7.4	51.9	29.6	100.0	0.0	22.2	77.8	14.3
Kagamiishi	1,979	16	14	0	0	7	7	13	0	2	11	1
		0.8	87.5	0.0	0.0	50.0	50.0	92.9	0.0	15.4	84.6	9.1
Shinchi	1,038	13	11	0	2	5	4	11	1	2	8	2
		1.3	84.6	0.0	18.2	45.5	36.4	100.0	9.1	18.2	72.7	25.0
Nakajima	754	5	4	0	0	3	1	4	0	0	4	1
		0.7	80.0	0.0	0.0	75.0	25.0	100.0	0.0	0.0	100.0	25.0
Yabuki	2,412	16	14	0	3	5	6	14	0	4	10	0
		0.7	87.5	0.0	21.4	35.7	42.9	100.0	0.0	28.6	71.4	0.0
Ishikawa	2,028	14	12	0	1	8	3	12	1	3	8	1
		0.7	85.7	0.0	8.3	66.7	25.0	100.0	8.3	25.0	66.7	12.5
Yamatsuri	740	6	4	0	1	1	2	3	0	2	1	1
		0.8	66.7	0.0	25.0	25.0	50.0	75.0	0.0	66.7	33.3	100.0
Asakawa	1,030	9	8	1	0	4	3	8	1	0	7	1
		0.9	88.9	12.5	0.0	50.0	37.5	100.0	12.5	0.0	87.5	14.3
Hirata	855	7	5	0	2	3	0	5	0	2	3	0
		0.8	71.4	0.0	40.0	60.0	0.0	100.0	0.0	40.0	60.0	0.0
Tanagura	2,160	17	12	0	2	6	4	11	0	1	10	3
		0.8	70.6	0.0	16.7	50.0	33.3	91.7	0.0	9.1	90.9	30.0
Hanawa	1,166	11	11	0	0	5	6	10	1	1	8	1
		0.9	100.0	0.0	0.0	45.5	54.5	90.9	10.0	10.0	80.0	12.5
Samegawa	495	6	5	0	0	3	2	5	0	0	5	0
		1.2	83.3	0.0	0.0	60.0	40.0	100.0	0.0	0.0	100.0	0.0
Ono	1,262	12	10	0	2	5	3	10	1	0	9	0
		1.0	83.3	0.0	20.0	50.0	30.0	100.0	10.0	0.0	90.0	0.0
Tamakawa	964	9	5	0	0	4	1	5	0	1	4	0
		0.9	55.6	0.0	0.0	80.0	20.0	100.0	0.0	20.0	80.0	0.0
Furudono	794	5	5	0	1	1	3	5	0	2	3	0
		0.6	100.0	0.0	20.0	20.0	60.0	100.0	0.0	40.0	60.0	0.0
Hinoemata	66	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minami-aizu	1,762	16	12	0	3	6	3	10	0	2	8	0
		0.9	75.0	0.0	25.0	50.0	25.0	83.3	0.0	20.0	80.0	0.0
Kaneyama	121	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Showa	93	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mishima	121	1	1	0	0	1	0	1	0	0	1	0
		0.8	100.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	100.0	0.0
Shimogo	614	4	2	0	0	0	2	2	0	0	2	1
		0.7	50.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0	50.0
Kitakata	5,727	44	34	0	2	15	17	28	0	4	24	3
		0.8	77.3	0.0	5.9	44.1	50.0	82.4	0.0	14.3	85.7	12.5
Nishiaizu	654	5	4	0	0	3	1	4	0	1	3	1
		0.8	80.0	0.0	0.0	75.0	25.0	100.0	0.0	25.0	75.0	33.3
Tadami	458	7	4	0	0	2	2	3	0	0	3	1
		1.5	57.1	0.0	0.0	50.0	50.0	75.0	0.0	0.0	100.0	33.3
Inawashiro	1,730	12	10	0	0	5	5	9	0	1	8	0
		0.7	83.3	0.0	0.0	50.0	50.0	90.0	0.0	11.1	88.9	0.0
Bandai	401	4	4	0	0	0	4	4	0	0	4	0
		1.0	100.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0	0.0
Kitashiobara	377	2	2	0	1	0	1	2	0	0	2	0
		0.5	100.0	0.0	50.0	0.0	50.0	100.0	0.0	0.0	100.0	0.0
Aizumisato	2,538	21	15	1	2	3	9	12	1	4	7	0
		0.8	71.4	6.7	13.3	20.0	60.0	80.0	8.3	33.3	58.3	0.0
Aizubange	2,063	18	13	0	0	5	8	12	0	1	11	0
		0.9	72.2	0.0	0.0	38.5	61.5	92.3	0.0	8.3	91.7	0.0
Yanaizu	386	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aizuwakamatsu	14,579	121	74	0	4	39	31	68	2	9	57	2
		0.8	61.2	0.0	5.4	52.7	41.9	91.9	2.9	13.2	83.8	3.5
Yugawa	516	4	2	0	0	2	0	2	0	0	2	0
		0.8	50.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	100.0	0.0
Subtotal	111,341	919	685	9	63	306	307	631	20	107	504	46
		0.8	74.5	1.3	9.2	44.7	44.8	92.1	3.2	17.0	79.9	9.1
Total	270,489	2,226	1,770	28	192	814	736	1,681	57	348	1,276	195
		0.8	79.5	1.6	10.8	46.0	41.6	95.0	3.4	20.7	75.9	15.3

Appendix 6

Surgical cases for malignancy or suspicion of malignancy

1. Target municipalities in FY 2014

   Suspicious or malignant: 52 (36 surgical cases: 35 papillary thyroid carcinomas, 1 other thyroid carcinoma)

2. Target municipalities in FY 2015

   Suspicious or malignant: 17 (8 surgical cases: 8 papillary thyroid carcinomas)

3. Total for cases FY 2014 - 2015

   Suspicious or malignant: 69 (44 surgical cases: 43 papillary thyroid carcinomas, 1 other thyroid carcinoma)

Report of Third-Round Thyroid Ultrasound Examinations
(Second Full-Scale Thyroid Screening Program)

Reported on 20 February 2017

1. Summary

1.1 Purpose

In order to monitor the long-term health of children, we are now engaged in the second Full-scale Thyroid Screening Program (third-round examinations). The first round was Preliminary Baseline Screening for initial assessment of thyroid glands, and the second round was the first Full-scale Thyroid Screening Program to assess any changes.

1.2 Group

In addition to those residing in Fukushima Prefecture – including visitors – who were born between 2 April 1992 and 1 April 2011, included in Preliminary Baseline Screening, the Full-scale Thyroid Screening (second- and third-round examinations) also includes those who were born between 2 April 2011 and 1 April 2012.

1.3 Implementation Period

The Second Full-scale Screening Program started 1 May 2016 and will cover examinees up to age 20 on a municipality-by-municipality schedule to FY 2017. Thereafter, we will revise the schedule to screen examinees every five years – at ages 25 and 30 for example – to make it easier for examinees to remember when they are due for examination. However, we will endeavor to make sure they do not let more than five years pass between the examinations through age 25.

1.4 Responsible Organizations

Fukushima Prefecture commissioned Fukushima Medical University (FMU) to conduct the survey in cooperation with institutions inside and outside Fukushima.

As of 31 December 2016, we provide the primary examination at 58 medical institutions under contract, and try to have more institutions inside Fukushima Prefecture.

One hundred five institutions outside Fukushima Prefecture have agreed to cooperate as of 31 December 2016.

The confirmatory examination has been conducted in Koriyama and Iwaki in Fukushima Prefecture from July 2013, Aizuwakamatsu from August 2014, Date from October 2016, and several institutions outside Fukushima Prefecture from November 2013. There are 36 institutions that provide the examination as of 31 December 2016.

1.5 Method

1.5-1 Primary Examination

We use ultrasonography for examination of the thyroid gland.

Assessments are made by specialists on the basis of the following criteria:

-Diagnostic Criteria (A)

Those with A1 and A2 test results are recommended for watchful waiting until they undergo the next screening starting from April 2018.

A1: No nodules / cysts

A2: Nodules ≤5.0 mm or cysts ≤20.0 mm

-Diagnostic Criteria (B)

Those with B test results are advised to take the confirmatory examination.

B: Nodules ≥5.1 mm or cysts ≥20.1 mm

Some A2 test results may be re-classified as B results when clinically indicated.

-Diagnostic Criteria (C)

Those with C test results are advised to take the confirmatory examination.

C: Immediate need for confirmatory examination.

1.5-2 Confirmatory Examination

We conduct ultrasonography, blood test, urine test, and fine-needle aspiration cytology (FNAC) if needed for those with B or C test results. Priority is given to those in urgent clinical need.

1.5-3 Flow chart

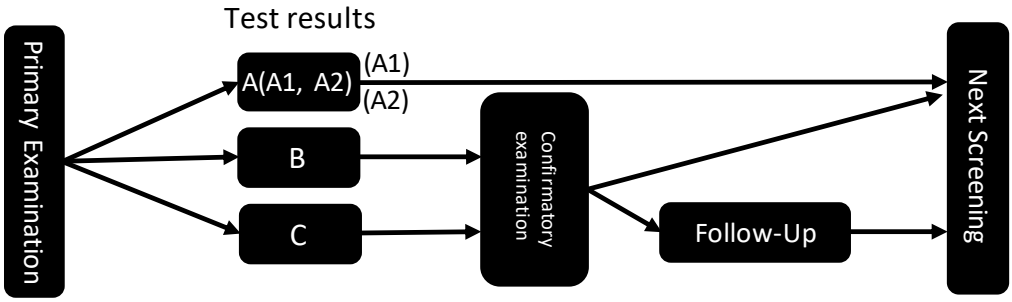


Fig.1 Flow chart

1.6 Target Municipalities

25 target municipalities for FY 2016

34 target municipalities for FY 2017

Fig.2 Target Municipalities

2. Results as of 31 December 2016

2.1 Results of Primary Examination

2.1-1 Progress Report

The Primary Examination started 1 May 2016, and the participation rate is 25.9% (87,217 of 336,623) from 59 municipalities (25 municipalities in FY 2016, and 34 in FY 2017). (See Appendix 1 and 2.)

The results have been returned to 81.5% (71,083) of the participants. (See Appendix 3.)

Those with A1 or A2 test results were 70,600 (99.3%), B were 483 (0.7%), and C was 0.

Table 1. Screening test coverage as of 31 December 2016

	Survey Population	Participants		Test results				
		Proportion (%)	Screened outside Fukushima	Proportion (%)	Class (%)			
					A		Requiring confirmatory test	
	a	b (b/a)		c (c/b)	A1 d (d/c)	A2 e (e/c)	B f (f/c)	C g (g/c)
FY 2016	191,855	83,866 (43.7)	5,244	68,873 (82.1)	24,370 (35.4)	44,037 (63.9)	466 (0.7)	0 (0.0)
FY 2017	144,768	3,351 (2.3)	153	2,210 (66.0)	812 (36.7)	1,381 (62.5)	17 (0.8)	0 (0.0)
Total	336,623	87,217 (25.9)	5,397	71,083 (81.5)	25,182 (35.4)	45,418 (63.9)	483 (0.7)	0 (0.0)

Table 2. Number and proportion of children with nodules/cysts as of 31 December 2016

	Number of confirmed screening results	Number and proportion of children with nodules/cysts			
		Nodules		Cysts	
	a	≥5.1 mm b (b/a)	≤5.0 mm c (c/a)	≥20.1 mm d (d/a)	≤20.0 mm e (e/a)
FY 2016	68,873	466 (0.7)	241 (0.3)	0 (0.0)	44,269 (64.3)
FY 2017	2,210	17 (0.8)	18 (0.8)	0 (0.0)	1,390 (62.9)
Total	71,083	483 (0.7)	259 (0.4)	0 (0.0)	45,659 (64.2)

Fractions have been rounded and may not total to 100%.

Excluding examinees born in FY 1992 and FY 1993, now scheduled to undergo testing every five years. Hereafter, these examinees will be accounted for separately.

2.1-2 Participation rates by age group

Participation rate of age group 18-23 (age as of 1 April 2016) in target municipalities for FY 2016 was 11.2%.

Participation rate of age group 18-24 (age as of 1 April 2017) in target municipalities for FY 2017 was 1.9%.

Table 3. Participation rates in target municipalities by age group

As of 31 December 2016

		Total	Age group (years)			
FY 2016 target municipalities	Age group (years)		4-7	8-12	13-17	18-23
	Survey population (a)	191,855	36,602	51,001	56,838	47,414
	Participants (b)	83,866	15,401	27,264	35,908	5,293
	Proportion (%) (b/a)	43.7	42.1	53.5	63.2	11.2
FY 2017 target municipalities	Age group (years)		5-7	8-12	13-17	18-24
	Survey population (a)	144,768	19,272	37,171	42,000	46,325
	Participants (b)	3,351	252	495	1,702	902
	Proportion (%) (b/a)	2.3	1.3	1.3	4.1	1.9
Total	Survey population (a)	336,623	55,874	88,172	98,838	93,739
	Participants (b)	87,217	15,653	27,759	37,610	6,195
	Proportion (%) (b/a)	25.9	28.0	31.5	38.1	6.6

2.1-3 Comparison with the First Full-scale Thyroid Screening (Second-Round Examination)

Among 66,627 participants who were diagnosed as A1 or A2 in the First Full-scale Thyroid Screening, 66,403 (99.7%) had A1 or A2 results, and 224 (0.34%) were diagnosed as B from the Second Full-scale Thyroid Screening Program.

Among 422 participants who were diagnosed as B in the First Full-scale Thyroid Screening, 188 (44.5%) had A1 or A2 results, and 234 (55.5%) were diagnosed as B from the Second Full-scale Thyroid Screening Program.

Table 4. Comparison with the First Full-scale Thyroid Screening

As of 31 December 2016

			Number of test results of the First Full-scale Thyroid Screening* (%) a	Results of the Second Full-scale Thyroid Screening			
				A		B	C
				A1 b b/a (%)	A2 c c/a (%)	d d/a (%)	e e/a (%)
Results of the First Full-scale Thyroid Screening	A	A1	27,799 (100.0)	19,659 (70.7)	8,091 (29.1)	49 (0.2)	0 (0.0)
		A2	38,828 (100.0)	3,702 (9.5)	34,951 (90.0)	175 (0.5)	0 (0.0)
	B		422 (100.0)	32 (7.6)	156 (37.0)	234 (55.5)	0 (0.0)
	C		0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Non-participants		4,034 (100.0)	1,789 (44.3)	2,220 (55.0)	25 (0.6)	0 (0.0)
Total			71,083 (100.0)	25,182 (35.4)	45,418 (63.9)	483 (0.7)	0 (0.0)

* Results of the participants with confirmed test results of the Second Full-scale Thyroid Screening.

This is not the breakdown of the total (270,468) of confirmed screening results from the First Full-scale Thyroid Screening.

2.2 Results of Confirmatory Examination

2.2-1 Progress Report

Thusfar, 143 of 483 people (29.6%) recommended to have further testing (started in October 2016) have acted on that recommendation. Of those, 64 (44.8%) have received results, as follows (see also Appendix 5 for results according to municipality):

Of 64 participants, 8 were found to be back within the range of A1 and A2, are listed as such in Table 5, and were advised to take their next regularly scheduled examination (12.5%).

The remaining 56 (87.5%) were recommended to have 6- or 12-month follow-up, which is covered by health insurance .

Table 5. Confirmatory testing coverage and results as of 31 December 2016

	Number of those requiring confirmatory test	Participants	Confirmed test results				
		Proportion (%)	Confirmatory test coverage (%)	Next screening advised		Follow-up advised	
				A1	A2		Cytology
	a	b (b/a)	c (c/b)	d (d/c)	e (e/c)	f (f/c)	g (g/f)
FY 2016	466	142 (30.5)	63 (44.4)	0 (0.0)	8 (12.7)	55 (87.3)	0 (0.0)
FY 2017	17	1 (5.9)	1 (100.0)	0 (0.0)	0 (0.0)	1 (100.0)	1 (100.0)
Total	483	143 (29.6)	64 (44.8)	0 (0.0)	8 (12.5)	56 (87.5)	1 (1.8)

Those confirmed within the range of A1 and A2 (including those with other thyroid conditions) were advised to take their next regularly scheduled examination.

Those who require 6- or 12-month follow-up provided by health insurance and those beyond the specified level of A2 were categorized as “Follow-up advised.”

2.2-2 Blood and urinary iodine test results as of 31 December 2016

Table 6. Blood test results Mean±SD (Abnormal value)

	FT4 1) (ng/dL)	FT3 2) (pg/mL)	TSH 3) (μIU/mL)	Tg 4) (ng/mL)	TgAb 5) (IU/mL)	TPOAb 6) (IU/mL)
Reference Range	0.95-1.74 7)	2.13-4.07 7)	0.340-3.880 7)	≦32.7	<28.0	<16.0
0 suspicious or malignant	-	-	-	-	-	-
Other 62	1.2 ± 0.2 (6.5%)	3.6 ± 0.4 (8.1%)	1.3 ± 0.8 (3.2%)	14.7 ± 10.4 (3.2%)	－ (11.3%)	－ (8.1%)

Table 7. Urinary iodine (μg/day)

	Minimum	25th percentile	Median	75th percentile	Maximum
0 suspicious or malignant	-	-	-	-	-
Other 63	51	108	147	285	8910

1) FT4: Free Thyroxine; higher among patients with thyrotoxicosis (such as Graves' disease) and lower with hypothyroidism (such as Hashimoto's thyroiditis).
2) FT3: Free Triiodothyronine; higher among patients with thyrotoxicosis (such as Graves' disease) and lower with hypothyroidism (such as Hashimoto's thyroiditis).
3) TSH: Thyroid Stimulating Hormone; higher among patients with Hashimoto's disease and lower with Graves' disease.
4) Tg: Thyroglobulin; higher when thyroid tissue is destroyed or when neoplastic tissue produces thyroglobulin.
   Laboratory reference range revised to ≤33.7 ng/mL as of 30 March 2015.
5) TgAb: Anti-Thyroglobulin Antibody; higher among patients with Hashimoto's disease and Graves' disease.
6) TPOAb: Anti-Thyroid Peroxidase Antibody; higher among patients with Hashimoto's disease or Graves' disease.
7) Reference interval varies according to age.

2.2 Confirmatory test results by municipality as of 31 December 2016

The proportion of findings suspicious for malignancy or actually malignant was 0% in both FY 2016 target municipalities (13 municipalities in the nationally designated evacuation zones and 12 towns of the Kempoku area) and FY 2017 target municipalities (34 towns of Iwaki, the Kennan and Aizu areas).

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Table 8.
Confirmatory test results by municipality in FY 2016

	Number of those screened	Participants who required confirmatory test	Proportion who required confirmatory test (%)*	Number who underwent confirmatory test	Suspicious or malignant cases	Proportion of suspicious or malignant cases (%)
Kawamata	1,376	8	0.6	2	0	0.00
Namie	1,224	11	0.9	1	0	0.00
Iitate	564	3	0.5	3	0	0.00
Minami-soma	5,904	43	0.7	16	0	0.00
Date	6,943	44	0.6	22	0	0.00
Tamura	3,734	30	0.8	18	0	0.00
Hirono	294	2	0.7	1	0	0.00
Naraha	252	0	0.0	0	0	0.00
Tomioka	545	5	0.9	2	0	0.00
Kawauchi	98	0	0.0	0	0	0.00
Okuma	471	6	1.3	3	0	0.00
Futaba	191	1	0.5	0	0	0.00
Katsurao	68	0	0.0	0	0	0.00
Fukushima	32,635	163	0.5	40	0	0.00
Nihonmatsu	6,156	43	0.7	16	0	0.00
Motomiya	3,700	16	0.4	5	0	0.00
Otama	1,022	6	0.6	4	0	0.00
Koriyama	8,628	48	0.6	2	0	0.00
Kori	1,320	10	0.8	2	0	0.00
Kunimi	997	8	0.8	4	0	0.00
Tenei	190	2	1.1	0	0	0.00
Shirakawa	5,633	11	0.2	0	0	0.00
Nishigo	1,301	5	0.4	1	0	0.00
Izumizaki	131	0	0.0	0	0	0.00
Miharu	489	1	0.2	0	0	0.00
Subtotal	83,866	466	0.6	142	0	0.00

Confirmatory test results by municipality in FY 2017

	Number of those screened	Participants who required confirmatory test	Proportion who required confirmatory test (%)*	Number who underwent confirmatory test	Suspicious or malignant cases	Proportion of suspicious or malignant cases (%)
Iwaki	538	2	0.4	0	0	0.00
Sukagawa	802	4	0.5	0	0	0.00
Soma	229	1	0.4	1	0	0.00
Kagamiishi	144	0	0.0	0	0	0.00
Shinchi	30	0	0.0	0	0	0.00
Nakajima	98	0	0.0	0	0	0.00
Yabuki	240	0	0.0	0	0	0.00
Ishikawa	124	1	0.8	0	0	0.00
Yamatsuri	35	0	0.0	0	0	0.00
Asakawa	81	2	2.5	0	0	0.00
Hirata	49	0	0.0	0	0	0.00
Tanagura	146	2	1.4	0	0	0.00
Hanawa	73	2	2.7	0	0	0.00
Samegawa	32	0	0.0	0	0	0.00
Ono	149	0	0.0	0	0	0.00
Tamakawa	50	0	0.0	0	0	0.00
Furudono	26	0	0.0	0	0	0.00
Hinoemata	2	0	0.0	0	0	0.00
Minami-aizu	41	0	0.0	0	0	0.00
Kaneyama	0	0	0.0	0	0	0.00
Showa	1	0	0.0	0	0	0.00
Mishima	0	0	0.0	0	0	0.00
Shimogo	8	0	0.0	0	0	0.00
Kitakata	59	0	0.0	0	0	0.00
Nishiaizu	7	0	0.0	0	0	0.00
Tadami	12	1	8.3	0	0	0.00
Inawashiro	79	0	0.0	0	0	0.00
Bandai	1	0	0.0	0	0	0.00
Kitashiobara	6	0	0.0	0	0	0.00
Aizumisato	17	0	0.0	0	0	0.00
Aizubange	34	0	0.0	0	0	0.00
Yanaizu	1	0	0.0	0	0	0.00
Aizuwakamatsu	230	2	0.9	0	0	0.00
Yugawa	7	0	0.0	0	0	0.00
Subtotal	3,351	17	0.5	1	0	0.00
Total	87,217	483	0.6	143	0	0.00

* Because this table shows the proportion of confirmatory test examinees among participants of the primary examination, it is different from the proportion of primary test results in table 1 on P.4.

2.3 Mental Health Care

2.3-1 Support for participants of primary examination

Since July 2015, we offer person-to-person explanations to participants at public venues where primary examinations take place. After an examination, this service is provided on request, with physicians using an online video link to private consultation booths at the venue. As of 31 December 2016, 17,840 (78.3%) of 22,790 participants visited the consultation booth. When the booth cannot be set up at a venue, phone support or briefing sessions at schools are offered as an alternative.

2.3-2 Support for participants of confirmatory examination

We set up a support team for participants of the confirmatory examination to address their anxiety and concerns, including online support.

Since the full-scale thyroid screening started, 831 participants (292 males and 539 females) have received support as of 31 December 2016. The number of consultations given to them was 1,615 in total. Of these, 946 (58.6%) received support services around their first examination and 623 (38.6%) around any subsequent exam – including 118 (7.3%) around FNAC – and 46 (2.8%) when giving informed consent.

In cooperation with teams of medical staff at hospitals, we offer similar services to those who are recommended for follow-up provided by health insurance.

Appendix 1

Thyroid Ultrasound Examination (TUE) coverage by municipality

As of 31 December 2016

	Survey Population	Participants		Proportion (%)	Number and proportion of participants by age group				Participants living outside Fukushima	Proportion (%)
			Screened outside Fukushima 3)		4-9	10-14	15-19	≥20		
	a	b		b/a					c	c/b
Screening coverage by municipality in FY 2016										
Kawamata	2,142	1,376	28	64.2	397	539	402	38 1)	34	2.5
					28.9	39.2	29.2	2.8 2)		
Namie	3,314	1,224	414	36.9	345	385	402	92	483	39.5
					28.2	31.5	32.8	7.5		
Iitate	987	564	17	57.1	158	250	145	11	27	4.8
					28.0	44.3	25.7	2.0		
Minami-soma	11,540	5,904	1,017	51.2	1,856	2,337	1,492	219	1,119	19.0
					31.4	39.6	25.3	3.7		
Date	10,208	6,943	209	68.0	1,985	2,653	2,061	244	200	2.9
					28.6	38.2	29.7	3.5		
Tamura	6,344	3,734	81	58.9	1,174	1,516	975	69	81	2.2
					31.4	40.6	26.1	1.8		
Hirono	975	294	53	30.2	107	116	55	16	48	16.3
					36.4	39.5	18.7	5.4		
Naraha	1,281	252	81	19.7	85	103	53	11	88	34.9
					33.7	40.9	21.0	4.4		
Tomioka	2,751	545	239	19.8	127	149	219	50	266	48.8
					23.3	27.3	40.2	9.2		
Kawauchi	297	98	13	33.0	27	40	30	1	14	14.3
					27.6	40.8	30.6	1.0		
Okuma	2,258	471	207	20.9	164	146	135	26	247	52.4
					34.8	31.0	28.7	5.5		
Futaba	1,133	191	87	16.9	63	65	55	8	96	50.3
					33.0	34.0	28.8	4.2		
Katsurao	211	68	3	32.2	19	22	19	8	4	5.9
					27.9	32.4	27.9	11.8		
Fukushima	49,340	32,635	1,707	66.1	9,778	11,785	9,911	1,161	1,875	5.7
					30.0	36.1	30.4	3.6		
Nihonmatsu	9,308	6,156	185	66.1	1,886	2,398	1,709	163	173	2.8
					30.6	39.0	27.8	2.6		
Motomiya	5,615	3,700	104	65.9	1,225	1,394	991	90	93	2.5
					33.1	37.7	26.8	2.4		
Otama	1,468	1,022	29	69.6	351	400	243	28	28	2.7
					34.3	39.1	23.8	2.7		
Koriyama	59,456	8,628	637	14.5	817	589	6,648	574	1,067	12.4
					9.5	6.8	77.1	6.7		
Kori	1,853	1,320	28	71.2	413	496	363	48	25	1.9
					31.3	37.6	27.5	3.6		
Kunimi	1,405	997	24	71.0	271	381	300	45	20	2.0
					27.2	38.2	30.1	4.5		
Tenei	966	190	5	19.7	63	72	51	4	5	2.6
					33.2	37.9	26.8	2.1		
Shirakawa	11,353	5,633	38	49.6	1,725	2,038	1,719	151	91	1.6
					30.6	36.2	30.5	2.7		
Nishigo	3,722	1,301	22	35.0	506	353	430	12	39	3.0
					38.9	27.1	33.1	0.9		
Izumizaki	1,163	131	3	11.3	9	6	113	3	4	3.1
					6.9	4.6	86.3	2.3		
Miharu	2,765	489	13	17.7	38	27	388	36	18	3.7
					7.8	5.5	79.3	7.4		
Subtotal	191,855	83,866	5,244	43.7	23,589	28,260	28,909	3,108	6,145	7.3
					28.1	33.7	34.5	3.7		

1) Number of participants. 2) Number of participants in the age group/Number of participants.

3) Number of participants who underwent the test outside Fukushima, as of 30 November 2016.

Fractions have been rounded and may not total to100%. Ages are at the time when the participants underwent the testing (the Second Full-scale Thyroid Screening).

Thyroid Ultrasound Examination (TUE) coverage by municipality

As of 31 December 2016

	Survey Population	Participants		Proportion (%)	Number and proportion of participants by age group				Participants living outside Fukushima	Proportion (%)
			Screened outside Fukushima 3)		4-9	10-14	15-19	≥20		
	a	b		b/a					c	c/b
Screening coverage by municipality in FY 2017										
Iwaki	56,790	538	73	0.9	165	131	192	50	71	13.2
					30.7	24.3	35.7	9.3		
Sukagawa	14,110	802	11	5.7	63	65	666	8	10	1.2
					7.9	8.1	83.0	1.0		
Soma	6,256	229	5	3.7	55	27	143	4	3	1.3
					24.0	11.8	62.4	1.7		
Kagamiishi	2,417	144	1	6.0	4	8	130	2	1	0.7
					2.8	5.6	90.3	1.4		
Shinchi	1,319	30	3	2.3	4	2	23	1	3	10.0
					13.3	6.7	76.7	3.3		
Nakajima	972	98	1	10.1	8	8	81	1	0	0.0
					8.2	8.2	82.7	1.0		
Yabuki	3,042	240	6	7.9	23	18	197	2	5	2.1
					9.6	7.5	82.1	0.8		
Ishikawa	2,537	124	1	4.9	17	8	99	0	2	1.6
					13.7	6.5	79.8	0.0		
Yamatsuri	931	35	0	3.8	5	3	27	0	0	0.0
					14.3	8.6	77.1	0.0		
Asakawa	1,211	81	0	6.7	3	4	73	1	1	1.2
					3.7	4.9	90.1	1.2		
Hirata	1,101	49	0	4.5	6	4	39	0	0	0.0
					12.2	8.2	79.6	0.0		
Tanagura	2,750	146	3	5.3	15	14	114	3	3	2.1
					10.3	9.6	78.1	2.1		
Hanawa	1,492	73	0	4.9	4	3	65	1	1	1.4
					5.5	4.1	89.0	1.4		
Samegawa	616	32	1	5.2	6	2	24	0	1	3.1
					18.8	6.3	75.0	0.0		
Ono	1,720	149	5	8.7	9	12	128	0	2	1.3
					6.0	8.1	85.9	0.0		
Tamakawa	1,211	50	0	4.1	2	5	43	0	0	0.0
					4.0	10.0	86.0	0.0		
Furudono	945	26	1	2.8	4	2	19	1	1	3.8
					15.4	7.7	73.1	3.8		
Hinoemata	94	2	0	2.1	0	0	2	0	0	0.0
					0.0	0.0	100.0	0.0		
Minami-aizu	2,512	41	0	1.6	8	4	28	1	0	0.0
					19.5	9.8	68.3	2.4		
Kaneyama	177	0	0	0.0	0	0	0	0	0	0.0
					0.0	0.0	0.0	0.0		
Showa	127	1	0	0.8	0	1	0	0	0	0.0
					0.0	100.0	0.0	0.0		
Mishima	174	0	0	0.0	0	0	0	0	0	0.0
					0.0	0.0	0.0	0.0		
Shimogo	870	8	0	0.9	3	1	4	0	0	0.0
					37.5	12.5	50.0	0.0		
Kitakata	8,077	59	8	0.7	13	16	23	7	8	13.6
					22.0	27.1	39.0	11.9		
Nishiaizu	885	7	1	0.8	2	0	4	1	1	14.3
					28.6	0.0	57.1	14.3		
Tadami	641	12	0	1.9	4	3	5	0	0	0.0
					33.3	25.0	41.7	0.0		
Inawashiro	2,383	79	0	3.3	16	6	57	0	6	7.6
					20.3	7.6	72.2	0.0		
Bandai	555	1	0	0.2	0	0	1	0	0	0.0
					0.0	0.0	100.0	0.0		
Kitashiobara	502	6	0	1.2	0	0	6	0	0	0.0
					0.0	0.0	100.0	0.0		
Aizumisato	3,311	17	1	0.5	5	4	8	0	1	5.9
					29.4	23.5	47.1	0.0		
Aizubange	2,790	34	4	1.2	9	9	10	6	4	11.8
					26.5	26.5	29.4	17.6		
Yanaizu	537	1	0	0.2	0	0	1	0	0	0.0
					0.0	0.0	100.0	0.0		
Aizuwakamatsu	21,107	230	28	1.1	74	46	92	18	24	10.4
					32.2	20.0	40.0	7.8		
Yugawa	606	7	0	1.2	0	0	7	0	0	0.0
					0.0	0.0	100.0	0.0		
Subtotal	144,768	3,351	153	2.3	527	406	2,311	107	148	4.4
					15.7	12.1	69.0	3.2		
Total	336,623	87,217	5,397	25.9	24,116	28,666	31,220	3,215	6,293	7.2
					27.7	32.9	35.8	3.7		

Appendix 2

Thyroid Ultrasound Examination (TUE) coverage by prefecture

As of 30 November 2016

Prefecture	Number of test venues	Participants*
Hokkaido	6	**133**
Aomori	1	**81**
Iwate	3	**149**
Miyagi	2	**1,115**
Akita	1	**81**
Yamagata	3	**317**
Ibaraki	4	**345**
Tochigi	7	**375**
Gunma	2	**101**
Saitama	2	**207**
Chiba	4	**249**
Tokyo	12	**796**
Kanagawa	5	**518**
Niigata	2	**272**
Toyama	1	**5**
Ishikawa	1	**17**

Prefecture	Number of test venues	Participants*
Fukui	1	**9**
Yamanashi	2	**46**
Nagano	2	**55**
Gifu	1	**21**
Shizuoka	2	**39**
Aichi	3	**98**
Mie	1	**10**
Shiga	1	**8**
Kyoto	3	**43**
Osaka	7	**87**
Hyogo	1	**25**
Nara	2	**8**
Wakayama	1	**5**
Tottori	1	**6**
Shimane	1	**9**
Okayama	3	**17**

Prefecture	Number of test venues	Participants*
Hiroshima	1	**5**
Yamaguchi	1	**13**
Tokushima	1	**3**
Kagawa	1	**5**
Ehime	1	**0**
Kochi	1	**10**
Fukuoka	3	**36**
Saga	1	**5**
Nagasaki	2	**11**
Kumamoto	1	**11**
Oita	1	**5**
Miyazaki	1	**14**
Kagoshima	1	**11**
Okinawa	1	**21**

Total	105	**5,397**

* Participants who underwent testing at venues outside Fukushima carried out either by Fukushima Medical University staff (once in Kanagawa) or by local specialists.

Appendix 3

Results of primary examination by municipality

As of 31 December 2016

	Participants	Confirmed results b	Number by test results				Nodules		Cysts	
			Proportion (%)							
			A		B	C	Proportion (%)		Proportion (%)	
	a	Proportion (%) b/a (%)	A1	A2			≥5.1 mm	≤5.0 mm	≥20.1 mm	≤20.0 mm

Screening coverage by municipality in FY 2016

Kawamata	1,376	1,354	470	876	8	0	8	6	0	880
		98.4	34.7	64.7	0.6	0.0	0.6	0.4	0.0	65.0
Namie	1,224	1,080	354	715	11	0	11	6	0	718
		88.2	32.8	66.2	1.0	0.0	1.0	0.6	0.0	66.5
Iitate	564	538	184	351	3	0	3	2	0	351
		95.4	34.2	65.2	0.6	0.0	0.6	0.4	0.0	65.2
Minami-soma	5,904	5,751	2,048	3,660	43	0	43	27	0	3,678
		97.4	35.6	63.6	0.7	0.0	0.7	0.5	0.0	64.0
Date	6,943	6,861	2,376	4,441	44	0	44	23	0	4,464
		98.8	34.6	64.7	0.6	0.0	0.6	0.3	0.0	65.1
Tamura	3,734	3,313	1,214	2,069	30	0	30	19	0	2,084
		88.7	36.6	62.5	0.9	0.0	0.9	0.6	0.0	62.9
Hirono	294	287	94	191	2	0	2	1	0	192
		97.6	32.8	66.6	0.7	0.0	0.7	0.3	0.0	66.9
Naraha	252	236	92	144	0	0	0	0	0	144
		93.7	39.0	61.0	0.0	0.0	0.0	0.0	0.0	61.0
Tomioka	545	441	164	272	5	0	5	0	0	274
		80.9	37.2	61.7	1.1	0.0	1.1	0.0	0.0	62.1
Kawauchi	98	87	26	61	0	0	0	0	0	61
		88.8	29.9	70.1	0.0	0.0	0.0	0.0	0.0	70.1
Okuma	471	429	149	274	6	0	6	3	0	274
		91.1	34.7	63.9	1.4	0.0	1.4	0.7	0.0	63.9
Futaba	191	164	71	92	1	0	1	0	0	92
		85.9	43.3	56.1	0.6	0.0	0.6	0.0	0.0	56.1
Katsurao	68	55	18	37	0	0	0	1	0	37
		80.9	32.7	67.3	0.0	0.0	0.0	1.8	0.0	67.3
Fukushima	32,635	28,865	10,225	18,477	163	0	163	88	0	18,561
		88.4	35.4	64.0	0.6	0.0	0.6	0.3	0.0	64.3
Nihonmatsu	6,156	6,033	2,148	3,842	43	0	43	22	0	3,865
		98.0	35.6	63.7	0.7	0.0	0.7	0.4	0.0	64.1
Motomiya	3,700	3,480	1,201	2,263	16	0	16	5	0	2,274
		94.1	34.5	65.0	0.5	0.0	0.5	0.1	0.0	65.3
Otama	1,022	981	342	633	6	0	6	3	0	637
		96.0	34.9	64.5	0.6	0.0	0.6	0.3	0.0	64.9
Koriyama	8,628	4,108	1,517	2,543	48	0	48	23	0	2,567
		47.6	36.9	61.9	1.2	0.0	1.2	0.6	0.0	62.5
Kori	1,320	1,307	475	822	10	0	10	3	0	829
		99.0	36.3	62.9	0.8	0.0	0.8	0.2	0.0	63.4
Kunimi	997	989	326	655	8	0	8	2	0	660
		99.2	33.0	66.2	0.8	0.0	0.8	0.2	0.0	66.7
Tenei	190	46	18	26	2	0	2	0	0	26
		24.2	39.1	56.5	4.3	0.0	4.3	0.0	0.0	56.5
Shirakawa	5,633	1,786	612	1,163	11	0	11	4	0	1,169
		31.7	34.3	65.1	0.6	0.0	0.6	0.2	0.0	65.5
Nishigo	1,301	397	139	253	5	0	5	2	0	254
		30.5	35.0	63.7	1.3	0.0	1.3	0.5	0.0	64.0
Izumizaki	131	103	42	61	0	0	0	1	0	61
		78.6	40.8	59.2	0.0	0.0	0.0	1.0	0.0	59.2
Miharu	489	182	65	116	1	0	1	0	0	117
		37.2	35.7	63.7	0.5	0.0	0.5	0.0	0.0	64.3
Subtotal	83,866	68,873	24,370	44,037	466	0	466	241	0	44,269
		82.1	35.4	63.9	0.7	0.0	0.7	0.3	0.0	64.3

Fractions have been rounded and may not total to 100%.

Results of primary examination by municipality

As of 31 December 2016

	Participants	Confirmed results b	Number by test results				Nodules		Cysts	
			Proportion (%)				Proportion (%)		Proportion (%)	
			A		B	C				
	a	Proportion (%) b/a (%)	A1	A2			≥5.1 mm	≤5.0 mm	≥20.1 mm	≤20.0 mm
Screening coverage by municipality in FY 2017										
Iwaki	538	416	164	250	2	0	2	2	0	252
		77.3	39.4	60.1	0.5	0.0	0.5	0.5	0.0	60.6
Sukagawa	802	424	149	271	4	0	4	6	0	273
		52.9	35.1	63.9	0.9	0.0	0.9	1.4	0.0	64.4
Soma	229	226	99	126	1	0	1	2	0	127
		98.7	43.8	55.8	0.4	0.0	0.4	0.9	0.0	56.2
Kagamiishi	144	82	25	57	0	0	0	1	0	57
		56.9	30.5	69.5	0.0	0.0	0.0	1.2	0.0	69.5
Shinchi	30	26	10	16	0	0	0	0	0	16
		86.7	38.5	61.5	0.0	0.0	0.0	0.0	0.0	61.5
Nakajima	98	74	27	47	0	0	0	0	0	47
		75.5	36.5	63.5	0.0	0.0	0.0	0.0	0.0	63.5
Yabuki	240	165	57	108	0	0	0	1	0	107
		68.8	34.5	65.5	0.0	0.0	0.0	0.6	0.0	64.8
Ishikawa	124	85	36	48	1	0	1	0	0	48
		68.5	42.4	56.5	1.2	0.0	1.2	0.0	0.0	56.5
Yamatsuri	35	21	6	15	0	0	0	0	0	15
		60.0	28.6	71.4	0.0	0.0	0.0	0.0	0.0	71.4
Asakawa	81	55	20	33	2	0	2	0	0	35
		67.9	36.4	60.0	3.6	0.0	3.6	0.0	0.0	63.6
Hirata	49	21	4	17	0	0	0	0	0	17
		42.9	19.0	81.0	0.0	0.0	0.0	0.0	0.0	81.0
Tanagura	146	112	40	70	2	0	2	2	0	71
		76.7	35.7	62.5	1.8	0.0	1.8	1.8	0.0	63.4
Hanawa	73	63	18	43	2	0	2	1	0	43
		86.3	28.6	68.3	3.2	0.0	3.2	1.6	0.0	68.3
Samegawa	32	20	8	12	0	0	0	1	0	12
		62.5	40.0	60.0	0.0	0.0	0.0	5.0	0.0	60.0
Ono	149	43	14	29	0	0	0	1	0	29
		28.9	32.6	67.4	0.0	0.0	0.0	2.3	0.0	67.4
Tamakawa	50	22	3	19	0	0	0	0	0	19
		44.0	13.6	86.4	0.0	0.0	0.0	0.0	0.0	86.4
Furudono	26	17	7	10	0	0	0	0	0	10
		65.4	41.2	58.8	0.0	0.0	0.0	0.0	0.0	58.8
Hinoemata	2	1	0	1	0	0	0	0	0	1
		50.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Minami-aizu	41	24	7	17	0	0	0	0	0	17
		58.5	29.2	70.8	0.0	0.0	0.0	0.0	0.0	70.8
Kaneyama	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Showa	1	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mishima	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shimogo	8	7	2	5	0	0	0	0	0	5
		87.5	28.6	71.4	0.0	0.0	0.0	0.0	0.0	71.4
Kitakata	59	49	23	26	0	0	0	0	0	26
		83.1	46.9	53.1	0.0	0.0	0.0	0.0	0.0	53.1
Nishiaizu	7	6	2	4	0	0	0	0	0	4
		85.7	33.3	66.7	0.0	0.0	0.0	0.0	0.0	66.7
Tadami	12	9	1	7	1	0	1	0	0	8
		75.0	11.1	77.8	11.1	0.0	11.1	0.0	0.0	88.9
Inawashiro	79	42	18	24	0	0	0	0	0	24
		53.2	42.9	57.1	0.0	0.0	0.0	0.0	0.0	57.1
Bandai	1	1	0	1	0	0	0	0	0	1
		100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Kitashiobara	6	2	1	1	0	0	0	0	0	1
		33.3	50.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0
Aizumisato	17	12	4	8	0	0	0	0	0	8
		70.6	33.3	66.7	0.0	0.0	0.0	0.0	0.0	66.7
Aizubange	34	29	12	17	0	0	0	0	0	17
		85.3	41.4	58.6	0.0	0.0	0.0	0.0	0.0	58.6
Yanaizu	1	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aizuwakamatsu	230	149	52	95	2	0	2	1	0	96
		64.8	34.9	63.8	1.3	0.0	1.3	0.7	0.0	64.4
Yugawa	7	7	3	4	0	0	0	0	0	4
		100.0	42.9	57.1	0.0	0.0	0.0	0.0	0.0	57.1
Subtotal	3,351	2,210	812	1,381	17	0	17	18	0	1,390
		66.0	36.7	62.5	0.8	0.0	0.8	0.8	0.0	62.9
Total	87,217	71,083	25,182	45,418	483	0	483	259	0	45,659
		81.5	35.4	63.9	0.7	0.0	0.7	0.4	0.0	64.2

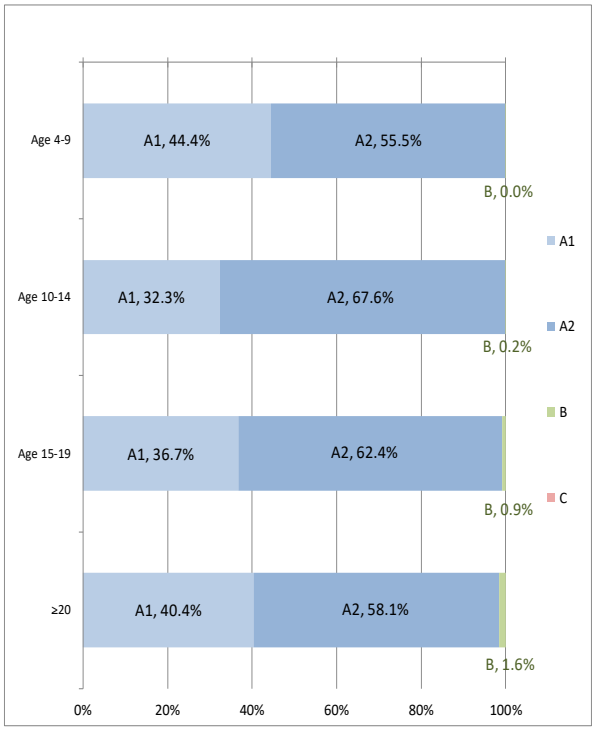
Appendix 4

1. Thyroid Ultrasound Examination results by age and sex

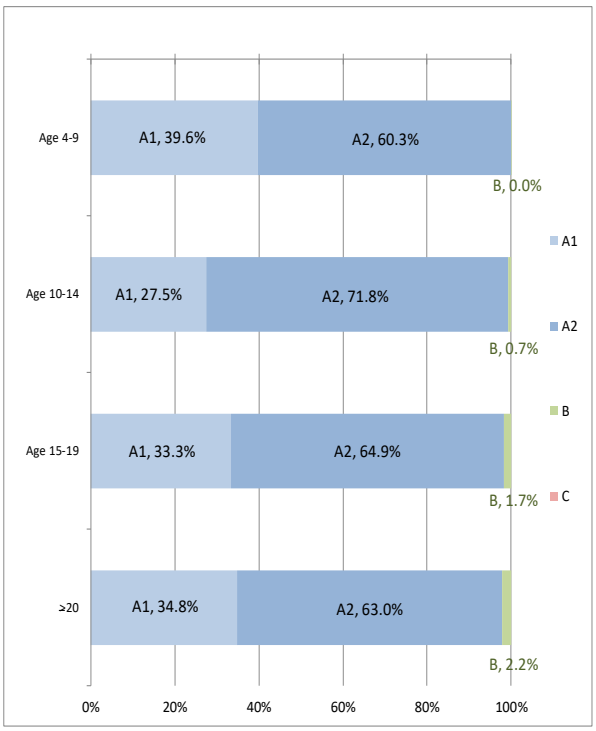
As of 31 December 2016

Ages	A						B			C			Total		
	A1			A2											
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
4-9	4,550	3,906	8,456	5,683	5,944	11,627	5	3	8	0	0	0	10,238	9,853	20,091
10-14	3,891	3,164	7,055	8,149	8,271	16,420	21	82	103	0	0	0	12,061	11,517	23,578
15-19	4,656	4,050	8,706	7,909	7,886	15,795	110	212	322	0	0	0	12,675	12,148	24,823
≥20	456	509	965	656	920	1,576	18	32	50	0	0	0	1,130	1,461	2,591
Total	13,553	11,629	25,182	22,397	23,021	45,418	154	329	483	0	0	0	36,104	34,979	71,083

Test results by age group (Male)



Test results by age group (Female)



Percentages have been rounded and may not total to 100%.

Ages are at the time when the participants underwent the testing (the Second Full-scale Thyroid Screening).

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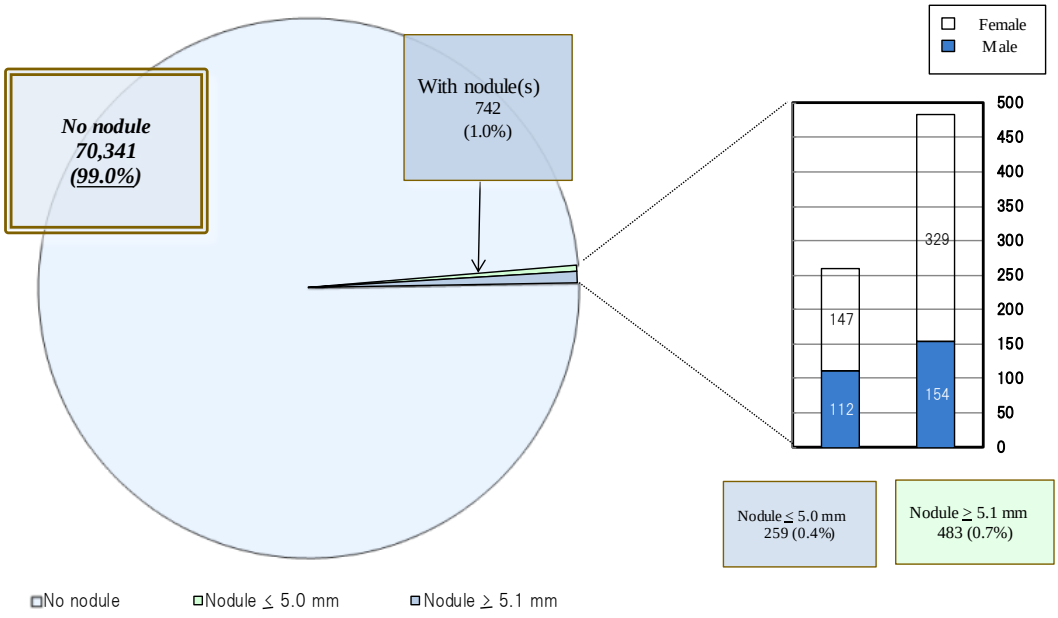
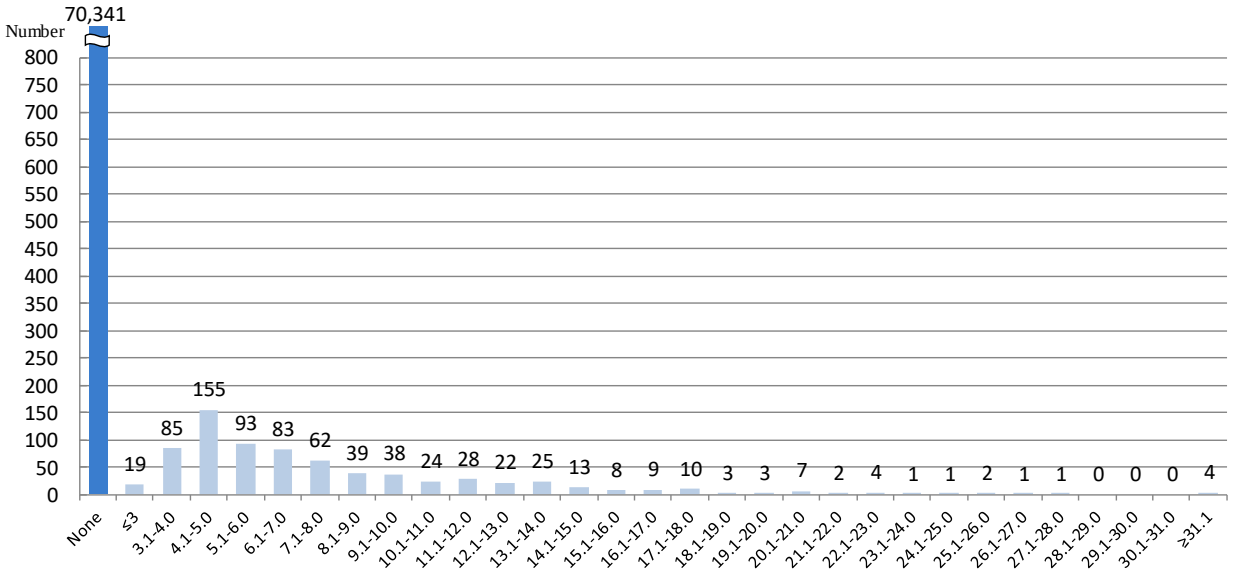
2. Nodule size

As of 31 December 2016

Nodule size	Total	Male	Female	Class	Proportion
None	70,341	35,838	34,503	A 1	99.0%
≤ 3.0 mm	19	10	9	A 2	0.4%
3.1-5.0 mm	240	102	138		
5.1-10.0 mm	315	100	215	B	0.7%
10.1-15.0 mm	112	30	82		
15.1-20.0 mm	33	13	20		
20.1-25.0 mm	15	6	9		
≥ 25.1 mm	8	5	3		
Total	71,083	36,104	34,979		

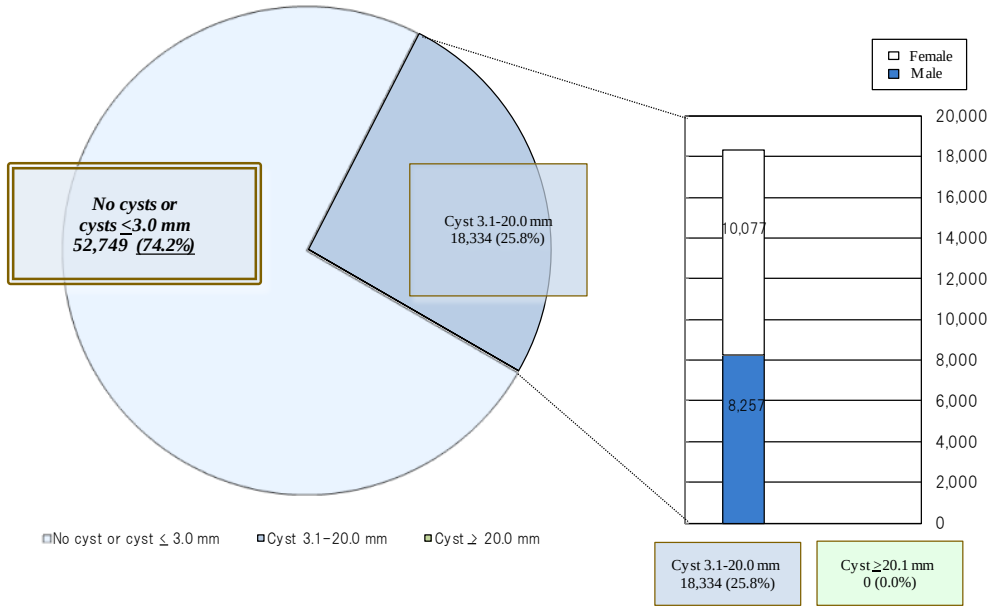


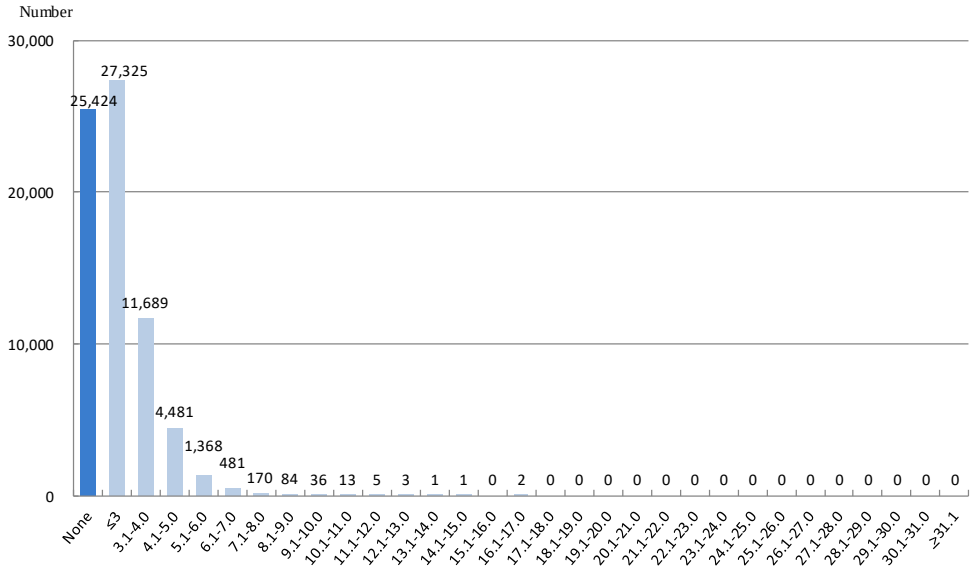


3. Cyst size

As of 31 December 2016

Cyst size	Total	Male	Female	Class	Proportion
None	25,424	13,651	11,773	A 1	74.2%
≤ 3.0 mm	27,325	14,196	13,129	A 2	25.8%
3.1-5.0 mm	16,170	7,481	8,689		
5.1-10.0 mm	2,139	770	1,369		
10.1-15.0 mm	23	6	17		
15.1-20.0 mm	2	0	2		
20.1-25.0 mm	0	0	0	B	0.000%
≥ 25.1 mm	0	0	0		
Total	71,083	36,104	34,979		





Appendix 5

Confirmatory test results by municipality

As of 31 December 2016

District	Number of those screened	Participants who required confirmatory test	Number of those who underwent confirmatory test					Number of confirmed results				
			Total	Ages 4-9	Ages 10-14	Ages 15-19	≥ 20	Total	Next screening advised		Follow-up advised	
									A1	A2		Aspiration biopsy cytology
	a	b	c	d	e	f	g	h	i	j	k	l
		Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)

Screening coverage by municipality in FY 2016

Kawamata	1,376	8	2	0	1	1	0	1	0	1	0	0
		0.6	25.0	0.0	50.0	50.0	0.0	50.0	0.0	100.0	0.0	0.0
Namie	1,224	11	1	0	0	1	0	0	0	0	0	0
		0.9	9.1	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Iitate	564	3	3	0	1	1	1	2	0	0	2	0
		0.5	100.0	0.0	33.3	33.3	33.3	66.7	0.0	0.0	100.0	0.0
Minami-soma	5,904	43	16	0	5	10	1	7	0	0	7	0
		0.7	37.2	0.0	31.3	62.5	6.3	43.8	0.0	0.0	100.0	0.0
Date	6,943	44	22	0	8	12	2	9	0	1	8	0
		0.6	50.0	0.0	36.4	54.5	9.1	40.9	0.0	11.1	88.9	0.0
Tamura	3,734	30	18	1	7	8	2	9	0	2	7	0
		0.8	60.0	5.6	38.9	44.4	11.1	50.0	0.0	22.2	77.8	0.0
Hirono	294	2	1	0	0	1	0	1	0	0	1	0
		0.7	50.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	100.0	0.0
Naraha	252	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tomioka	545	5	2	0	0	2	0	0	0	0	0	0
		0.9	40.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Kawauchi	98	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Okuma	471	6	3	0	1	2	0	1	0	0	1	0
		1.3	50.0	0.0	33.3	66.7	0.0	33.3	0.0	0.0	100.0	0.0
Futaba	191	1	0	0	0	0	0	0	0	0	0	0
		0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Katsurao	68	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fukushima	32,635	163	40	2	3	26	9	11	0	1	10	0
		0.5	24.5	5.0	7.5	65.0	22.5	27.5	0.0	9.1	90.9	0.0
Nihonmatsu	6,156	43	16	0	6	8	2	14	0	2	12	0
		0.7	37.2	0.0	37.5	50.0	12.5	87.5	0.0	14.3	85.7	0.0
Motomiya	3,700	16	5	1	1	2	1	2	0	0	2	0
		0.4	31.3	20.0	20.0	40.0	20.0	40.0	0.0	0.0	100.0	0.0
Otama	1,022	6	4	0	1	3	0	2	0	0	2	0
		0.6	66.7	0.0	25.0	75.0	0.0	50.0	0.0	0.0	100.0	0.0
Koriyama	8,628	48	2	0	0	2	0	1	0	1	0	0
		0.6	4.2	0.0	0.0	100.0	0.0	50.0	0.0	100.0	0.0	0.0
Kori	1,320	10	2	0	1	1	0	1	0	0	1	0
		0.8	20.0	0.0	50.0	50.0	0.0	50.0	0.0	0.0	100.0	0.0
Kunimi	997	8	4	0	2	0	2	2	0	0	2	0
		0.8	50.0	0.0	50.0	0.0	50.0	50.0	0.0	0.0	100.0	0.0
Tenei	190	2	0	0	0	0	0	0	0	0	0	0
		1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shirakawa	5,633	11	0	0	0	0	0	0	0	0	0	0
		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nishigo	1,301	5	1	0	0	1	0	0	0	0	0	0
		0.4	20.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Izumizaki	131	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Miharu	489	1	0	0	0	0	0	0	0	0	0	0
		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	83,866	466	142	4	37	81	20	63	0	8	55	0
		0.6	30.5	2.8	26.1	57.0	14.1	44.4	0.0	12.7	87.3	0.0

h) Excluding participants who have not received the test results.

Fractions have been rounded and may not total to 100%. Ages are at the time when the participants underwent the testing (the Second Full-scale Thyroid Screening).

Confirmatory test results by municipality

As of 31 December 2016

District	Number of those screened	Participants who required confirmatory test	Number of those who underwent confirmatory test					Number of confirmed results				
			Total	Ages 4-9	Ages10-14	Ages 15-19	≥ 20	Total	Next screening advised		Follow-up advised	
									A1	A2		Aspiration biopsy cytology
	a	b	c	d	e	f	g	h	i	j	k	l
		Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)
Screening coverage by municipality in FY 2017												
Iwaki	538	2	0	0	0	0	0	0	0	0	0	0
		0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sukagawa	802	4	0	0	0	0	0	0	0	0	0	0
		0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Soma	229	1	1	0	0	1	0	1	0	0	1	1
		0.4	100.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	100.0	100.0
Kagamiishi	144	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shinchi	30	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nakajima	98	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yabuki	240	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ishikawa	124	1	0	0	0	0	0	0	0	0	0	0
		0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yamatsuri	35	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Asakawa	81	2	0	0	0	0	0	0	0	0	0	0
		2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hirata	49	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tanagura	146	2	0	0	0	0	0	0	0	0	0	0
		1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hanawa	73	2	0	0	0	0	0	0	0	0	0	0
		2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Samegawa	32	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ono	149	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tamakawa	50	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Furudono	26	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hinoemata	2	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minami-aizu	41	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kaneyama	0	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Showa	1	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mishima	0	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shimogo	8	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kitakata	59	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nishiaizu	7	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tadami	12	1	0	0	0	0	0	0	0	0	0	0
		8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inawashiro	79	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bandai	1	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kitashiobara	6	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aizumisato	17	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aizubange	34	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yanaizu	1	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aizuwakamatsu	230	2	0	0	0	0	0	0	0	0	0	0
		0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yugawa	7	0	0	0	0	0	0	0	0	0	0	0
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	3,351	17	1	0	0	1	0	1	0	0	1	1
		0.5	5.9	0.0	0.0	100.0	0.0	100.0	0.0	0.0	100.0	100.0
Total	87,217	483	143	4	37	82	20	64	0	8	56	1
		0.6	29.6	2.8	25.9	57.3	14.0	44.8	0.0	12.5	87.5	1.8

Progress Report of the Comprehensive Health Check

Reported on 20 February 2017

1. Group

Residents of nationally designated evacuation zones as of 2011 and those who were recommended to have follow-up based on results of the Basic Survey.

【Evacuation area, etc.】

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)

2. The implementation status in FY 2015

◆Methods of FY 2015

Age group	Area	Methods
≥16 years 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) * Number of cooperating medical institutions is 486
		Group health examinations conducted by FMU (Group health examinations within the prefecture) * 27 locations within the prefecture (conducted 51 times)
	Outside the prefecture	Additional check-ups in specific health examinations held by target municipalities (Other[1])
		Individual health examinations at designated medical institutions outside the prefecture (Individual health examinations outside the prefecture) * Number of cooperating medical institutions is 763 (including 311 medical institutions that could accommodate ≤15 years old)
≤15 years old	Within the prefecture	Children's health examinations at designated medical institutions within the prefecture (Children's health examinations within the prefecture) * Number of cooperating medical institutions is 99
	Outside the prefecture	Children's health examinations at designated medical institutions outside the prefecture (Children's health examinations outside the prefecture) * Number of cooperating medical institutions is 439 (including 311 medical institutions that could accommodate ≥16 years old)

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

◆Results of FY 2015

Progress Report for FY 2011-2015 (Ages 16 and older) (Unit: person, percentage)

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
	Revised value as of 11 Sep 2012	Revised value as of 5 Jul 2013	Revised value as of 1 Sep 2014	Revised value as of 1 Sep 2015	Revised value as of 1 Sep 2016
Survey population	182,370	184,910	186,970	188,328	190,019
Health Check conducted by municipalities within the prefecture	8,798	23,907	25,604	25,913	26,195
Individual examinations conducted within the prefecture	—	6,692	5,806	4,927	4,443
Group examinations conducted within the prefecture	41,949	10,603	6,767	5,808	5,183
Individual examinations conducted outside the prefecture	3,815	3,055	3,205	3,418	3,332
Other[1,2]	2,045	3,206	2,017	1,846	2,113
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
Proportion of participants (%)	30.9%	25.4%	23.0%	22.2%	21.7%

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)

Progress Report for FY 2011-2015 (Ages 15 and younger) (Unit: person, percentage)

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
	Revised value as of 11 Sep 2012	Revised value as of 5 Jul 2013	Revised value as of 1 Sep 2014	Revised value as of 1 Sep 2015	Revised value as of 1 Sep 2016
Survey population	27,819	27,077	26,474	25,883	25,296
Children's health examination within the prefecture	15,002	9,534	8,432	7,432	6,206
Children's health examination outside the prefecture	2,949	2,283	1,822	1,792	1,403
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
Proportion of participants (%)	64.5%	43.5%	38.7%	35.6%	30.1%

◆Proportion of participants

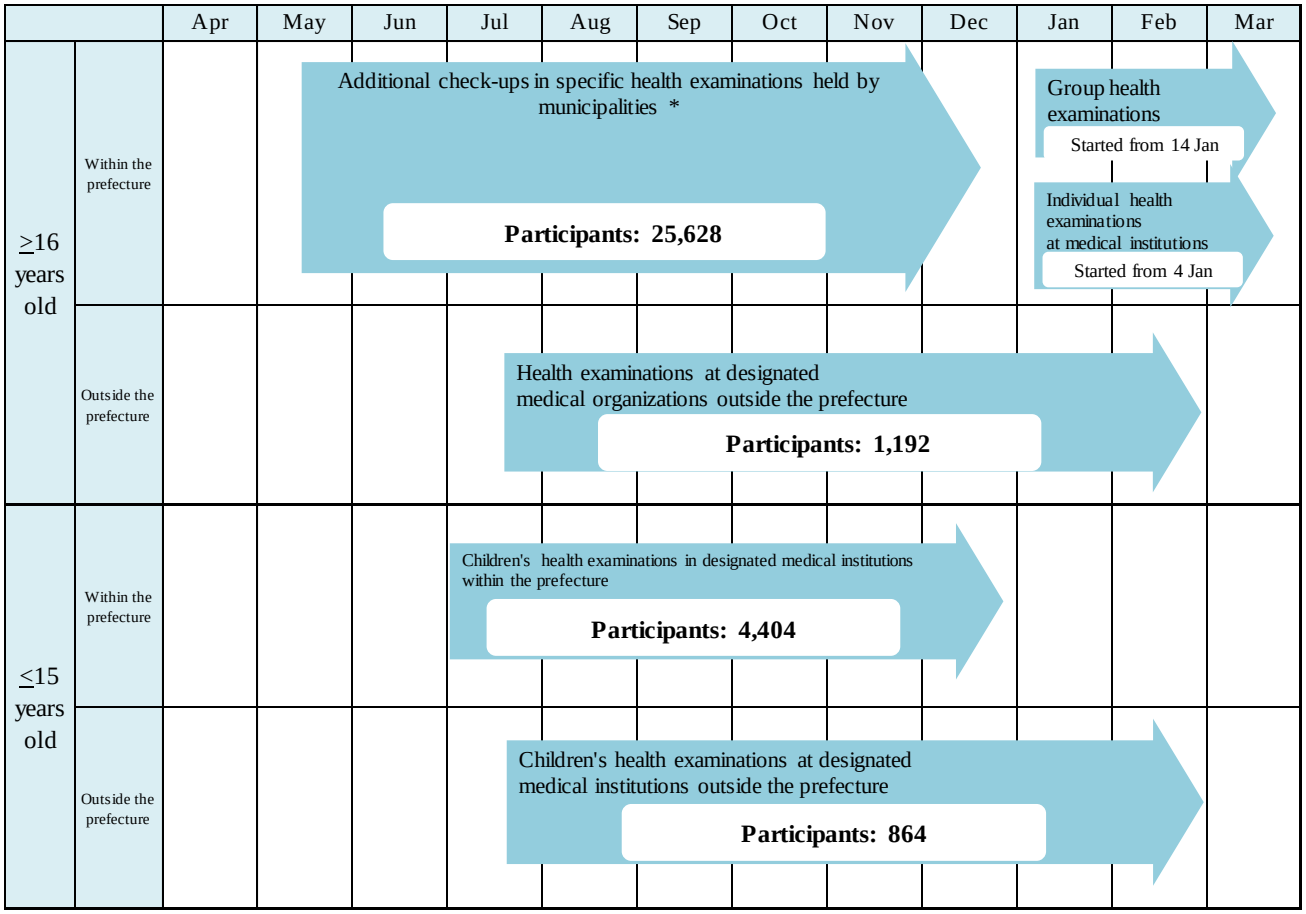
The proportion of participants 16 years and older was 21.7% in FY 2015. Compared to 22.2% in FY 2014, it has decreased by 0.5 points. Similarly, the proportion of participants who are 15 and under was 30.1%, which has decreased by 5.5 points compared to 35.6% in FY 2014.

3. Progress Report of FY 2016

Group: 215,701 individuals

(24,600 individuals aged 15 and under, 191,101 individuals aged 16 and older)

As of 31 December 2016



* Iitate (from 11 May), Tamura (from 24 May), Katsurao (from 4 Jun), Kawamata (from 20 Jun), Minami-soma (from 23 Jun), Hirono (from 5 Jul), Namie (from 26 Aug), Futaba (from 29 Aug), Kawauchi (from 30 Aug), Naraha (from 20 Sep), Tomioka (from 21 Oct), Okuma (from 17 Oct)

【People residing within the prefecture】

For those aged 16 and older, items were added to specific health check-ups held by 12 municipalities except Date city as before, so that examinations could be simultaneously conducted. The number of examinees who are 16 and older is 25,628 (preliminary data).

Furthermore, we have been conducting group health examinations and individual health examinations at medical institutions for those who could not receive the above-mentioned check-ups since January 2016. (The number of cooperating medical institutions that provide individual health exams is 482.)

For children aged 15 and under, the health exams were conducted during an approximately 6-month period from Jul to Dec 2016 as was the case in the previous year. (Number of cooperating medical institutions was 96.) The number of examinees is 4,404 (preliminary data).

【People living outside the prefecture】

In addition to increasing the number of medical institutions that can conduct health examinations nationwide, we have sequentially sent out notices from mid-July in order to ensure early implementation starting from August. At this point, the number of examinees who are 16 and older is 1,192, and number of those who are 15 and younger is 864.

Comprehensive Health Check for Children in FY 2011 - 2015
Height and Weight (Aged 0-5)

Boys' height	FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		Difference
Age	n	Mean(cm)(a)	n	Mean(cm)(b)	n	Mean(cm)(c)	n	Mean(cm)(d)	n	Mean(cm)(e)	(e)-(a)
10-11 mo	44	73.6	46	73.3	42	72.7	41	72.9	36	72.2	Δ 1.4
1 y-	77	74.8	52	74.1	47	74.4	44	75.2	40	74.7	Δ 0.1
1 y 2 mo-	68	76.5	64	77.2	35	77.0	35	77.3	24	77.1	0.6
1 y 4 mo-	93	78.7	54	79.1	43	78.1	32	79.2	33	78.9	0.2
1 y 6 mo-	80	81.2	59	80.2	30	79.8	45	80.0	39	79.8	Δ 1.4
1 y 8 mo-	73	82.1	56	82.5	32	82.6	32	81.1	26	82.9	0.8
1 y 10 mo- 1 y 11 mo	83	83.8	52	83.7	44	83.4	21	84.3	22	84.2	0.4
2 y-	281	86.6	181	87.4	177	87.1	111	86.1	87	86.3	Δ 0.3
2 y 6 mo-	269	90.7	196	91.4	170	91.4	105	90.9	92	90.8	0.1
3 y-	281	94.8	193	94.9	179	95.3	148	94.8	76	94.5	Δ 0.3
3 y 6 mo-	257	98.6	170	99.0	176	98.2	150	98.4	89	98.3	Δ 0.3
4 y-	258	101.7	203	102.3	172	101.8	162	102.5	123	101.9	0.2
4 y 6 mo-	280	105.7	193	105.7	177	105.6	176	105.2	122	105.6	Δ 0.1
5 y-	286	108.5	182	108.9	175	108.9	187	108.4	135	108.8	0.3
5 y 6 mo-5 y 11 mo	293	111.4	199	111.9	180	111.9	155	112.0	147	112.1	0.7
Total	2,723		1,900		1,679		1444		1,091		

Girls' height	FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		Difference
Age	n	Mean(cm)(a)	n	Mean(cm)(b)	n	Mean(cm)(c)	n	Mean(cm)(d)	n	Mean(cm)(e)	(e)-(a)
10-11 mo	36	71.5	49	72.0	45	72.6	39	71.3	22	70.4	Δ 1.1
1 y-	79	73.7	60	73.4	45	74.0	33	73.3	33	73.2	Δ 0.5
1 y 2 mo-	85	75.1	41	75.2	43	75.9	34	74.5	34	74.3	Δ 0.8
1 y 4 mo-	80	77.4	54	77.8	28	78.7	26	77.9	39	76.9	Δ 0.5
1 y 6 mo-	78	78.9	53	78.9	23	79.6	34	79.0	26	78.3	Δ 0.6
1 y 8 mo-	86	81.2	49	81.1	47	80.9	35	81.2	30	80.8	Δ 0.4
1 y 10 mo- 1 y 11 mo	98	82.0	52	81.8	51	82.9	38	82.5	33	82.0	0.0
2 y-	263	85.4	178	85.6	148	85.8	107	85.3	86	85.0	Δ 0.4
2 y 6 mo-	288	89.9	199	89.7	166	90.3	125	89.9	94	90.6	0.7
3 y-	255	93.5	208	94.0	164	94.0	134	93.5	83	93.8	0.3
3 y 6 mo-	246	97.3	181	97.4	155	97.4	143	97.7	114	98.1	0.8
4 y-	275	100.6	175	100.8	197	101.3	163	101.1	111	100.8	0.2
4 y 6 mo-	253	104.2	192	103.9	175	104.5	161	104.3	119	104.9	0.7
5 y-	286	107.6	197	107.5	168	107.8	174	108.2	152	107.7	0.1
5 y 6 mo-5 y 11 mo	296	110.3	191	111.1	153	111.0	150	111.4	152	110.5	0.2
Total	2,704		1,879		1,608		1396		1,128		

Comprehensive Health Check for Children in FY 2011 - 2015
Height and Weight (Aged 0-5)

Boys' weight	FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		Difference
Age	n	Mean(kg)(a)	n	Mean(kg)(b)	n	Mean(kg)(c)	n	Mean(kg)(d)	n	Mean(kg)(e)	(e)-(a)
10-11 mo	44	9.8	46	9.4	42	9.3	41	9.2	36	9.2	Δ 0.6
1 y-	77	9.9	52	9.5	47	9.4	44	9.7	40	9.5	Δ 0.4
1 y 2 mo-	68	10.4	64	10.2	35	10.1	35	10.2	24	10.0	Δ 0.4
1 y 4 mo-	93	10.9	54	10.5	44	10.3	32	10.6	33	10.6	Δ 0.3
1 y 6 mo-	80	11.2	59	11.2	30	11.0	45	10.9	39	10.6	Δ 0.6
1 y 8 mo-	73	11.6	56	11.4	32	11.4	32	11.0	26	11.5	Δ 0.1
1 y 10 mo- 1 y 11 mo	83	12.0	52	11.6	44	11.6	21	11.9	22	12.0	0.0
2 y-	281	12.7	181	12.8	177	12.5	111	12.1	87	12.2	Δ 0.5
2 y 6 mo-	269	13.8	196	13.5	170	13.6	105	13.3	92	13.4	Δ 0.4
3 y-	281	14.8	193	14.6	179	14.6	148	14.5	76	14.3	Δ 0.5
3 y 6 mo-	257	15.9	170	15.7	176	15.7	150	15.5	89	15.2	Δ 0.7
4 y-	258	16.8	203	16.6	172	16.5	162	16.6	123	16.6	Δ 0.2
4 y 6 mo-	280	17.9	193	17.8	177	17.7	176	17.5	122	17.8	Δ 0.1
5 y-	286	18.7	182	18.5	175	19.0	187	18.7	135	18.7	0.0
5 y 6 mo-5 y 11 mo	293	20.0	199	19.9	180	20.2	155	19.7	147	20.0	0.0
Total	2,723		1,900		1,680		1444		1,091		

Girls' weight	FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		Difference
Age	n	Mean(kg)(a)	n	Mean(kg)(b)	n	Mean(kg)(c)	n	Mean(kg)(d)	n	Mean(kg)(e)	(e)-(a)
10-11 mo	36	8.9	49	8.7	45	8.9	39	8.6	22	8.4	Δ 0.5
1 y-	79	9.4	60	9.1	45	9.0	33	9.0	33	9.0	Δ 0.4
1 y 2 mo-	85	9.7	41	9.4	43	9.5	34	9.0	34	9.1	Δ 0.6
1 y 4 mo-	80	10.3	54	10.1	28	10.7	26	10.0	39	10.0	Δ 0.3
1 y 6 mo-	79	10.5	53	10.4	23	10.8	34	10.0	26	10.0	Δ 0.5
1 y 8 mo-	86	11.0	49	10.5	47	10.7	35	11.1	30	10.8	Δ 0.2
1 y 10 mo- 1 y 11 mo	98	11.2	52	10.8	51	11.0	38	11.2	33	10.8	Δ 0.4
2 y-	263	12.1	178	11.9	148	11.9	107	11.8	86	11.6	Δ 0.5
2 y 6 mo-	288	13.2	199	12.9	166	13.0	125	13.0	94	13.3	0.1
3 y-	255	14.1	208	14.1	164	13.8	134	13.8	83	14.3	0.2
3 y 6 mo-	246	15.2	181	15.0	155	15.0	143	15.0	114	15.3	0.1
4 y-	275	16.4	175	16.0	197	16.2	163	16.0	111	16.0	Δ 0.4
4 y 6 mo-	253	17.2	193	17.0	175	17.1	161	17.1	119	17.2	0.0
5 y-	286	18.4	197	18.2	168	18.5	174	18.4	152	18.0	Δ 0.4
5 y 6 mo-5 y 11 mo	296	19.3	191	19.6	153	19.6	150	19.6	152	19.1	Δ 0.2
Total	2,705		1,880		1,608		1396		1,128		

Comprehensive Health Check for Children in FY 2011 - 2015

Comparison with the statistical study of school health conducted by the Ministry of Education, Culture, Science and Technology in Japan (6-15 years)

Boys' height (cm)

	Age (years)	Nationwide Survey FY 2010	Nationwide Survey FY 2014	Difference	Fukushima Prefecture FY 2010	Fukushima Prefecture FY 2014	Difference	Comprehensive Health Check for Children FY 2011	Comprehensive Health Check for Children FY 2012	Comprehensive Health Check for Children FY 2013	Comprehensive Health Check for Children FY 2014	Comprehensive Health Check for Children FY 2015	Difference	
													(FY 2015)-(FY 2011)	(FY 2015)-(FY 2015 nationwide)
		Mean (a)	Mean (b)	(b)-(a)	Mean (c)	Mean (d)	(d)-(c)	Mean (e)	Mean (f)	Mean (g)	Mean (h)	Mean (i)	(i)-(e)	(i)-(b)
Primary school	6	116.7	116.5	Δ 0.2	116.6	116.6	0.0	116.6	116.6	117.3	116.8	116.5	Δ 0.1	0.0
	7	122.5	122.4	Δ 0.1	122.3	122.2	Δ 0.1	122.8	123.0	122.8	123.4	122.7	Δ 0.1	0.2
	8	128.2	128.0	Δ 0.2	128.3	128.6	0.3	128.1	128.5	128.3	128.9	128.9	0.8	0.8
	9	133.5	133.6	0.1	133.7	134.1	0.4	133.4	133.9	134.2	133.7	134.2	0.8	0.7
	10	138.8	138.9	0.1	138.8	139.3	0.5	139.3	139.4	139.1	139.8	139.5	0.2	0.6
	11	145.0	145.1	0.1	145.6	146.3	0.7	145.5	145.8	146.0	146.0	146.1	0.6	0.9
Middle school	12	152.4	152.5	0.1	153.3	153.3	0.0	153.2	153.3	153.6	153.9	153.5	0.3	0.9
	13	159.7	159.7	0.0	160.1	160.1	0.0	160.1	160.6	160.0	161.0	161.3	1.2	1.5
	14	165.1	165.1	0.0	165.2	165.1	Δ 0.1	165.3	165.7	165.6	165.7	165.8	0.5	0.7
High school	15	168.2	168.3	0.1	168.6	168.5	Δ 0.1	168.4	168.2	167.6	168.2	167.3	Δ 1.1	Δ 1.0

Boys' weight (kg)

	Age (years)	Nationwide Survey FY 2010	Nationwide Survey FY 2014	Difference	Fukushima Prefecture FY 2010	Fukushima Prefecture FY 2014	Difference	Comprehensive Health Check for Children FY 2011	Comprehensive Health Check for Children FY 2012	Comprehensive Health Check for Children FY 2013	Comprehensive Health Check for Children FY 2014	Comprehensive Health Check for Children FY 2015	Difference	
													(FY 2015)-(FY 2011)	(FY 2015)-(FY 2015 nationwide)
		Mean (a)	Mean (b)	(b)-(a)	Mean (c)	Mean (d)	(d)-(c)	Mean (e)	Mean (f)	Mean (g)	Mean (h)	Mean (i)	(i)-(e)	(i)-(b)
Primary school	6	21.4	21.3	Δ 0.1	21.7	21.9	0.2	22.1	21.5	22.1	22.0	21.9	Δ 0.2	0.6
	7	24.0	24.0	0.0	24.3	24.5	0.2	24.8	24.8	24.8	25.2	25.2	0.4	1.3
	8	27.2	27.0	Δ 0.2	27.5	28.0	0.5	28.4	28.0	28.1	28.1	28.4	0.0	1.5
	9	30.5	30.4	Δ 0.1	31.6	32.0	0.4	32.6	32.2	32.0	31.1	32.2	Δ 0.4	1.8
	10	34.1	34.0	Δ 0.1	34.3	35.5	1.2	36.0	35.9	35.9	35.8	35.3	Δ 0.7	1.3
	11	38.4	38.4	0.0	39.7	40.3	0.6	40.5	40.7	40.6	41.0	40.4	Δ 0.1	2.2
Middle school	12	44.1	44.0	Δ 0.1	45.7	46.0	0.3	46.9	45.4	45.8	45.9	44.9	Δ 2.0	1.0
	13	49.2	48.8	Δ 0.4	50.6	50.8	0.2	51.2	51.5	50.5	50.2	51.0	Δ 0.2	2.2
	14	54.4	53.9	Δ 0.5	55.1	55.0	Δ 0.1	56.1	56.1	56.2	55.3	54.8	Δ 1.3	0.9
High school	15	59.5	58.9	Δ 0.6	61.7	60.9	Δ 0.8	60.0	58.7	59.3	59.5	58.9	Δ 1.1	Δ 0.1

Comprehensive Health Check for Children in FY 2011 - 2015

Comparison with the statistical study of school health conducted by the Ministry of Education, Culture, Science and Technology in Japan (6-15 years)

Girls' height (cm)

	Age (years)	Nationwide Survey FY 2010	Nationwide Survey FY 2014	Difference	Fukushima Prefecture FY 2010	Fukushima Prefecture FY 2014	Difference	Comprehensive Health Check for Children FY 2011	Comprehensive Health Check for Children FY 2012	Comprehensive Health Check for Children FY 2013	Comprehensive Health Check for Children FY 2014	Comprehensive Health Check for Children FY 2015	Difference	
													(FY 2015)-(FY 2011)	(FY 2015)-(FY 2015 nationwide)
		Mean (a)	Mean (b)	(b)-(a)	Mean (c)	Mean (d)	(d)-(c)	Mean (e)	Mean (f)	Mean (g)	Mean (h)	Mean (i)	(i)-(e)	(i)-(b)
Primary school	6	115.8	115.5	△ 0.3	115.7	115.5	△ 0.2	115.6	115.6	115.8	115.2	115.9	0.3	0.4
	7	121.7	121.5	△ 0.2	122.0	121.7	△ 0.3	121.5	121.6	121.8	122.0	120.9	△ 0.6	△ 0.6
	8	127.4	127.4	0.0	128.1	127.4	△ 0.7	127.5	127.9	127.2	127.6	127.9	0.4	0.6
	9	133.5	133.4	△ 0.1	133.5	133.7	0.2	133.6	133.9	133.8	133.7	133.6	0.0	0.2
	10	140.2	140.1	△ 0.1	139.7	140.0	0.3	140.4	140.0	140.8	140.8	140.5	0.1	0.4
	11	146.8	146.8	0.0	146.9	147.6	0.7	146.9	147.4	147.3	147.6	147.6	0.7	0.9
Middle school	12	151.9	151.8	△ 0.1	151.6	152.0	0.4	152.2	152.1	151.7	152.0	152.1	△ 0.1	0.3
	13	155.0	154.8	△ 0.2	155.1	154.9	△ 0.2	154.6	154.9	155.2	154.1	154.7	0.1	△ 0.2
	14	156.5	156.4	△ 0.1	156.2	156.0	△ 0.2	156.4	156.4	156.1	156.4	155.8	△ 0.6	△ 0.7
High school	15	157.1	157.0	△ 0.1	156.7	156.7	0.0	157.0	157.3	157.1	157.1	157.2	0.2	0.1

Girls' weight (kg)

	Age (years)	Nationwide Survey FY 2010	Nationwide Survey FY 2014	Difference	Fukushima Prefecture FY 2010	Fukushima Prefecture FY 2014	Difference	Comprehensive Health Check for Children FY 2011	Comprehensive Health Check for Children FY 2012	Comprehensive Health Check for Children FY 2013	Comprehensive Health Check for Children FY 2014	Comprehensive Health Check for Children FY 2015	Difference	
													(FY 2015)-(FY 2011)	(FY 2015)-(FY 2015 nationwide)
		Mean (a)	Mean (b)	(b)-(a)	Mean (c)	Mean (d)	(d)-(c)	Mean (e)	Mean (f)	Mean (g)	Mean (h)	Mean (i)	(i)-(e)	(i)-(b)
Primary school	6	21.0	20.8	△ 0.2	21.0	21.3	0.3	21.7	21.1	21.1	21.1	21.4	△ 0.3	0.6
	7	23.5	23.4	△ 0.1	24.1	24.3	0.2	24.1	24.0	24.0	24.0	23.6	△ 0.5	0.2
	8	26.5	26.4	△ 0.1	27.2	27.0	△ 0.2	27.4	27.2	27.1	26.9	27.4	0.0	1.0
	9	30.0	29.8	△ 0.2	30.2	31.2	1.0	31.0	31.3	30.8	31.1	30.7	△ 0.3	1.0
	10	34.1	34.0	△ 0.1	34.0	34.1	0.1	35.7	34.8	35.6	35.0	35.2	△ 0.5	1.3
	11	39.0	39.0	0.0	40.0	40.6	0.6	40.5	40.7	40.6	40.2	40.1	△ 0.4	1.3
Middle school	12	43.8	43.6	△ 0.2	45.1	45.2	0.1	45.8	44.0	43.8	44.4	44.2	△ 1.6	0.6
	13	47.3	47.2	△ 0.1	48.7	48.9	0.2	48.5	47.4	47.8	46.7	48.3	△ 0.2	1.0
	14	50.0	50.0	0.0	51.2	50.6	△ 0.6	51.8	50.7	49.7	49.7	49.7	△ 2.1	△ 0.2
High school	15	51.6	51.4	△ 0.2	53.1	51.6	△ 1.5	53.5	51.7	50.9	52.1	52.0	△ 1.5	0.5

Drawn from the statistical study of school health for FY 2010, 2014 conducted by the Ministry of Education, Culture, Science and Technology in Japan.

【Results】

◆Height

Comparing boys' height in FY 2015 with FY 2011, no specific trend was evident for children aged 10 months to 5 years. However, the heights decreased among girls aged 10 months to 1 year 9 months and 2 years to 2 years 5 months compared to FY 2011, and there was no difference for girls aged 1 year 10-11 months. Also, comparing the height of girls aged 2 years 6 months to 5 years in FY 2015 with FY 2011, children were taller.

Comparing the height of primary and middle school boys in FY 2015 with FY 2011, those 8 years and older were taller. In comparison with national averages in FY 2015, children of all ages also were taller.

Comparing the height of boys aged 15 years in FY 2015 with FY 2011 and national averages in FY 2015, those aged 15 years were shorter.

Comparing the height of primary school girls in FY 2015 with FY 2011 and national averages in FY 2015, children were taller except those aged 7 years who were shorter.

Comparing the height of middle school girls in FY 2015 with FY 2011, children aged 12 and 14 years were shorter, and children aged 13 years were taller. In comparison with national averages in FY 2015, Fukushima children aged 13-14 years were shorter, 12 years were taller.

Comparing the height of girls aged 15 years in FY 2015 with FY 2011 and national averages in FY 2015, those aged 15 years were taller.

◆Weight

Comparing children's weight in FY 2015 with FY 2011, most boys aged 10 months to 5 years weigh less. However, there was no difference for boys aged 1 year 10-11 months and 5 years to under 6 years. Comparing the weight of girls aged 10 months to 5 years in FY 2015 with FY 2011, most of those aged 10 months to 2 years 5 months, 4 years to 4 years 5 months and 5 years to under 6 years weigh less. Those aged 2 years 6 months to under 4 years weigh more and there was no difference for girls aged 4 years 6-11 months.

Comparing the weight of primary and middle school boys in FY 2015 with FY 2011, children of all ages except those aged 8 years weigh less. In comparison with national averages in FY 2015, children of all ages weigh more.

Comparing the weight of boys aged 15 years in FY 2015 with FY 2011 and national averages in FY 2015, those aged 15 years weigh less.

Comparing the weight of primary school girls in FY 2015 with FY 2011, children of all ages except those aged 8 years weigh less. There was no difference for 8-year-old girls. In comparison with national averages, children of all ages weigh more.

Comparing the weight of middle school girls in FY 2015 with FY 2011, children of all ages weigh less. In comparison with national averages, those in Fukushima aged 12-13 years weigh more and those aged 14 years weigh less.

Comparing the weight of girls aged 15 years in FY 2015 with FY 2011, those aged 15 years weigh less, but weigh more compared to national averages.

【Summary】

Comparing the FY 2015 survey with FY 2011, most children of target municipalities including the nationally designated evacuation zones tend to be taller and weigh less. (No specific trend was evident for boys under 6 years old.) Compared it with the national median, most school-age children were taller and weigh more.

FY 2011-2015　Comprehensive Health Check
Health Statistics Reports

Reported on 20 February 2017

【Group】

Residents of nationally designated evacuation zones as of 2011 and those who were recommended to have follow-up based on results of the Basic Survey.

【Evacuation area, etc.】

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)

【Examination items】

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

- Medical examination results in FY 2015 are divided into general age categories and, due to differences in medical checkup items, also divided into 5 age groups: 0-6 years old, 7-15 years old, 16-39 years old, 40-64 years old, and 65 years old and above. This is further paired with 2 categories resulting in 10 categories, and the results were compiled for each medical checkup item.
- Individuals who received examination at least twice in the same year have been included in the total results.
- Symbols in the tables are represented in the same way as in Vital Statistics of the Ministry of Health, Labour and Welfare:

When there are no figures (-)

When there are no items (no medical checkup items due to age category) (･)

When it is not appropriate to express the total (…)

When the percentage is small (less than 0.05)　(0.0%)

- A statistical analysis has not been conducted.
- Although there are no significant changes in the survey population of FY 2012-2015 from FY 2011, the participants, the time they received their health exams, and the medical organizations differ. Due to such modifying factors, this is not a strict comparison.

Note: Exam schedule for participants aged 15 years old and under

FY 2011: Jan-Mar 2012

FY 2012: Jul-Dec 2012

FY 2013: Jul-Dec 2013

FY 2014: Jul-Dec 2014

FY 2015: Jul-Dec 2015

Height

FY 2015

Height (cm) (overall)			
Age	Examinees	Average age	Average height
0-6	2,655	3.8	96.9
7-15	4,903	10.9	142.2
16-39	5,354	29.2	162.7
40-64	14,748	55.0	160.2
65-	19,551	73.3	154.9

Height (cm) (male)					
Age	Examinees	Average age	Average height	150 cm and below	170 cm and above
0-6	1,309	3.8	96.9	…	…
7-15	2,558	11.0	143.7	…	…
16-39	1,897	28.0	171.0	0.5%	57.5%
40-64	5,483	55.5	168.1	0.2%	37.8%
65-	8,868	73.3	162.0	2.8%	10.0%

Height (cm) (female)					
Age	Examinees	Average age	Average height	140 cm and below	160 cm and above
0-6	1,346	3.9	96.8	…	…
7-15	2,345	10.9	140.7	…	…
16-39	3,457	29.8	158.2	0.2%	37.7%
40-64	9,265	54.8	155.5	0.4%	21.4%
65-	10,683	73.2	149.1	6.6%	2.7%

Weight

FY 2015

Weight (kg) (overall)			
Age	Examinees	Average age	Average weight
0-6	2,655	3.8	15.4
7-15	4,903	10.9	38.0
16-39	5,354	29.2	59.8
40-64	14,748	55.0	61.1
65-	19,559	73.3	57.3

Weight (kg) (male)					
Age	Examinees	Average age	Average weight	50 kg and below	70 kg and above
0-6	1,309	3.8	15.5	…	…
7-15	2,558	11.0	39.0	…	…
16-39	1,897	28.0	68.7	4.7%	38.9%
40-64	5,483	55.5	69.3	1.9%	43.3%
65-	8,871	73.3	63.1	7.4%	22.1%

Weight (kg) (female)					
Age	Examinees	Average age	Average weight	45 kg and below	65 kg and above
0-6	1,346	3.9	15.3	…	…
7-15	2,345	10.9	36.9	…	…
16-39	3,457	29.8	55.0	13.8%	14.3%
40-64	9,265	54.8	56.3	9.9%	17.1%
65-	10,688	73.2	52.5	19.0%	8.1%

BMI

FY 2015

BMI (weight/height^2) (overall)					
Age	Examinees	Average age	Average BMI	Less than 18	25 and above
0-6	.	.	.	.	.
7-15	.	.	.	.	.
16-39	5,354	29.2	22.5	9.1%	21.7%
40-64	14,748	55.0	23.7	3.8%	32.9%
65-	19,551	73.3	23.8	3.0%	34.0%

BMI (weight/height^2) (male)					
Age	Examinees	Average age	Average BMI	Less than 18	25 and above
0-6	.	.	.	.	.
7-15	.	.	.	.	.
16-39	1,897	28.0	23.5	5.8%	29.3%
40-64	5,483	55.5	24.5	1.4%	40.6%
65-	8,868	73.3	24.0	2.0%	36.3%

BMI (weight/height^2) (female)					
Age	Examinees	Average age	Average BMI	Less than 18	25 and above
0-6	.	.	.	.	.
7-15	.	.	.	.	.
16-39	3,457	29.8	22.0	11.0%	17.6%
40-64	9,265	54.8	23.3	5.1%	28.4%
65-	10,683	73.2	23.6	3.7%	32.2%

Abdominal circumference (AC)

FY 2015

AC (cm) (overall)			
Age	Examinees	Average age	Average AC
0-6	・	・	・
7-15	・	・	・
16-39	1,391	29.0	76.6
40-64	14,742	55.0	84.0
65-	12,825	69.5	85.1

AC (cm) (male)				
Age	Examinees	Average age	Average AC	85 cm and above
0-6	・	・	・	・
7-15	・	・	・	・
16-39	501	28.6	80.4	31.3%
40-64	5,480	55.5	86.7	55.8%
65-	5,820	69.5	86.4	57.7%

AC (cm) (female)				
Age	Examinees	Average age	Average AC	90 cm and above
0-6	・	・	・	・
7-15	・	・	・	・
16-39	890	29.2	74.4	7.5%
40-64	9,262	54.8	82.4	21.4%
65-	7,005	69.6	84.1	25.9%

Systolic blood pressure

FY 2015

Systolic blood pressure (mmHg) (overall)				
Age	Examinees	Average age	Average systolic blood pressure	140 mmHg and above
0-6	・	・	・	・
7-15	4,898	10.9	104.9	0.2%
16-39	5,354	29.2	110.9	2.1%
40-64	14,748	55.0	123.6	14.2%
65-	19,559	73.3	130.5	24.8%

Systolic blood pressure (mmHg) (male)				
Age	Examinees	Average age	Average systolic blood pressure	140 mmHg and above
0-6	・	・	・	・
7-15	2,554	11.0	106.3	0.3%
16-39	1,897	28.0	116.3	3.5%
40-64	5,484	55.5	126.6	17.4%
65-	8,871	73.3	131.1	26.5%

Systolic blood pressure (mmHg) (female)				
Age	Examinees	Average age	Average systolic blood pressure	140 mmHg and above
0-6	・	・	・	・
7-15	2,344	10.9	103.4	0.1%
16-39	3,457	29.8	107.9	1.4%
40-64	9,264	54.8	121.8	12.3%
65-	10,688	73.2	129.9	23.4%

Diastolic blood pressure

FY 2015

Diastolic blood pressure (mmHg) (overall)				
Age	Examinees	Average age	Average diastolic blood pressure	90 mmHg and above
0-6	・	・	・	・
7-15	4,898	10.9	60.9	0.3%
16-39	5,354	29.2	67.1	2.7%
40-64	14,748	55.0	75.9	10.9%
65-	19,559	73.3	74.9	7.3%

Diastolic blood pressure (mmHg) (male)				
Age	Examinees	Average age	Average diastolic blood pressure	90 mmHg and above
0-6	・	・	・	・
7-15	2,554	11.0	61.2	0.4%
16-39	1,897	28.0	69.8	4.1%
40-64	5,484	55.5	78.9	15.9%
65-	8,871	73.3	75.8	8.7%

Diastolic blood pressure (mmHg) (female)				
Age	Examinees	Average age	Average diastolic blood pressure	90 mmHg and above
0-6	・	・	・	・
7-15	2,344	10.9	60.6	0.3%
16-39	3,457	29.8	65.6	2.0%
40-64	9,264	54.8	74.1	8.0%
65-	10,688	73.2	74.1	6.2%

Urinary sugar

FY 2015

Urinary sugar (overall)			
Age	Examinees	Average age	(1+) and above
0-6	·	·	·
7-15	·	·	·
16-39	5,316	29.2	0.5%
40-64	14,712	55.1	2.2%
65-	19,495	73.2	2.2%

Urinary sugar (male)			
Age	Examinees	Average age	(1+) and above
0-6	·	·	·
7-15	·	·	·
16-39	1,895	28.0	0.6%
40-64	5,476	55.5	3.7%
65-	8,847	73.3	3.6%

Urinary sugar (female)			
Age	Examinees	Average age	(1+) and above
0-6	·	·	·
7-15	·	·	·
16-39	3,421	29.8	0.4%
40-64	9,236	54.8	1.3%
65-	10,648	73.2	1.1%

Urine protein

FY 2015

Urine protein (overall)			
Age	Examinees	Average age	(1+) and above
0-6	·	·	·
7-15	·	·	·
16-39	5,316	29.2	2.6%
40-64	14,712	55.1	1.7%
65-	19,495	73.2	2.8%

Urine protein (male)			
Age	Examinees	Average age	(1+) and above
0-6	·	·	·
7-15	·	·	·
16-39	1,895	28.0	3.3%
40-64	5,476	55.5	2.7%
65-	8,847	73.3	4.2%

Urine protein (female)			
Age	Examinees	Average age	(1+) and above
0-6	·	·	·
7-15	·	·	·
16-39	3,421	29.8	2.1%
40-64	9,236	54.8	1.1%
65-	10,648	73.2	1.6%

Urine occult blood

FY 2015

Urine occult blood (overall)				
Age	Examinees	Average age	(1+) and above	(1+) and above and during time periods other than menstruation.
0-6	·	·	·	·
7-15	·	·	·	·
16-39	5,315	29.2	7.6%	4.3%
40-64	14,711	55.1	6.0%	4.9%
65-	19,495	73.2	5.7%	5.7%

Urine occult blood (male)			
Age	Examinees	Average age	(1+) and above
0-6	·	·	·
7-15	·	·	·
16-39	1,895	28.0	0.9%
40-64	5,476	55.5	2.6%
65-	8,847	73.3	3.9%

Urine occult blood (female)				
Age	Examinees	Average age	(1+) and above	(1+) and above and during time periods other than menstruation.
0-6	·	·	·	·
7-15	·	·	·	·
16-39	3,420	29.8	11.3%	6.2%
40-64	9,235	54.8	8.1%	6.3%
65-	10,648	73.2	7.2%	7.2%

Serum creatinine

FY 2015

Serum creatinine (mg/dL) (overall)			
Age	Examinees	Average age	Average serum creatinine
0-6	.	.	.
7-15	4,788	11.0	0.48
16-39	5,352	29.2	0.69
40-64	14,747	55.0	0.74
65-	19,552	73.3	0.80

Serum creatinine (mg/dL) (male)					
Age	Examinees	Average age	Average serum creatinine	1.15 mg/dL and above	1.35 mg/dL and above
0-6	.	.	.	.	.
7-15	2,501	11.0	0.50	-	-
16-39	1,895	28.0	0.83	0.4%	0.1%
40-64	5,482	55.5	0.87	3.2%	0.8%
65-	8,869	73.3	0.92	9.0%	3.2%

Serum creatinine (mg/dL) (female)					
Age	Examinees	Average age	Average serum creatinine	0.95 mg/dL and above	1.15 mg/dL and above
0-6	.	.	.	.	.
7-15	2,287	10.9	0.45	-	-
16-39	3,457	29.8	0.62	0.1%	-
40-64	9,265	54.8	0.66	1.0%	0.4%
65-	10,683	73.2	0.70	5.1%	1.6%

eGFR

FY 2015

eGFR (mL/min/1.73 m^2) (overall)					
Age	Examinees	Average age	Average eGFR	Less than 50 ml/min. /1.73 m^2	Less than 60 ml/min. /1.73 m^2
0-6	·	·	·	·	·
7-15	·	·	·	·	·
16-39	5,352	29.2	94.4	0.0%	0.3%
40-64	14,747	55.0	75.0	1.8%	10.9%
65-	19,552	73.3	65.2	11.3%	34.4%

eGFR (mL/min/1.73 m^2) (male)					
Age	Examinees	Average age	Average eGFR	Less than 50 ml/min. /1.73 m^2	Less than 60 ml/min. /1.73 m^2
0-6	·	·	·	·	·
7-15	·	·	·	·	·
16-39	1,895	28.0	93.7	0.1%	0.3%
40-64	5,482	55.5	75.3	2.1%	10.8%
65-	8,869	73.3	65.9	10.8%	32.3%

eGFR (mL/min/1.73 m^2) (female)					
Age	Examinees	Average age	Average eGFR	Less than 50 ml/min. /1.73 m^2	Less than 60 ml/min. /1.73 m^2
0-6	·	·	·	·	·
7-15	·	·	·	·	·
16-39	3,457	29.8	94.8	-	0.4%
40-64	9,265	54.8	74.8	1.6%	10.9%
65-	10,683	73.2	64.6	11.6%	36.2%

Fasting plasma glucose

FY 2015

Fasting plasma glucose (mg/dL) (overall)						
Age	Examinees	Average age	Average fasting plasma glucose	110 mg/dL and above	130 mg/dL and above	160 mg/dL and above
0-6	・	・	・	・	・	・
7-15	3,366	11.1	87.0	0.4%	0.0%	-
16-39	4,689	29.1	88.3	1.7%	0.6%	0.3%
40-64	13,257	55.0	98.9	14.5%	4.9%	1.6%
65-	16,852	73.0	104.0	24.6%	8.0%	1.9%

Fasting plasma glucose (mg/dL) (male)						
Age	Examinees	Average age	Average fasting plasma glucose	110 mg/dL and above	130 mg/dL and above	160 mg/dL and above
0-6	・	・	・	・	・	・
7-15	1,777	11.1	87.9	0.6%	0.1%	-
16-39	1,635	27.8	90.1	2.6%	0.8%	0.3%
40-64	4,873	55.4	103.4	21.8%	8.2%	2.5%
65-	7,610	73.0	107.0	30.8%	10.5%	2.6%

Fasting plasma glucose (mg/dL) (female)						
Age	Examinees	Average age	Average fasting plasma glucose	110 mg/dL and above	130 mg/dL and above	160 mg/dL and above
0-6	・	・	・	・	・	・
7-15	1,589	11.1	86.0	0.1%	-	-
16-39	3,054	29.7	87.4	1.3%	0.5%	0.3%
40-64	8,384	54.7	96.2	10.2%	3.1%	1.0%
65-	9,242	73.0	101.5	19.5%	5.9%	1.3%

HbA1c (NGSP)

FY 2015

HbA1c (%)（NGSP）(overall)						
Age	Examinees	Average age	Average HbA1c	6.0% and above	7.0% and above	8.0% and above
0-6	・	・	・	・	・	・
7-15	4,786	11.0	5.3	0.6%	0.1%	0.0%
16-39	5,353	29.2	5.3	2.5%	0.6%	0.2%
40-64	14,748	55.0	5.6	14.9%	3.3%	1.3%
65-	19,552	73.3	5.8	24.7%	4.5%	1.2%

HbA1c (%)（NGSP）(male)						
Age	Examinees	Average age	Average HbA1c	6.0% and above	7.0% and above	8.0% and above
0-6	・	・	・	・	・	・
7-15	2,499	11.0	5.3	0.6%	0.1%	0.0%
16-39	1,896	28.0	5.3	3.3%	0.6%	0.2%
40-64	5,482	55.5	5.7	17.9%	4.9%	1.9%
65-	8,869	73.3	5.8	27.5%	5.7%	1.4%

HbA1c (%)（NGSP）(female)						
Age	Examinees	Average age	Average HbA1c	6.0% and above	7.0% and above	8.0% and above
0-6	・	・	・	・	・	・
7-15	2,287	10.9	5.3	0.5%	0.1%	-
16-39	3,457	29.8	5.3	2.1%	0.6%	0.3%
40-64	9,266	54.8	5.6	13.2%	2.4%	1.0%
65-	10,683	73.2	5.7	22.4%	3.5%	1.0%

HDL-C

FY 2015

HDL-C (mg/dL) (overall)				
Age	Examinees	Average age	Average HDL-C	Less than 40 mg/dL
0-6	.	.	.	.
7-15	4,788	11.0	60.7	2.7%
16-39	5,353	29.2	62.5	4.3%
40-64	14,748	55.0	62.3	5.0%
65-	19,552	73.3	59.1	7.0%

HDL-C (mg/dL) (male)				
Age	Examinees	Average age	Average HDL-C	Less than 40 mg/dL
0-6	.	.	.	.
7-15	2,501	11.0	61.0	2.9%
16-39	1,896	28.0	55.8	8.3%
40-64	5,482	55.5	56.3	9.8%
65-	8,869	73.3	55.7	11.0%

HDL-C (mg/dL) (female)				
Age	Examinees	Average age	Average HDL-C	Less than 40 mg/dL
0-6	.	.	.	.
7-15	2,287	10.9	60.3	2.4%
16-39	3,457	29.8	66.2	2.1%
40-64	9,266	54.8	65.8	2.2%
65-	10,683	73.2	61.8	3.7%

Triglyceride (TG)

FY 2015

Triglyceride（TG）(mg/dL) (overall)					
Age	Examinees	Average age	Average triglyceride	150 mg/dL and above	300 mg/dL and above
0-6	・	・	・	・	・
7-15	4,788	11.0	78.9	7.6%	0.6%
16-39	5,353	29.2	87.0	11.0%	1.5%
40-64	14,748	55.0	115.8	20.9%	3.1%
65-	19,552	73.3	112.5	18.3%	1.7%

Triglyceride（TG）(mg/dL) (male)					
Age	Examinees	Average age	Average triglyceride	150 mg/dL and above	300 mg/dL and above
0-6	・	・	・	・	・
7-15	2,501	11.0	77.0	7.6%	0.6%
16-39	1,896	28.0	108.8	18.4%	3.1%
40-64	5,482	55.5	139.9	31.0%	6.2%
65-	8,869	73.3	117.1	20.7%	2.4%

Triglyceride（TG）(mg/dL) (female)					
Age	Examinees	Average age	Average triglyceride	150 mg/dL and above	300 mg/dL and above
0-6	・	・	・	・	・
7-15	2,287	10.9	81.0	7.7%	0.7%
16-39	3,457	29.8	75.0	7.0%	0.6%
40-64	9,266	54.8	101.5	15.0%	1.3%
65-	10,683	73.2	108.7	16.3%	1.2%

LDL-C

FY 2015

LDL-C (mg/dL) (overall)					
Age	Examinees	Average age	Average LDL-C	120 mg/dL and above	140 mg/dL and above
0-6	.	.	.	.	.
7-15	4,787	11.0	92.4	11.7%	2.8%
16-39	5,353	29.2	109.7	33.0%	15.8%
40-64	14,748	55.0	127.4	57.8%	32.9%
65-	19,552	73.3	119.4	47.6%	24.1%

LDL-C (mg/dL) (male)					
Age	Examinees	Average age	Average LDL-C	120 mg/dL and above	140 mg/dL and above
0-6	.	.	.	.	.
7-15	2,500	11.0	90.9	11.3%	2.8%
16-39	1,896	28.0	114.2	39.6%	21.3%
40-64	5,482	55.5	125.5	55.5%	31.4%
65-	8,869	73.3	115.2	42.8%	20.1%

LDL-C (mg/dL) (female)					
Age	Examinees	Average age	Average LDL-C	120 mg/dL and above	140 mg/dL and above
0-6	.	.	.	.	.
7-15	2,287	10.9	94.1	12.0%	2.8%
16-39	3,457	29.8	107.3	29.4%	12.9%
40-64	9,266	54.8	128.6	59.1%	33.9%
65-	10,683	73.2	122.9	51.6%	27.5%

AST

FY 2015

AST (U/L) (overall)					
Age	Examinees	Average age	Average AST	31 U/L and above	51 U/L and above
0-6	.	.	.	.	.
7-15	4,788	11.0	24.1	11.2%	0.8%
16-39	5,353	29.2	20.7	8.8%	1.9%
40-64	14,748	55.0	24.1	13.4%	2.9%
65-	19,552	73.3	25.6	16.8%	2.5%

AST (U/L) (male)					
Age	Examinees	Average age	Average AST	31 U/L and above	51 U/L and above
0-6	.	.	.	.	.
7-15	2,501	11.0	25.3	15.0%	1.0%
16-39	1,896	28.0	24.4	17.3%	3.3%
40-64	5,482	55.5	26.9	20.6%	4.5%
65-	8,869	73.3	26.8	21.5%	3.2%

AST (U/L) (female)					
Age	Examinees	Average age	Average AST	31 U/L and above	51 U/L and above
0-6	.	.	.	.	.
7-15	2,287	10.9	22.7	7.2%	0.7%
16-39	3,457	29.8	18.7	4.2%	1.1%
40-64	9,266	54.8	22.5	9.1%	1.9%
65-	10,683	73.2	24.6	12.9%	1.9%

ALT

FY 2015

ALT (U/L) (overall)					
Age	Examinees	Average age	Average ALT	31 U/L and above	51 U/L and above
0-6	.	.	.	.	.
7-15	4,788	11.0	16.1	5.0%	1.8%
16-39	5,353	29.2	21.7	16.0%	7.0%
40-64	14,748	55.0	24.1	19.7%	6.1%
65-	19,552	73.3	21.2	13.1%	3.2%

ALT (U/L) (male)					
Age	Examinees	Average age	Average ALT	31 U/L and above	51 U/L and above
0-6	.	.	.	.	.
7-15	2,501	11.0	18.0	7.2%	2.5%
16-39	1,896	28.0	31.8	32.8%	14.8%
40-64	5,482	55.5	30.1	32.1%	10.8%
65-	8,869	73.3	23.3	17.5%	4.5%

ALT (U/L) (female)					
Age	Examinees	Average age	Average ALT	31 U/L and above	51 U/L and above
0-6	.	.	.	.	.
7-15	2,287	10.9	14.0	2.6%	0.9%
16-39	3,457	29.8	16.2	6.8%	2.7%
40-64	9,266	54.8	20.6	12.4%	3.4%
65-	10,683	73.2	19.4	9.5%	2.2%

γ-GT

FY 2015

γ-GT (U/L) (overall)					
Age	Examinees	Average age	Average γ-GT	51 U/L and above	101 U/L and above
0-6	・	・	・	・	・
7-15	4,787	11.0	14.4	0.4%	0.0%
16-39	5,353	29.2	25.5	8.7%	2.2%
40-64	14,748	55.0	39.5	19.3%	6.1%
65-	19,552	73.3	33.5	13.9%	3.9%

γ-GT (U/L) (male)					
Age	Examinees	Average age	Average γ-GT	51 U/L and above	101 U/L and above
0-6	・	・	・	・	・
7-15	2,500	11.0	15.7	0.6%	0.0%
16-39	1,896	28.0	38.4	18.6%	5.4%
40-64	5,482	55.5	59.9	34.6%	12.0%
65-	8,869	73.3	44.6	23.0%	7.0%

γ-GT (U/L) (female)					
Age	Examinees	Average age	Average γ-GT	51 U/L and above	101 U/L and above
0-6	・	・	・	・	・
7-15	2,287	10.9	13.1	0.2%	0.0%
16-39	3,457	29.8	18.4	3.2%	0.4%
40-64	9,266	54.8	27.4	10.2%	2.6%
65-	10,683	73.2	24.3	6.4%	1.4%

Uric acid

FY 2015

Uric acid (mg/dL) (overall)					
Age	Examinees	Average age	Average uric acid	7.1 mg/dL and above	8.0 mg/dL and above
0-6	・	・	・	・	・
7-15	4,788	11.0	4.6	3.3%	1.0%
16-39	5,352	29.2	5.0	8.2%	3.0%
40-64	14,747	55.0	5.1	8.9%	2.7%
65-	19,552	73.3	5.2	9.1%	2.7%

Uric acid (mg/dL) (male)					
Age	Examinees	Average age	Average uric acid	7.1 mg/dL and above	8.0 mg/dL and above
0-6	・	・	・	・	・
7-15	2,501	11.0	4.9	6.0%	1.8%
16-39	1,895	28.0	6.1	20.9%	7.9%
40-64	5,482	55.5	6.1	20.9%	6.7%
65-	8,869	73.3	5.8	16.4%	4.9%

Uric acid (mg/dL) (female)					
Age	Examinees	Average age	Average uric acid	7.1 mg/dL and above	8.0 mg/dL and above
0-6	・	・	・	・	・
7-15	2,287	10.9	4.3	0.3%	0.0%
16-39	3,457	29.8	4.3	1.3%	0.3%
40-64	9,265	54.8	4.5	1.8%	0.4%
65-	10,683	73.2	4.7	3.1%	0.8%

RBC

FY 2015

RBC (10^6/μL) (overall)			
Age	Examinees	Average age	Average RBC
0-6	2,634	3.8	4.71
7-15	4,891	10.9	4.82
16-39	5,351	29.2	4.75
40-64	14,748	55.0	4.64
65-	19,551	73.3	4.49

RBC (10^6/μL) (male)						
Age	Examinees	Average age	Average RBC	3.69x10^6/μL and below	3.99x10^6/μL and below	5.80x10^6/μL and above
0-6	1,299	3.8	4.74	-	0.4%	0.3%
7-15	2,552	11.0	4.92	-	0.2%	1.1%
16-39	1,896	28.0	5.19	0.1%	0.2%	4.4%
40-64	5,482	55.5	4.92	0.6%	1.9%	2.5%
65-	8,868	73.3	4.66	2.8%	8.0%	0.9%

RBC (10^6/μL) (female)						
Age	Examinees	Average age	Average RBC	3.39x10^6/μL and below	3.69x10^6/μL and below	5.50x10^6/μL and above
0-6	1,335	3.9	4.69	-	0.1%	1.3%
7-15	2,339	10.9	4.71	0.0%	0.1%	0.6%
16-39	3,455	29.8	4.51	0.2%	1.1%	0.5%
40-64	9,266	54.8	4.48	0.2%	1.5%	0.4%
65-	10,683	73.2	4.34	1.3%	5.5%	0.2%

Hemoglobin

FY 2015

Hemoglobin (g/dL) (overall)			
Age	Examinees	Average age	Average hemoglobin
0-6	2,634	3.8	12.5
7-15	4,891	10.9	13.5
16-39	5,351	29.2	14.0
40-64	14,748	55.0	14.0
65-	19,551	73.3	13.9

Hemoglobin (g/dL) (male)						
Age	Examinees	Average age	Average hemoglobin	12.0 g/dL and below	13.0 g/dL and below	18.0 g/dL and above
0-6	1,299	3.8	12.5	28.6%	75.2%	-
7-15	2,552	11.0	13.8	2.8%	25.0%	0.1%
16-39	1,896	28.0	15.6	0.5%	1.2%	1.1%
40-64	5,482	55.5	15.3	0.7%	3.1%	1.2%
65-	8,868	73.3	14.6	4.2%	12.0%	0.9%

Hemoglobin (g/dL) (female)						
Age	Examinees	Average age	Average hemoglobin	11.0 g/dL and below	12.0 g/dL and below	16.0 g/dL and above
0-6	1,335	3.9	12.6	3.4%	24.3%	-
7-15	2,339	10.9	13.3	1.2%	6.5%	0.1%
16-39	3,455	29.8	13.1	5.9%	15.8%	0.3%
40-64	9,266	54.8	13.3	4.6%	11.4%	0.6%
65-	10,683	73.2	13.2	3.1%	13.5%	0.7%

Hematocrit

FY 2015

Hematocrit (%) (overall)			
Age	Examinees	Average age	Average hematocrit
0-6	2,634	3.8	37.3
7-15	4,891	10.9	40.4
16-39	5,351	29.2	42.3
40-64	14,748	55.0	42.4
65-	19,551	73.3	41.9

Hematocrit (%) (male)						
Age	Examinees	Average age	Average hematocrit	35.9% and below	37.9% and below	55.0% and above
0-6	1,299	3.8	37.2	31.0%	63.7%	-
7-15	2,552	11.0	40.9	3.5%	16.8%	-
16-39	1,896	28.0	46.5	0.2%	0.7%	0.1%
40-64	5,482	55.5	45.5	0.5%	1.4%	0.4%
65-	8,868	73.3	43.9	3.2%	6.8%	0.3%

Hematocrit (%) (female)						
Age	Examinees	Average age	Average hematocrit	28.9% and below	32.9% and below	48.0% and above
0-6	1,335	3.9	37.5	0.1%	2.5%	-
7-15	2,339	10.9	39.9	0.1%	0.8%	0.0%
16-39	3,455	29.8	40.0	0.3%	2.6%	0.3%
40-64	9,266	54.8	40.6	0.4%	2.1%	0.7%
65-	10,683	73.2	40.3	0.3%	1.9%	0.9%

Platelet count

FY 2015

Platelet count (10^3/μL) (overall)							
Age	Examinees	Average age	Average platelet count	89x10^3/μL and below	129x10^3/μL and below	370x10^3/μL and above	450x10^3/μL and above
0-6	2,631	3.8	335.6	0.1%	0.1%	28.2%	8.2%
7-15	4,891	10.9	283.2	0.0%	0.1%	7.5%	0.8%
16-39	5,351	29.2	264.5	0.1%	0.3%	5.0%	0.7%
40-64	14,745	55.0	255.6	0.2%	0.6%	4.1%	0.6%
65-	19,545	73.3	230.8	0.3%	1.8%	1.6%	0.3%

Platelet count (10^3/μL) (male)							
Age	Examinees	Average age	Average platelet count	89x10^3/μL and below	129x10^3/μL and below	370x10^3/μL and above	450x10^3/μL and above
0-6	1,296	3.8	334.5	-	-	27.9%	8.5%
7-15	2,552	11.0	283.6	0.0%	0.1%	8.2%	0.9%
16-39	1,896	28.0	255.0	-	0.5%	2.6%	0.3%
40-64	5,481	55.5	248.8	0.2%	0.6%	2.9%	0.4%
65-	8,863	73.3	223.2	0.4%	2.3%	1.4%	0.3%

Platelet count (10^3/μL) (female)							
Age	Examinees	Average age	Average platelet count	89x10^3/μL and below	129x10^3/μL and below	370x10^3/μL and above	450x10^3/μL and above
0-6	1,335	3.9	336.6	0.1%	0.2%	28.6%	7.9%
7-15	2,339	10.9	282.8	0.0%	0.0%	6.8%	0.6%
16-39	3,455	29.8	269.8	0.1%	0.2%	6.3%	0.9%
40-64	9,264	54.8	259.6	0.2%	0.5%	4.7%	0.8%
65-	10,682	73.2	237.2	0.2%	1.3%	1.7%	0.4%

WBC

FY 2015

WBC (10³/μL) (overall)							
Age	Examinees	Average age	Average WBC	2.9x10³/μL and below	3.9x10³/μL and below	9.6x10³/μL and above	11.1x10³/μL and above
0-6	2,634	3.8	8.6	-	0.2%	28.0%	13.9%
7-15	4,891	10.9	6.5	0.1%	2.8%	5.3%	1.7%
16-39	5,351	29.2	6.0	0.8%	7.5%	3.8%	1.0%
40-64	14,748	55.0	5.8	0.8%	9.0%	2.9%	0.9%
65-	19,551	73.3	5.8	0.6%	7.5%	2.1%	0.7%

WBC (10³/μL) (male)							
Age	Examinees	Average age	Average WBC	2.9x10³/μL and below	3.9x10³/μL and below	9.6x10³/μL and above	11.1x10³/μL and above
0-6	1,299	3.8	8.5	-	0.2%	27.9%	13.9%
7-15	2,552	11.0	6.5	0.1%	2.9%	5.6%	1.4%
16-39	1,896	28.0	6.1	0.3%	5.8%	4.6%	1.2%
40-64	5,482	55.5	6.3	0.3%	4.8%	4.5%	1.3%
65-	8,868	73.3	6.1	0.4%	5.6%	2.8%	0.9%

WBC (10³/μL) (female)							
Age	Examinees	Average age	Average WBC	2.9x10³/μL and below	3.9x10³/μL and below	9.6x10³/μL and above	11.1x10³/μL and above
0-6	1,335	3.9	8.6	-	0.2%	28.1%	13.9%
7-15	2,339	10.9	6.6	0.1%	2.7%	5.0%	2.0%
16-39	3,455	29.8	5.9	1.0%	8.5%	3.4%	1.0%
40-64	9,266	54.8	5.6	1.1%	11.4%	1.9%	0.6%
65-	10,683	73.2	5.6	0.8%	9.1%	1.6%	0.5%

Differential white blood count (neutrophil)

FY 2015

Neutrophil (count/μL) (overall)						
Age	Examinees	Average age	Average neutrophil	Minimum value	Maximum value	500/μL and below
0-6	2,633	3.8	3,481	615	14,896	-
7-15	4,891	10.9	3,253	669	21,567	-
16-39	5,347	29.2	3,451	546	19,952	-
40-64	14,746	55.0	3,278	639	14,847	-
65-	19,549	73.3	3,294	267	26,386	0.0%

Neutrophil (count/μL) (male)						
Age	Examinees	Average age	Average neutrophil	Minimum value	Maximum value	500/μL and below
0-6	1,299	3.8	3,453	615	14,896	-
7-15	2,552	11.0	3,157	847	10,716	-
16-39	1,894	28.0	3,427	1,024	16,994	-
40-64	5,481	55.5	3,543	936	14,847	-
65-	8,867	73.3	3,453	267	23,537	0.0%

Neutrophil (count/μL) (female)						
Age	Examinees	Average age	Average neutrophil	Minimum value	Maximum value	500/μL and below
0-6	1,334	3.9	3,508	668	11,949	-
7-15	2,339	10.9	3,357	669	21,567	-
16-39	3,453	29.8	3,464	546	19,952	-
40-64	9,265	54.8	3,122	639	11,780	-
65-	10,682	73.2	3,162	526	26,386	-

Differential white blood count (lymphocyte)

FY 2015

Lymphocyte (count/μL) (overall)						
Age	Examinees	Average age	Average lymphocyte count	Minimum value	Maximum value	500/μL and below
0-6	2,633	3.8	4,283	930	17,327	-
7-15	4,891	10.9	2,617	525	7,490	-
16-39	5,347	29.2	2,006	303	6,039	0.1%
40-64	14,746	55.0	2,026	308	6,760	0.0%
65-	19,549	73.3	2,006	380	12,977	0.0%

Lymphocyte (count/μL) (male)						
Age	Examinees	Average age	Average lymphocyte count	Minimum value	Maximum value	500/μL and below
0-6	1,299	3.8	4,264	1,001	16,555	-
7-15	2,552	11.0	2,610	525	7,128	-
16-39	1,894	28.0	2,095	303	6,039	0.2%
40-64	5,481	55.5	2,131	308	6,124	0.0%
65-	8,867	73.3	2,007	380	12,977	0.1%

Lymphocyte (count/μL) (female)						
Age	Examinees	Average age	Average lymphocyte count	Minimum value	Maximum value	500/μL and below
0-6	1,334	3.9	4,302	930	17,327	-
7-15	2,339	10.9	2,625	855	7,490	-
16-39	3,453	29.8	1,957	533	5,184	-
40-64	9,265	54.8	1,963	374	6,760	0.0%
65-	10,682	73.2	2,005	405	12,745	0.0%

Differential white blood count (monocyte)

FY 2015

Monocyte (count/μL) (overall)					
Age	Examinees	Average age	Average monocyte count	Minimum value	Maximum value
0-6	2,633	3.8	446	63	1,639
7-15	4,891	10.9	352	0	1,501
16-39	5,347	29.2	330	45	1,711
40-64	14,746	55.0	317	35	1,127
65-	19,549	73.3	336	31	1,579

Monocyte (count/μL) (male)					
Age	Examinees	Average age	Average monocyte count	Minimum value	Maximum value
0-6	1,299	3.8	454	69	1,638
7-15	2,552	11.0	361	45	1,270
16-39	1,894	28.0	359	84	1,711
40-64	5,481	55.5	363	80	1,127
65-	8,867	73.3	370	60	1,579

Monocyte (count/μL) (female)					
Age	Examinees	Average age	Average monocyte count	Minimum value	Maximum value
0-6	1,334	3.9	437	63	1,639
7-15	2,339	10.9	342	0	1,501
16-39	3,453	29.8	314	45	1,163
40-64	9,265	54.8	290	35	1,032
65-	10,682	73.2	307	31	1,251

Differential white blood count (eosinophil)

FY 2015

Eosinophil (count/μL) (overall)					
Age	Examinees	Average age	Average eosinophil count	Minimum value	Maximum value
0-6	2,633	3.8	293	0	2,860
7-15	4,891	10.9	269	0	2,714
16-39	5,347	29.2	178	0	2,337
40-64	14,746	55.0	161	0	1,787
65-	19,549	73.3	155	0	5,340

Eosinophil (count/μL) (male)					
Age	Examinees	Average age	Average eosinophil count	Minimum value	Maximum value
0-6	1,299	3.8	314	0	2,860
7-15	2,552	11.0	307	0	2,714
16-39	1,894	28.0	210	0	2,337
40-64	5,481	55.5	192	0	1,787
65-	8,867	73.3	182	0	5,340

Eosinophil (count/μL) (female)					
Age	Examinees	Average age	Average eosinophil count	Minimum value	Maximum value
0-6	1,334	3.9	273	0	2,674
7-15	2,339	10.9	228	0	2,499
16-39	3,453	29.8	160	0	1,794
40-64	9,265	54.8	143	0	1,711
65-	10,682	73.2	133	0	1,700

Differential white blood count (basophil)

FY 2015

Basophil (count/μL) (overall)					
Age	Examinees	Average age	Average basophil count	Minimum value	Maximum value
0-6	2,633	3.8	38	0	416
7-15	4,891	10.9	34	0	390
16-39	5,347	29.2	39	0	204
40-64	14,746	55.0	42	0	260
65-	19,549	73.3	41	0	711

Basophil (count/μL) (male)					
Age	Examinees	Average age	Average basophil count	Minimum value	Maximum value
0-6	1,299	3.8	40	0	416
7-15	2,552	11.0	36	0	390
16-39	1,894	28.0	41	0	204
40-64	5,481	55.5	46	0	202
65-	8,867	73.3	43	0	711

Basophil (count/μL) (female)					
Age	Examinees	Average age	Average basophil count	Minimum value	Maximum value
0-6	1,334	3.9	36	0	303
7-15	2,339	10.9	32	0	388
16-39	3,453	29.8	38	0	177
40-64	9,265	54.8	40	0	260
65-	10,682	73.2	39	0	618

【Summary】

1) The weight of participants decreased in every age group of 15 years and younger in FY 2012 from FY 2011. Afterward, there was little difference. In the age group of 16-39, the weight stayed the same from FY 2011 through FY 2014 and slightly decreased in FY 2015. In the age group of 40-64, there was no difference of weight, whereas it slightly increased in the age group of 65 and older since FY 2011. The prevalence of overweight males stayed the same since FY 2011. The prevalence of overweight females steadily increased in the age group of 40 and older.
2) Overweight individuals with a BMI of 25 kg/m^2 or above for FY 2011 increased with age (22.3% in the age group of 16-39, and 37.1% in the age group of 65 and older). The prevalence of overweight individuals was higher among males in all age groups compared with females. The prevalence stayed almost the same from FY 2011 through FY 2013. The prevalence decreased from FY 2013 through FY 2014 in every age group, but it increased among males in every age group from FY 2014 through FY 2015. As a whole, it increased in the age group of 40-64 (32.9%), whereas it decreased in the age group of 65 and older (34.0%).
3) The abdominal circumference (AC) stayed almost the same since FY2011 in the age group of 40 and older, but it steadily decreased in the age group of 16-39. The prevalence of AC above diagnostic criteria of metabolic syndrome (AC highs) stayed almost the same among both males and females aged 40 and older since FY 2011, whereas it decreased among both males and females in the age group of 16-39 in FY 2015 compared with FY 2011.
4) The prevalence of hypertensive individuals, with a systolic blood pressure of 140 mmHg and above or a diastolic pressure of 90 mmHg and above, decreased among both males and females aged 40 and older over the years in FY 2011-2014, but it slightly increased in FY 2015 compared with FY 2014. The prevalence was low in males and females aged 39 and younger, and even lower in FY 2012-2015 compared with FY 2011. The prevalence of hypertensive individuals was higher among males than females in all age groups.
5) The prevalence of individuals who test positive for urinary sugar (1+) and above was lower among every age group in FY 2015 compared with FY 2011.
6) The prevalence of urine protein (1+) and above was higher among every age group in FY 2015 compared with FY 2011.
7) The prevalence of urine occult blood (1+) and above omitting the time period during menstruation increased from 4.2% to 6.2% only among females in the age group of 16-39 in FY 2015 compared with FY 2011, but in other age groups, the prevalence decreased among both males and females.
8) The prevalence of serum creatinine 1.15mg/dL and above, an indicator of impaired renal function in FY 2011, was 2.4% in the age group of 40-64 and 7.6% in the age group of 65 and older. Since FY 2012 it continued to be high as 3.2% (40-64) and 9.0% (65 and older), respectively in FY 2015.
9) The prevalence of eGFR less than $60ml/min/1.73m^2$, an indicator of impaired renal function in FY 2011, was 6.6% in the age group of 40-64 and 28.6% in the age group of 65 and older. Since FY 2012 it

continued to be high as 10.9% (40-64) and 34.4% (65 and older), respectively in FY 2015. It showed the same tendency among both males and females.

10) The prevalence of impaired glucose tolerance indicated by fasting plasma glucose of 110 mg/dL and above decreased among all age groups in FY 2015 compared with 2011.

11) The prevalence of impaired glucose tolerance indicated by HbA1c 6.0% and above in FY 2011, was 11.8% in the age group of 40-64 and 18.7% in the age group of 65 and older. In FY 2015 it increased to 14.9% (40-64), 24.7% (65 and older), respectively. However, the prevalence of poor blood sugar control of HbA1c 7.0% and above decreased in FY 2015 compared with FY 2011.

12) The prevalence of abnormal lipid metabolism with an LDL cholesterol of 120 mg/dL and above, triglyceride of 150 mg/dL and above, and HDL-C less than 40 mg/dL increased with age in FY 2011: 13.2%, 7.0%, and 2.9% respectively in the age group of 7-15. The prevalence slightly decreased in the age group of 65 and older in FY 2012, afterward it remained the same until FY 2015. In the age group of 7-15, the prevalence of hypertriglyceridemia gradually increased until FY 2014, but it decreased in FY 2015.

13) The prevalence of hepatic dysfunction indicated by AST, ALT, or γ-GT above their reference intervals increased from FY 2011 to 2012, but it dropped to the level of FY 2011 in FY 2013. It slightly increased in FY 2015 compared with FY 2014, but was almost the same as in FY 2013.

14) The prevalence of hyperuricemia with a uric acid level of 7.1 mg/dL and above among males in FY 2011 was: 4.7% in the age group of 7-15; 18.5% in the age group of 16-39; and 18.1% in the age group of 40-64. The prevalence was markedly higher among males than females in all age groups. Compared with FY 2011, it increased in all age groups except for 65 and over in FY 2014. From FY 2014 through FY 2015, it increased to 6.0% in the age group of 7-15, to 20.9% in the age group of 40-64, and to 16.4% in the age group of 65 and older, respectively.

15) RBC, hemoglobin, and hematocrit: There were no significant differences in the average value of each age group through FY 2011-2014. Hemoglobin increased in the age group of 16 and older from FY 2012 through 2014, but decreased in FY 2015.

16) Platelet count: There were no significant changes in the average value of each age group through FY 2011-2015.

17) WBC differential: There were no significant changes in the average value of each age group through FY 2011-2015. There was no increase in the prevalence of lymphocyte counts 500/μL and below.

There were no significant changes in the average counts of neutrophils, lymphocytes, monocytes, eosinophils, or basophils in every age group through FY 2011-2015.

There were no changes in the value of RBC, WBC, and platelet count among children in FY 2012, 2013, 2014, and 2015 compared with FY 2011.

Progress Report of Mental Health and Lifestyle Survey

Reported on 20 February 2017

1. Implementation Plan of Mental Health and Lifestyle Survey for FY 2016

1.1 Purpose

Based on the results of Mental Health and Lifestyle Survey for FY 2011-2015, we will continue to use survey forms for FY 2016 to monitor residents' mental health and lifestyle changes.

For the survey respondents assessed to benefit from support, we offer over-the-phone and other support services, and cooperate with municipal health and other agencies, sharing information to the extent authorized by law and individual preference.

1.2 Survey Respondents

Residents of designated Evacuation Zones as of 2011.

207,998 people as of 11 January 2017

[Evacuation Zones]

Hirono, Naraha, Tomioka, Kawauchi, Okuma, Futaba, Namie, Katsurao, Iitate
Minami-soma, Tamura, Kawamata, and parts of Date (the area with a specific spot recommended for evacuation)

1.3 Survey Methods

We plan to mail survey forms (to be filled out by self or parent/guardian) to the survey population from early February 2017. We introduced a secure online response system accessible by personal computer, tables, or smartphone, for the convenience of respondents.

1.3-1 Classification

Category	Age Criteria	Method
0-3 years	Born between 2 April 2013 and 1 April 2016	Completed by parents
4-6 years	Born between 2 April 2010 and 1 April 2013	Completed by parents
Primary school age	Born between 2 April 2004 and 1 April 2010	Completed by parents
Middle school age	Born between 2 April 2001 and 1 April 2004	Partially self-administered
Adults	Born before 1 April 2001	Self-administered

1.3-2 Survey Items

- Mental and physical health
- Lifestyle habits (diet, sleep, smoking, exercise)
- Living conditions (for adults)

1.3-3 Support after the Survey

- Doctors and other professionals at Fukushima Medical University (FMU) will evaluate and analyse the survey responses. The Mental Health Support Team consisting of clinical psychologists, public health nurses and other professionals will provide phone or other forms of support to respondents assessed to require counseling or support for mental health or lifestyle problems.
- Participants who require further medical treatment will be referred to registered physicians (*see next section) at medical facilities in the Fukushima Prefecture. Those requiring continued support will be referred to the municipal government of the area from which they evacuated and the Fukushima Center for Disaster Mental Health, where their support needs will be reviewed and met.
- At the registered general practitioner's discretion, participants assessed to require further professional mental health care will be handled by FMU and cooperating institutions in the normal course of treatment. Specifically, children will be handled at the Children's Mental Health Treatment Center and all others will be handled in the Department of Psychosomatic Medicine.

- The Mental Health Support Team will offer information and advice about radiation to participants, and those participants assessed to require assistance from a particular relevant specialist will be handled by the Radiation Health Consultation Team comprised of professors from FMU. If an individual inquiring about the health effects of radiation or some other issue needs to have a medical examination, specialist doctors and other professionals will determine the course of action.

2. Registered General Practitioners

Registered general practitioners are psychiatrists or pediatricians who provide services to participants assessed to require healthcare services based on the Mental Health and Lifestyle Survey.

To be eligible for registration, a psychiatrist or a pediatrician needs to attend the accredited workshops held by FMU. The number of registrants is 135 from 85 medical institutions as of 31 December 2016.

Mental Health and Lifestyle Survey for FY 2015
Summary of Support

1. Purpose

The Great East Japan Earthquake on 11 March 2011 and the following accident at the Fukushima Daiichi Nuclear Power Plant brought the residents of Fukushima Prefecture psychological distress or post-traumatic stress disorder (PTSD) caused by radiation anxiety, evacuation, loss of property, and fearful experiences. The survey started in FY 2011 to understand the residents' mental health and lifestyle, and provide them with appropriate care.

Since the results of the Mental Health and Lifestyle Survey for FY 2011-2014 show that ongoing care is needed by understanding the residents' mental health and lifestyle changes, we conducted the survey for FY 2015 using survey forms. Based on responses, we offered consultations to those assessed to require counseling or support for mental health or lifestyle problems in order to improve the residents' conditions and connect them to medical institutions.

2. Survey Respondents

Respondents to the Mental Health and Lifestyle Survey for FY 2015, who are residents of nationally designated evacuation areas as of 11 March 2011 and those born on or before 1 April 2015. We have five types of surveys according to age.

Age 0-3 years: Participants born between April 2, 2012 and April 1, 2015.
Age 4-6 years: Participants born between April 2, 2009 and April 1, 2012.
Primary School: Participants born between April 2, 2003 and April 1, 2009.
Middle School: Participants born between April 2, 2000 and April 1, 2003.
Adults: Participants born on or before April 1, 2000.

In this survey, 'children' refers to the respondents of middle school age and below.

3. Methods

3.1 Individual Notices of Results

Survey questionnaires for FY 2015 were mailed to the survey population in February 2016. In September and October, the results of main items with advice were sent individually to those who responded by 31 August 2016. We introduced a phone number for people to get more detailed information with the results, and posted Frequently Asked Questions on the test results section of our Japanese website. The items provided to the participants follow:

Survey type	Items in the result
0-3 years	Height, weight, diet (1 year olds and older), exercise (2 year olds and older), bedtime
4-6 years	Height, weight, diet, exercise, bedtime, behavioral difficulties and emotional health (SDQ[1])
Primary school age	Height, weight, diet, exercise, bedtime, behavioral difficulties and emotional health (SDQ)
Middle school age	Height, weight, diet, exercise, sleep, behavioral difficulties and emotional health (SDQ)
Adults	Obesity (BMI[2]), diet, exercise, sleep, psychological distress scale (K6[3])

1) Strength and Difficulties Questionnaire. Mental health and behavioral screening scale for children.

2) Body Mass Index (calculated based on height and weight written in the survey forms)

3) Psychological distress scale which screens for general mental illness such as depression and anxiety.

In the results for children, standard height and weight by age in months at the time when they completed the survey forms were provided for reference.

3.2 Criteria for Support

We selected individuals who required support based on the criteria below after reviewing their responses to the survey for FY 2015. A Mental Health Support Team consisting of clinical psychologists, public health nurses and others provided telephone counseling sessions or sent written support materials according to the urgency and severity.

This report provides the results of those who responded by 31 October 2016 and received support by 31 December 2016.

Criteria for support are based on A) Scores and B) Items other than scores.

3.2-1 Telephone Counseling

Respondents who required support (A):

- Children with SDQ score $\geq$20, adults with K6 score $\geq$15.

Respondents who required support (B):

- Children and adults identified based on the content of free-answer questions and in urgent need of support.
- Adults with a previous history of hypertension (HT) or diabetes (DM) who have not received treatment and met the following criteria: BMI $\geq$27.5 kg/m^2 (HT/DM • BMI), or those who consume $\geq$42 drinks in total per week (HT/DM • Excessive drinking) (Multiply the number of days per week by the average daily drinking volume). Adults who report

consuming ≥42 drinks per week with a CAGE score (screening tool for alcoholism) of 4 out of 4 (high-risk drinking).

- Adults with a history of mental disorders who are not currently visiting a clinic.

3.2-2 Mail Support

Respondents who required support (A):

- Children with SDQ score ≥16 (criterion in initial screening[1]) and adults with K6 score ≥10 (criterion for anxiety disorder in initial screening[2]), who did not meet the criteria for telephone counseling.

References

1) Matsuishi T, et al. (2008) Scale properties of the Japanese version of the Strengths and Difficulties Questionnaire (SDQ): a study of infant and school children in community samples. Brain and Development. 30: 410-415.

2) Distribution and related factors of mental health conditions based on the nationwide K6 questionnaire survey. FY 2006 Health Labour Sciences Research Grant (Research on Applied Use of Statistics and Information). Research on the consideration of a system that understands and analyzes statistical information regarding the health condition of citizens from a household perspective. Divided research document.

Respondents who required support (B):

- Children and adults identified based on the content of free-answer questions and not in urgent need of support.
- Adults with a weight gain of ≥3 kg per year and BMI ≥27.5 kg/m^2 (excluding those who have received treatment).
- Adults who consume ≥42 drinks in total per week with a CAGE score of 2 or 3.
- Adults outside the above criteria, but with unsatisfactory sleep, depressed mood and/or decreased activity.
- Adults with a history of mental disorders who did not answer about their hospital visit(s).

We sent the respondents who required mail support a letter with a special phone number for support, and a return postcard asking their desire for telephone support. Also, we sent a booklet to respondents who required support (B) (based on items other than scores) to encourage lifestyle change. Telephone support was provided for those who indicated their desire for support, or those who were assessed to require support based on the reply content.

3.2-3 General Information by Mail (Sending a Booklet)

- Adults with a weight gain of ≥3 kg per year, BMI ≥25.0 and BMI <27.5 kg/m^2 (Mild obesity).
- Adults who meet neither of the above criteria, but with a CAGE score ≥2.

We sent a booklet to the respondents who met the above criteria (excluding respondents designated for telephone counseling and mail support).

3.3 Categories of Interventions and Those Results

In the telephone counseling sessions, we asked the respondents about their health and problems they were facing.

We categorized what transpired in the counseling sessions, e.g., listened carefully, recommended seeing a doctor, advised lifestyle changes, offered psychoeducation, provided information (such as social resources), etc.

The results of the telephone counseling were categorized into four groups as shown below: Follow-up 1, 2, 3, and declined support.

As for continued support, there are four categories as shown below: Follow-up support, referred to outside institutions, mail support, and directed to other departments.

3.3-1 Categories of Results

Follow-up 1: Participants confirmed to be improving or self-managing their problems.

Follow-up 2: Participants not fully recovering from health problems, emotional aftermath of the disaster, adjustment problems, etc.

Follow-up 3: Participants whose status could not be confirmed.

Declined support: Participants who clearly conveyed that they did not want support.

3.3-2 Continued Support

Follow-up support: Participants requiring continued telephone counseling.

Referred to outside institutions: Participants required to be referred to municipal government or the Fukushima Center for Disaster Mental Health.

Mail support: Participants were sent referral, list of registered general practitioners, information of institutions outside the prefecture for support, and letters providing information for registered doctors.

Directed to other departments: Participants needing services related to the Basic Survey and/or Thyroid Ultrasound Examination of FMU's Radiation Medical Science Center.

4. Results

4.1 Send Results to Respondents

The number of respondents of FY 2015 Mental Health and Lifestyle Survey was 50,456, of whom 6,446 were children, and 44,010 were adults. Among them, notices of results were sent to 6,406 children (939 of 0-3 years, 1,338 of 4-6 years, 2,746 of primary school students, and 1,383 of middle school students) and 43,941 adults. The total number was 50,347.

4.2 Number of Respondents Requiring Support and Receiving Support

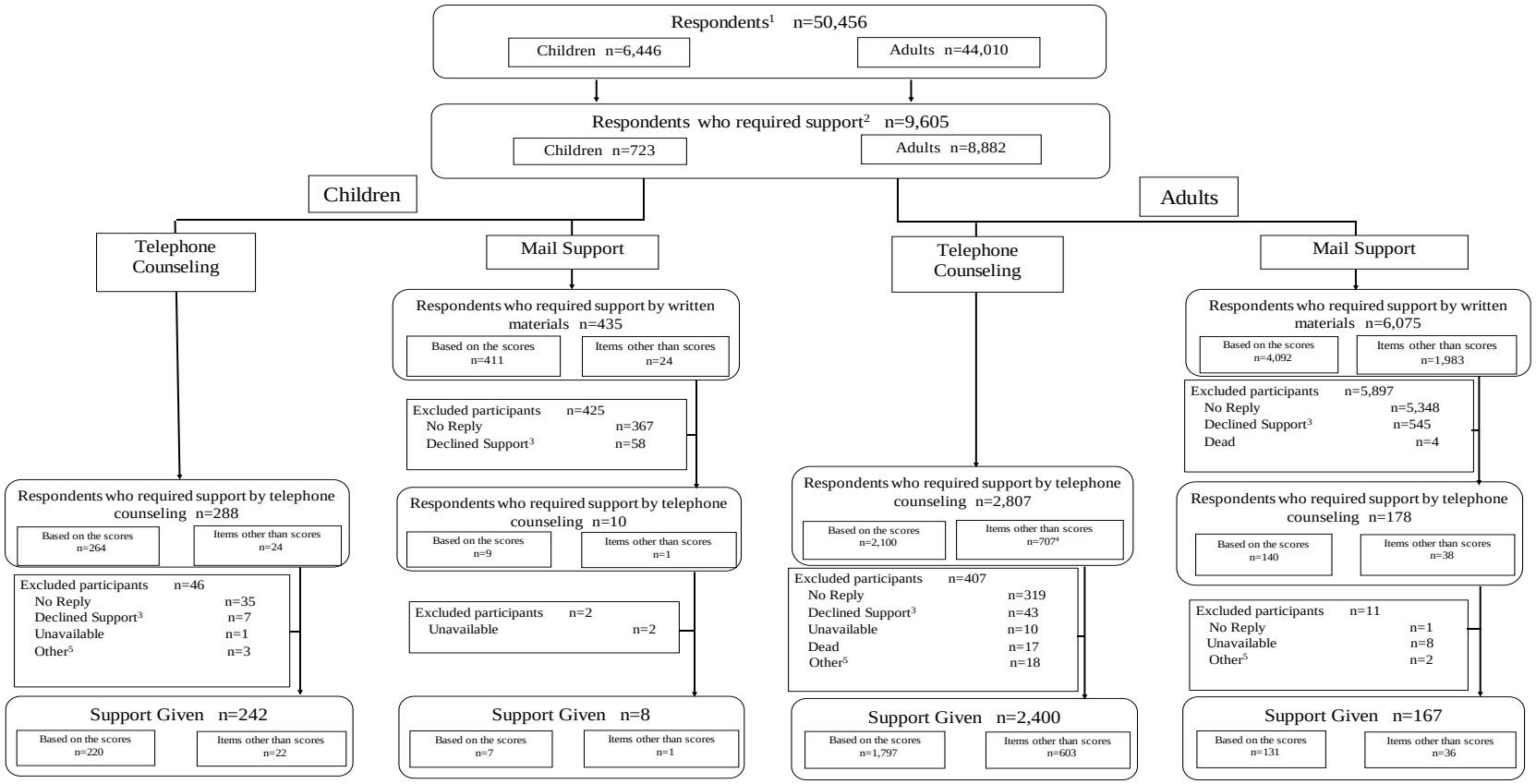
A total of 723 children required support; 288 of them needed telephone counseling and 435 required mail support. Of the 435 participants, 10 were assessed to require telephone counseling based on the responses to the written materials.

A total of 8,882 adults required support; 2,807 of them needed telephone counseling and 6,075 required mail support. After receiving the mail support, 178 were assessed to require telephone counseling. The number of those with mild obesity as the sending criteria for a booklet was 503 and 1,478 adults met the criteria of CAGE scores. The total number was 1,981.

To those who were identified as requiring support but could not be reached for telephone support and those who only met the sending criteria for a booklet(except for those who died), information was provided by sending booklet made by Radiation Medical Science Center of FMU: *Mental Health and Lifestyle Support.*

Figure 1 shows the numbers of respondents requiring support and receiving support. It excludes participants who only met the sending criteria for a booklet .

The percentages in the result table are rounded and may not total to 100%.



1) Those who responded by 31 October 2016.
2) Those who received support by 31 December 2016.
3) Those who indicated no desire for support in the return postcard.
4) The number includes 295 participants who required support by telephone counseling regarding lifestyle habits.
5) Such as those who preferred telephone support out of hours.

Figure 1: Number of participants requiring support and receiving support

4.3 Telephone Support for Children

Since SDQ is for children aged 4 years and older, children aged 0-3 years old were assessed on the basis of the free-answer question. Since few participants who had been sent written materials received telephone counseling (0 of age 0-3 years, 1 of age 4-6 years, 6 of primary school age, 3 of middle school age), the following results combine participants requiring telephone counseling with the number of those assessed to require telephone support based on the written materials.

4.3-1 Status of Respondents Requiring Support

A total of 298 children required support; 288 of them needed telephone counseling and 10 were assessed to require telephone support on the basis of the written support materials. Of these 298 children, 173 (58.1%) were male, 125 (41.9%) were female, 211 (70.8%) lived within Fukushima Prefecture, and 87 (29.2%) lived outside Fukushima. Telephone support was successfully provided to 250 (83.9%) of the total. Respondents living within Fukushima were 173 (69.2%), and 77 (30.8%) were living outside Fukushima (Table 1).

Table 1: Status of children requiring support (By sex and area)

Participants requiring support	Total		0-3 years		4-6 years		Primary school age		Middle school age	
	298		3		46		167		82	
Male	173	(58.1%)	1	(33.3%)	27	(58.7%)	106	(63.5%)	39	(47.6%)
Female	125	(41.9%)	2	(66.7%)	19	(41.3%)	61	(36.5%)	43	(52.4%)
Within Fukushima	211	(70.8%)	3	(100.0%)	32	(69.6%)	117	(70.1%)	59	(72.0%)
Outside Fukushima	87	(29.2%)	0	(0.0%)	14	(30.4%)	50	(29.9%)	23	(28.0%)
Participants receiving support	250		2		33		145		70	
Within Fukushima	173	(69.2%)	2	(100.0%)	23	(69.7%)	101	(69.7%)	47	(67.1%)
Outside Fukushima	77	(30.8%)	0	(0.0%)	10	(30.3%)	44	(30.3%)	23	(32.9%)

Areas at the time of sending survey questionnaires in FY 2015.

4.3-2 Problems Participants Face

After the telephone counseling, we summarized the content. Frequently mentioned problems children were facing were related to school, physical health problems and sleep problems. The frequently mentioned problems parents or guardians were facing were physical health problems, family problems, anxiety about the future and school-related issues.

Furthermore, we used question items made with the help of physicians specialized in child and adolescent psychiatry to more comprehensively understand the situation the participants were facing in the counseling sessions. The most frequently discussed issues of children by participants who received telephone counseling were the following: rebellious behavior, 22 (29.7%); irritability, 21 (30.0%); and guardian's anxiety about child rearing, 61 (39.4%). When asked about their hospital visits, 22 (15.2%) of the respondents said they saw psychosomatic medicine specialists, 19 (13.1%) saw other professionals, and 104 (71.7%) did not visit any clinics (Table 2).

Table 2: State of health of participants who received telephone counseling

Participants receiving support	Total		0-3 years		4-6 years		Primary school age		Middle school age	
	250		2		33		145		70	
Have sleeping problems										
Yes	21	(10.9%)	0	(0.0%)	0	(0.0%)	10	(8.8%)	11	(22.4%)
No	172	(89.1%)	2	(100.0%)	28	(100.0%)	104	(91.2%)	38	(77.6%)
Unclear	57	-	0	-	5	-	31	-	21	-
Have appetite problems										
Yes	10	(5.4%)	1	(50.0%)	0	(0.0%)	5	(4.6%)	4	(8.9%)
No	174	(94.6%)	1	(50.0%)	28	(100.0%)	104	(95.4%)	41	(91.1%)
Unclear	66	-	0	-	5	-	36	-	25	-
Have friendship problems										
Yes	25	(21.7%)	0	(0.0%)	0	(0.0%)	13	(18.6%)	12	(42.9%)
No	90	(78.3%)	1	(100.0%)	16	(100.0%)	57	(81.4%)	16	(57.1%)
Unclear	135	-	1	-	17	-	75	-	42	-
Feel energetic										
Yes	82	(75.2%)	0	(0.0%)	11	(78.6%)	56	(77.8%)	15	(68.2%)
No	27	(24.8%)	1	(100.0%)	3	(21.4%)	16	(22.2%)	7	(31.8%)
Unclear	141	-	1	-	19	-	73	-	48	-
Somatization										
Yes	19	(19.6%)	0	(0.0%)	1	(7.1%)	12	(19.7%)	6	(28.6%)
No	78	(80.4%)	1	(100.0%)	13	(92.9%)	49	(80.3%)	15	(71.4%)
Unclear	153	-	1	-	19	-	84	-	49	-
Rebellious										
Yes	22	(29.7%)	0	(0.0%)	0	(0.0%)	13	(27.1%)	9	(52.9%)
No	52	(70.3%)	1	(100.0%)	8	(100.0%)	35	(72.9%)	8	(47.1%)
Unclear	176	-	1	-	25	-	97	-	53	-
Irritable										
Yes	21	(30.0%)	0	(0.0%)	2	(18.2%)	11	(25.6%)	8	(53.3%)
No	49	(70.0%)	1	(100.0%)	9	(81.8%)	32	(74.4%)	7	(46.7%)
Unclear	180	-	1	-	22	-	102	-	55	-

Table 2: (Cont.) State of health of participants who received telephone counseling

Participants receiving support	Total 250		0-3 years 2		4-6 years 33		Primary school age 145		Middle school age 70	
Emotionally dependent										
Yes	13	(22.8%)	1	(100.0%)	2	(22.2%)	8	(21.1%)	2	(22.2%)
No	44	(77.2%)	0	(0.0%)	7	(77.8%)	30	(78.9%)	7	(77.8%)
Unclear	193	-	1	-	24	-	107	-	61	-
Bored										
Yes	1	(2.2%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	1	(12.5%)
No	45	(97.8%)	1	(100.0%)	8	(100.0%)	29	(100.0%)	7	(87.5%)
Unclear	204	-	1	-	25	-	116	-	62	-
Have developmental problems										
Yes	42	(33.6%)	0	(0.0%)	3	(21.4%)	30	(35.3%)	9	(37.5%)
No	83	(66.4%)	2	(100.0%)	11	(78.6%)	55	(64.7%)	15	(62.5%)
Unclear	125	-	0	-	19	-	60	-	46	-
Emotional or behavioral problems										
Yes	28	(29.2%)	0	(0.0%)	4	(26.7%)	16	(27.1%)	8	(40.0%)
No	68	(70.8%)	2	(100.0%)	11	(73.3%)	43	(72.9%)	12	(60.0%)
Unclear	154	-	0	-	18	-	86	-	50	-
Mental disorder										
Yes	4	(3.5%)	0	(0.0%)	0	(0.0%)	1	(1.4%)	3	(12.5%)
No	109	(96.5%)	2	(100.0%)	14	(100.0%)	72	(98.6%)	21	(87.5%)
Unclear	137	-	0	-	19	-	72	-	46	-
Traumatic stress reaction after the disaster										
Yes	2	(2.7%)	0	(0.0%)	1	(7.1%)	0	(0.0%)	1	(6.7%)
No	73	(97.3%)	2	(100.0%)	13	(92.9%)	44	(100.0%)	14	(93.3%)
Unclear	175	-	0	-	19	-	101	-	55	-
School adjustment										
Well-adjusted	176	(83.0%)	2	(100.0%)	28	(93.3%)	108	(88.5%)	38	(65.5%)
Fail to adjust	36	(17.0%)	0	(0.0%)	2	(6.7%)	14	(11.5%)	20	(34.5%)
Unclear	38	-	0	-	3	-	23	-	12	-
Home or living environment problems										
Yes	21	(17.1%)	0	(0.0%)	3	(20.0%)	13	(17.1%)	5	(16.1%)
No	102	(82.9%)	1	(100.0%)	12	(80.0%)	63	(82.9%)	26	(83.9%)
Unclear	127	-	1	-	18	-	69	-	39	-
Guardian's anxiety about child rearing										
Yes	61	(39.4%)	1	(50.0%)	5	(22.7%)	38	(41.3%)	17	(43.6%)
No	94	(60.6%)	1	(50.0%)	17	(77.3%)	54	(58.7%)	22	(56.4%)
Unclear	95	-	0	-	11	-	53	-	31	-
Guardian's physical health										
Good	146	(86.9%)	1	(50.0%)	23	(95.8%)	90	(89.1%)	32	(78.0%)
Bad	22	(13.1%)	1	(50.0%)	1	(4.2%)	11	(10.9%)	9	(22.0%)
Unclear	82	-	0	-	9	-	44	-	29	-
Guardian's mental health										
Good	139	(86.3%)	1	(50.0%)	21	(91.3%)	86	(88.7%)	31	(79.5%)
Bad	22	(13.7%)	1	(50.0%)	2	(8.7%)	11	(11.3%)	8	(20.5%)
Unclear	89	-	0	-	10	-	48	-	31	-
Treatments										
Psychiatry or psychosomatic medicine	22	(15.2%)	0	(0.0%)	0	(0.0%)	10	(11.9%)	12	(28.6%)
Other	19	(13.1%)	1	(50.0%)	2	(11.8%)	14	(16.7%)	2	(4.8%)
No	104	(71.7%)	1	(50.0%)	15	(88.2%)	60	(71.4%)	28	(66.7%)
Unclear	105	-	0	-	16	-	61	-	28	-
Utilization of professional support										
Yes	46	(34.8%)	0	(0.0%)	3	(20.0%)	28	(35.9%)	15	(40.5%)
No	86	(65.2%)	2	(100.0%)	12	(80.0%)	50	(64.1%)	22	(59.5%)
Unclear	118	-	0	-	18	-	67	-	33	-

The participants who did not mention the issue go to 'Unclear' category.
Proportions do not include the number of 'Unclear'.

4.3-3 Categories of Interventions and Those Results

The results of the telephone counseling were categorized into 'Follow-up 1,' 'Follow-up 2,' 'Follow-up 3,' and 'Declined Support' as was the case in the previous surveys. The breakdown below shows the criteria of 'Follow-up 2,' which were divided into the problems faced by the children and the problems faced by the guardians. Numbers in the breakdown refer to the total number and the proportion in the brackets show the ratio of total number to the number of 'Follow-up 2.' Also, we categorized how we conducted the counseling sessions.

After the telephone support, 204 (81.6%) were categorized as 'Follow-up 1,' 34 (13.6%) were categorized as 'Follow-up 2,' 6 (2.4%) were categorized as 'Follow-up 3,' and 6 (2.4%) declined support (Table 3). Among the participants who were categorized as "Follow-up 2," 15 children (44.1%) had school maladaptation problems and 9 guardians (26.5%) had mental health problems (Table 4).

Table 3: Results of telephone counseling

Participants receiving support	Total 250		0-3 years 2		4-6 years 33		Primary school age 145		Middle school age 70	
Follow-up 1	204	(81.6%)	2	(100.0%)	31	(93.9%)	120	(82.8%)	51	(72.9%)
Follow-up 2	34	(13.6%)	0	(0.0%)	1	(3.0%)	19	(13.1%)	14	(20.0%)
Follow-up 3	6	(2.4%)	0	(0.0%)	0	(0.0%)	3	(2.1%)	3	(4.3%)
Declined support	6	(2.4%)	0	(0.0%)	1	(3.0%)	3	(2.1%)	2	(2.9%)

Table 4: Breakdown of the reasons for 'Follow-up 2'

Number of 'Follow-up 2'	Total 34		0-3 years 0		4-6 years 1		Primary school age 19		Middle school age 14	
(Children)										
Physical problems	2	(5.9%)	0	(0.0%)	0	(0.0%)	2	(10.5%)	0	(0.0%)
Mental problems	8	(23.5%)	0	(0.0%)	0	(0.0%)	4	(21.1%)	4	(28.6%)
School maladaptation	15	(44.1%)	0	(0.0%)	0	(0.0%)	7	(36.8%)	8	(57.1%)
Other	4	(11.8%)	0	(0.0%)	1	(100.0%)	2	(10.5%)	1	(7.1%)
(Guardian)										
Physical problems	8	(23.5%)	0	(0.0%)	1	(100.0%)	3	(15.8%)	4	(28.6%)
Mental problems	9	(26.5%)	0	(0.0%)	1	(100.0%)	5	(26.3%)	3	(21.4%)
Child rearing problems	3	(8.8%)	0	(0.0%)	0	(0.0%)	2	(10.5%)	1	(7.1%)
Isolation	1	(2.9%)	0	(0.0%)	0	(0.0%)	1	(5.3%)	0	(0.0%)
Other	1	(2.9%)	0	(0.0%)	0	(0.0%)	1	(5.3%)	0	(0.0%)

The breakdown provides the total number.

We provided various types of support: listened carefully to the participants, 227 (90.8%); recommended seeing a doctor, 7 (2.8%); advised lifestyle changes, 1 (0.4%); offered psychoeducation, 23 (9.2%); provided information by phone, 4 (1.6%); and other (checked residents' condition), 24 (9.6%). (Table 5.)

Table 5: Content of the support

Participants receiving support	Total 250		0-3 years 2		4-6 years 33		Primary school age 145		Middle school age 70	
Listened carefully	227	(90.8%)	2	(100.0%)	30	(90.9%)	131	(90.3%)	64	(91.4%)
Recommended seeing a doctor	7	(2.8%)	0	(0.0%)	1	(3.0%)	4	(2.8%)	2	(2.9%)
Advised lifestyle changes	1	(0.4%)	0	(0.0%)	0	(0.0%)	1	(0.7%)	0	(0.0%)
Offered psychoeducation	23	(9.2%)	0	(0.0%)	4	(12.1%)	13	(9.0%)	6	(8.6%)
Provided information by phone	4	(1.6%)	0	(0.0%)	1	(3.0%)	1	(0.7%)	2	(2.9%)
Other (checked residents' condition)	24	(9.6%)	0	(0.0%)	3	(9.1%)	14	(9.7%)	7	(10.0%)

The breakdown provides the total number.

Among those who needed continued support services, 2 were categorized as ‘Follow-up support,’ and no one for the other 3 continued supports (Table 6).

Table 6: Continued support

Participants receiving support	Total 250		0-3 years 2		4-6 years 33		Primary school age 145		Middle school age 70	
Follow-up support	2	(0.8%)	0	(0.0%)	0	(0.0%)	2	(1.4%)	0	(0.0%)
Referred to outside institutions	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
Mail support	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
Directed to other departments	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)

4.4 Telephone Support for Adults

4.4-1 Status of Respondents Requiring Support

(Telephone Counseling)

A total of 2,807 adults required telephone counseling sessions; 2,100 were identified on the basis of the scores, and 707 were assessed on the basis of items other than scores. Among the participants, 2,400 (85.5%) received telephone support.

Among those who required telephone support on the basis of the scores, 882 (42.0%) were male and 1,218 (58.0%) were female. Among those who required support on the basis of items other than scores, 390 (55.2%) were male and 317 (44.8%) were female (Table 7).

Among those who required telephone support, 2,228 (79.4%) lived within Fukushima Prefecture and 579 (20.6%) lived outside Fukushima. Among the participants who received telephone support, 1,922 (80.1%) lived within Fukushima Prefecture and 478 (19.9%) lived outside Fukushima (Table 8).

Table 7: Participants requiring telephone counseling (By sex and age group)

	Based on the scores					Based on the items other than scores				
Age group	Total	Male		Female		Total	Male		Female	
15-19	48	17	(35.4%)	31	(64.6%)	13	5	(38.5%)	8	(61.5%)
20-29	120	42	(35.0%)	78	(65.0%)	34	17	(50.0%)	17	(50.0%)
30-39	209	95	(45.5%)	114	(54.5%)	82	50	(61.0%)	32	(39.0%)
40-49	240	110	(45.8%)	130	(54.2%)	110	73	(66.4%)	37	(33.6%)
50-59	288	134	(46.5%)	154	(53.5%)	128	76	(59.4%)	52	(40.6%)
60-69	388	190	(49.0%)	198	(51.0%)	187	103	(55.1%)	84	(44.9%)
70-79	456	182	(39.9%)	274	(60.1%)	115	55	(47.8%)	60	(52.2%)
80-	351	112	(31.9%)	239	(68.1%)	38	11	(28.9%)	27	(71.1%)
Total	2,100	882	(42.0%)	1,218	(58.0%)	707	390	(55.2%)	317	(44.8%)

Ages are as of 1 April 2015.

Table 8: Participants requiring telephone counseling (By area)

Participants requiring support	Total		Based on the scores		Items other than scores	
	2,807		2,100		707	
Within Fukushima	2,228	(79.4%)	1,649	(78.5%)	579	(81.9%)
Outside Fukushima	579	(20.6%)	451	(21.5%)	128	(18.1%)
Participants receiving support	2,400		1,797		603	
Within Fukushima	1,922	(80.1%)	1,431	(79.6%)	491	(81.4%)
Outside Fukushima	478	(19.9%)	366	(20.4%)	112	(18.6%)

Areas at the time of sending survey questionnaires in FY 2015.

(Mail Support)

Among the participants requiring mail support, a total of 178 required telephone counseling sessions (140 of them were identified on the basis of the scores, and 38 were assessed on the items other than scores). We provided support to 167 (93.8%) residents.

Out of the participants identified on the basis of the scores, 71 (50.7%) were male and 69 (49.3%) were female. Among the participants who were assessed on the items other than scores, 17 (44.7%) were male and 21 (55.3%) were female (Table 9).

Among those who required telephone support, 153 (86.0%) lived within Fukushima Prefecture and 25 (14.0%) lived outside Fukushima. The telephone counseling sessions were provided to 144 (86.2%) participants who lived within Fukushima Prefecture and 23 (13.8%) who lived outside Fukushima (Table 10).

Table 9: Participants required telephone counseling among those who required mail support (By sex and age group)

	Based on the scores						Based on the items other than scores					
Age group	Total	Male		Female			Total	Male		Female		
15-19	1	0	(0.0%)	1	(100%)		1	0	(0.0%)	1	(100%)	
20-29	5	1	(20.0%)	4	(80.0%)		4	1	(25.0%)	3	(75.0%)	
30-39	13	4	(30.8%)	9	(69.2%)		1	0	(0.0%)	1	(100%)	
40-49	6	2	(33.3%)	4	(66.7%)		0	0	(0.0%)	0	(0.0%)	
50-59	14	10	(71.4%)	4	(28.6%)		6	2	(33.3%)	4	(66.7%)	
60-69	27	14	(51.9%)	13	(48.1%)		7	4	(57.1%)	3	(42.9%)	
70-79	46	32	(69.6%)	14	(30.4%)		11	6	(54.5%)	5	(45.5%)	
80-	28	8	(28.6%)	20	(71.4%)		8	4	(50.0%)	4	(50.0%)	
Total	140	71	(50.7%)	69	(49.3%)		38	17	(44.7%)	21	(55.3%)	

Ages are as of 1 April 2015.

Table 10: Participants required telephone counseling among those who required mail support (By area)

Participants requiring support	Support given		Based on the scores		Items other than scores	
	178		140		38	
Within Fukushima	153	(86.0%)	116	(82.9%)	37	(97.4%)
Outside Fukushima	25	(14.0%)	24	(17.1%)	1	(2.6%)
Participants receiving support	167		131		36	
Within Fukushima	144	(86.2%)	109	(83.2%)	35	(97.2%)
Outside Fukushima	23	(13.8%)	22	(16.8%)	1	(2.8%)

Areas at the time of sending survey questionnaires in FY 2015.

4.4-2 Problems Participants Face

(Telephone Counseling)

After the telephone counseling, we summarized the content. Frequently mentioned problems were physical health problems, sleep problems and depression.

We asked participants using checklists about their health conditions, sleep, and hospital visit(s). Table 11 provides the state of health of participants.

When asked about the state of health, 1,020 (47.3%) answered ‘Good,’ and 1,138 (52.7%) answered ‘Bad.’ Comparing health conditions with a year ago, 192 (9.5%) saw improvement, 1,496 (73.7%) saw no changes, 219 (10.8%) became worse, and 122 (6.0%) have not had problems so far.

Asked about their sleep, 941 (46.5%) answered ‘Good,’ and 1,083 (53.5%) answered ‘Bad.’ Comparing the sleep habit with a year ago, 171 (9.0%) saw improvement, 1,606 (84.3%) saw no changes, 53 (2.8%) became worse, and 74 (3.9 %) have not had problems so far.

As for clinics, 400 (18.8%) were treated by psychiatrists or psychosomatic medicine specialists, 1,244 (58.4%) were treated by other specialists, and 485 (22.8%) did not see a doctor.

Table 11: State of health of participants who received telephone counseling

Participants receiving support	Total 2,400		Based on the scores 1,797		Items other than scores 603	
Physical condition						
Good	1,020	(47.3%)	655	(40.8%)	365	(65.9%)
Bad	1,138	(52.7%)	949	(59.2%)	189	(34.1%)
Unclear	242	—	193	—	49	—
Changes in physical condition						
Improved	192	(9.5%)	115	(7.7%)	77	(14.3%)
No change	1,496	(73.7%)	1,084	(72.7%)	412	(76.7%)
Worsened	219	(10.8%)	182	(12.2%)	37	(6.9%)
Have not had problems	122	(6.0%)	111	(7.4%)	11	(2.0%)
Unclear	371	—	305	—	66	—
Sleeping habit						
Good	941	(46.5%)	611	(40.9%)	330	(62.3%)
Bad	1,083	(53.5%)	883	(59.1%)	200	(37.7%)
Unclear	376	—	303	—	73	—
Changes in sleep						
Improved	171	(9.0%)	118	(8.5%)	53	(10.3%)
No change	1,606	(84.3%)	1,167	(84.1%)	439	(84.9%)
Worsened	53	(2.8%)	42	(3.0%)	11	(2.1%)
Have not had problems	74	(3.9%)	60	(4.3%)	14	(2.7%)
Unclear	496	—	410	—	86	—
Treatments						
Psychiatry or psychosomatic medicine	400	(18.8%)	358	(22.6%)	42	(7.7%)
Other	1,244	(58.4%)	962	(60.7%)	282	(51.8%)
No	485	(22.8%)	265	(16.7%)	220	(40.4%)
Unclear	271	—	212	—	59	—
Utilization of professional support						
Yes	580	(35.6%)	464	(40.1%)	116	(24.6%)
No	1,048	(64.4%)	693	(59.9%)	355	(75.4%)
Unclear	772	—	640	—	132	—
Depression						
Yes	987	(49.2%)	861	(57.5%)	126	(24.9%)
No	1,018	(50.8%)	637	(42.5%)	381	(75.1%)
Unclear	395	—	299	—	96	—
Anxiety over the disaster/psychological trauma						
Yes	106	(6.6%)	93	(8.1%)	13	(2.9%)
No	1,490	(93.4%)	1,051	(91.9%)	439	(97.1%)
Unclear	804	—	653	—	151	—

The participants who did not mention the issue go to 'Unclear' category.
Proportions do not include the number of 'Unclear.'

(Mail Support)

We provided telephone counseling to those who indicated their desire for telephone support by return postcard, and to those who were assessed by the Mental Health Support Team that they required support based on the content of the reply.

After the telephone counseling, we summarized the content. Frequently mentioned problems were physical health problems, sleep problems and exercise issues.

We asked participants using checklists about their health condition, sleep, and hospital visit(s). Table 12 provides the state of health of participants.

When asked about the state of health, 93 (59.2%) answered ‘Good,’ and 64 (40.8%) answered ‘Bad.’ Comparing health conditions with a year ago, 10 (6.5%) saw improvement, 127 (81.9%) saw no changes, 12 (7.7%) became worse, and 6 (3.9%) have not had problems so far.

Asked about their sleep, 83 (58.9%) answered ‘Good,’ and 58 (41.1%) answered ‘Bad.’ Comparing the sleep habit with a year ago, 9 (6.5%) saw improvement, 118 (84.9%) saw no changes, 6 (4.3%) became worse, 6 (4.3 %) have not had problems so far.

As for clinics, 24 (15.1%) were treated by psychiatrists or psychosomatic medicine specialists, 108 (67.9%) were treated by other specialists, and 27 (17.0%) did not see a doctor.

Table 12: State of health of participants who received telephone counseling among those who required mail support

Participants receiving support	Total 167		Based on the scores 131		Items other than scores 36	
Physical condition						
Good	93	(59.2%)	67	(54.5%)	26	(76.5%)
Bad	64	(40.8%)	56	(45.5%)	8	(23.5%)
Unclear	10	—	8	—	2	—
Changes in physical condition						
Improved	10	(6.5%)	7	(5.8%)	3	(8.8%)
No change	127	(81.9%)	102	(84.3%)	25	(73.5%)
Worsened	12	(7.7%)	8	(6.6%)	4	(11.8%)
Have not had problems	6	(3.9%)	4	(3.3%)	2	(5.9%)
Unclear	12	—	10	—	2	—
Sleeping habit						
Good	83	(58.9%)	62	(57.4%)	21	(63.6%)
Bad	58	(41.1%)	46	(42.6%)	12	(36.4%)
Unclear	26	—	23	—	3	—
Changes in sleep						
Improved	9	(6.5%)	6	(5.6%)	3	(9.4%)
No change	118	(84.9%)	94	(87.9%)	24	(75.0%)
Worsened	6	(4.3%)	3	(2.8%)	3	(9.4%)
Have not had problems	6	(4.3%)	4	(3.7%)	2	(6.3%)
Unclear	28	—	24	—	4	—
Treatments						
Psychiatry or psychosomatic medicine	24	(15.1%)	23	(18.5%)	1	(2.9%)
Other	108	(67.9%)	85	(68.5%)	23	(65.7%)
No	27	(17.0%)	16	(12.9%)	11	(31.4%)
Unclear	8	—	7	—	1	—
Utilization of professional support						
Yes	55	(40.4%)	44	(42.7%)	11	(33.3%)
No	81	(59.6%)	59	(57.3%)	22	(66.7%)
Unclear	31	—	28	—	3	—
Depression						
Yes	39	(25.7%)	33	(27.5%)	6	(18.8%)
No	113	(74.3%)	87	(72.5%)	26	(81.3%)
Unclear	15	—	11	—	4	—
Anxiety over the disaster/psychological trauma						
Yes	6	(4.1%)	5	(4.4%)	1	(3.1%)
No	140	(95.9%)	109	(95.6%)	31	(96.9%)
Unclear	21	—	17	—	4	—

The participants who did not mention the issue go to 'Unclear' category.
Proportions do not include the number of 'Unclear.'

4.4-3 Categories of Interventions and Those Results

The results of the support were categorized into 'Follow-up 1,' 'Follow-up 2,' 'Follow-up 3,' and 'Declined Support' as was the case in the previous surveys. The breakdown below shows the criteria of 'Follow-up 2.' Numbers in the breakdown refer to the total number and the proportion in the brackets show the ratio of total number to the number of 'Follow-up 2.' Also, we categorized how we conducted the counseling sessions.

(Telephone Counseling)

After the telephone counseling, 1,983 (82.6%) were designated as 'Follow-up 1,' 300 (12.5%) as 'Follow-up 2,' 69 (2.9%) as 'Follow-up 3,' and 48 (2.0%) as 'Declined Support' (Table 13). The reasons for 'Follow-up 2' were categorized into the following: 162 (54.0%) for physical health problems, 179 (59.7%) for mental health problems, 31 (10.3%) for social maladaptation, 35 (11.7%) for isolation and 32 (10.7%) for other (Table 14).

Table 13: Results of telephone counseling

Participants receiving support	Total		Based on the scores		Items other than scores	
	2,400		1,797		603	
Follow-up 1	1,983	(82.6%)	1,457	(81.1%)	526	(87.2%)
Follow-up 2	300	(12.5%)	246	(13.7%)	54	(9.0%)
Follow-up 3	69	(2.9%)	54	(3.0%)	15	(2.5%)
Declined support	48	(2.0%)	40	(2.2%)	8	(1.3%)

Table 14: Breakdown of the reasons for 'Follow-up 2'

Number of 'Follow-up 2'	Total		Based on the scores		Items other than scores	
	300		246		54	
Physical problems	162	(54.0%)	131	(53.3%)	31	(57.4%)
Mental problems	179	(59.7%)	152	(61.8%)	27	(50.0%)
Social maladaptation	31	(10.3%)	29	(11.8%)	2	(3.7%)
Isolation	35	(11.7%)	27	(11.0%)	8	(14.8%)
Other (checked residents' condition)	32	(10.7%)	19	(7.7%)	13	(24.1%)

The breakdown provides the total number.

We provided various types of support: listened carefully to the participants, 2,054 (85.6%); recommended seeing a doctor, 326 (13.6%); advised lifestyle changes, 433 (18.0%); offered psychoeducation, 249 (10.4%); provided information by phone, 46 (1.9%); and other (checked residents' condition), 308 (12.8%). (Table 15.)

Table 15: Content of the support

Participants receiving support	Total 2,400		Based on the scores 1,797		Items other than scores 603	
Listened carefully	2,054	(85.6%)	1,530	(85.1%)	524	(86.9%)
Recommended seeing a doctor	326	(13.6%)	152	(8.5%)	174	(28.9%)
Advised lifestyle changes	433	(18.0%)	154	(8.6%)	279	(46.3%)
Offered psychoeducation	249	(10.4%)	211	(11.7%)	38	(6.3%)
Provided information by phone	46	(1.9%)	18	(1.0%)	28	(4.6%)
Other (checked residents' condition)	308	(12.8%)	248	(13.8%)	60	(10.0%)

The breakdown provides the total number.

Among those who needed continued support services, 224 were designated as 'Follow-up support,' 17 were referred to outside institutions, 10 were sent written materials, and 2 were directed to other departments (Table 16).

Table 16: Continued support

Participants receiving support	Total 2,400		Based on the scores 1,797		Items other than scores 603	
Follow-up support	224	(9.3%)	71	(4.0%)	153	(25.4%)
Referred to outside institutions	17	(0.7%)	10	(0.6%)	7	(1.2%)
Mail support	10	(0.4%)	8	(0.4%)	2	(0.3%)
Directed to other departments	2	(0.1%)	2	(0.1%)	0	(0.0%)

(Mail Support)

After the telephone counseling, 155 (92.8%) were designated as 'Follow-up 1,' 11 (6.6%) as 'Follow-up 2,' 1 (0.6%) as 'Follow-up 3,' and 0 (0.0%) as 'Declined Support' (Table 17). The reasons for 'Follow-up 2' were categorized into the following: 7 (63.6%) for physical health problems, 4 (36.4%) for mental health problems, 2 (18.2%) for social maladaptation, 1 (9.1%) for isolation and 3 (27.3%) for other (Table 18).

Table 17: Results of the telephone counseling among those who required mail support

Participants receiving support	Total 167		Based on the scores 131		Items other than scores 36	
Follow-up 1	155	(92.8%)	120	(91.6%)	35	(97.2%)
Follow-up 2	11	(6.6%)	10	(7.6%)	1	(2.8%)
Follow-up 3	1	(0.6%)	1	(0.8%)	0	(0.0%)
Declined support	0	(0.0%)	0	(0.0%)	0	(0.0%)

Table 18: Breakdown of the reasons for ‘Follow-up 2’

	Total		Based on the scores		Items other than scores	
Number of 'Follow-up 2'	11		10		1	
Physical problems	7	(63.6%)	7	(70.0%)	0	(0.0%)
Mental problems	4	(36.4%)	4	(40.0%)	0	(0.0%)
Social maladaptation	2	(18.2%)	2	(20.0%)	0	(0.0%)
Isolation	1	(9.1%)	1	(10.0%)	0	(0.0%)
Other (checked residents' condition)	3	(27.3%)	2	(20.0%)	1	(100.0%)

The breakdown provides the total number.

We provided various types of support: listened carefully to the participants, 159 (95.2%); recommended seeing a doctor, 26 (15.6%); advised lifestyle changes, 44 (26.3%); offered psychoeducation, 16 (9.6%); provided information by phone, 2 (1.2%); and other (checked residents' condition), 7 (4.2%). (Table 19.)

Table 19: Content of the support

Participants receiving support	Total		Based on the scores		Items other than scores	
	167		131		36	
Listened carefully	159	(95.2%)	123	(93.9%)	36	(100.0%)
Recommended seeing a doctor	26	(15.6%)	16	(12.2%)	10	(27.8%)
Advised lifestyle changes	44	(26.3%)	30	(22.9%)	14	(38.9%)
Offered psychoeducation	16	(9.6%)	16	(12.2%)	0	(0.0%)
Provided information by phone	2	(1.2%)	1	(0.8%)	1	(2.8%)
Other (checked residents' condition)	7	(4.2%)	6	(4.6%)	1	(2.8%)

The breakdown provides the total number.

Among those who needed continued support services, 7 were designated as ‘Follow-up support,’ 1 was referred to outside institutions, and no one for the other 2 continued supports (Table 20).

Table 20: Continued support

Participants receiving support	Total		Based on the scores		Items other than scores	
	167		131		36	
Follow-up support	7	(4.2%)	4	(3.1%)	3	(8.3%)
Referred to outside institutions	1	(0.6%)	1	(0.8%)	0	(0.0%)
Mail support	0	(0.0%)	0	(0.0%)	0	(0.0%)
Directed to other departments	0	(0.0%)	0	(0.0%)	0	(0.0%)

4.5 Telephone Support Based on Items Other than Scores (Lifestyle Habits)

In the telephone counseling sessions for those who require support regarding lifestyle habits, we asked their health, changes in lifestyle, hospital visits, and health awareness and recommended seeing a doctor. Also, we offered information about the health effects of obesity and excessive alcohol consumption and encouraged lifestyle changes. Since the individuals need long-term support to maintain a behavior change, we continued to support them to check that they followed the advice.

4.5-1 Criteria for Support

1. Of the respondents with a previous history of hypertension (HT) or diabetes (DM) and have not received treatment, those who met the following criteria:
    a. Those with a BMI $\geq$27.5 kg/m^2 (HT/DM • BMI)
    b. Those who consume $\geq$42 drinks in total per week
    (HT/DM • Excessive drinking)
    c. Those who meet both of the above criteria (HT/DM • BMI • Excessive drinking)
2. Those who consume average $\geq$6 drinks per day ($\geq$42 drinks per week) with CAGE scores of 4 (high-risk drinking).

4.5-2 Status of Respondents Requiring Support

A total of 295 individuals required support. The number of participants who were assessed on the basis of 'HT/DM • BMI' was 170, 'HT/DM • Excessive drinking' was 59, 'HT/DM • BMI • Excessive drinking' was 16, and 'high-risk drinking' was 50. Among those who required support, 224 (75.9%) were male and 71 (24.1%) were female. The age group of 60-69 years had the largest number of respondents requiring support: 85 (28.8%). The second largest age group was 40-49 years, 73 (24.7%), followed by the age group of 50-59 years, 62 (21.0%). Among those who required support, 247 (83.7%) lived within Fukushima Prefecture and 48 (16.3%) lived outside Fukushima (Table 21).

Table 21: Participants required telephone support based on items other than scores

(By sex, age group and area)

Participants requiring support	Total 295		HT/DM・BMI 170		HT/DM・Excessive drinking 59		HT/DM・BMI・Excessive drinking 16		High-risk drinking 50	
Sex										
Male	224	(75.9%)	110	(64.7%)	55	(93.2%)	15	(93.8%)	44	(88.0%)
Female	71	(24.1%)	60	(35.3%)	4	(6.8%)	1	(6.3%)	6	(12.0%)
Age group										
15-19	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)	0	(0.0%)
20-29	13	(4.4%)	10	(5.9%)	0	(0.0%)	1	(6.3%)	2	(4.0%)
30-39	39	(13.2%)	23	(13.5%)	4	(6.8%)	3	(18.8%)	9	(18.0%)
40-49	73	(24.7%)	46	(27.1%)	13	(22.0%)	4	(25.0%)	10	(20.0%)
50-59	62	(21.0%)	33	(19.4%)	15	(25.4%)	5	(31.3%)	9	(18.0%)
60-69	85	(28.8%)	43	(25.3%)	23	(39.0%)	2	(12.5%)	17	(34.0%)
70-79	17	(5.8%)	10	(5.9%)	3	(5.1%)	1	(6.3%)	3	(6.0%)
80-	6	(2.0%)	5	(2.9%)	1	(1.7%)	0	(0.0%)	0	(0.0%)
Area of residence										
Within Fukushima	247	(83.7%)	140	(82.4%)	48	(81.4%)	16	(100.0%)	43	(86.0%)
Outside Fukushima	48	(16.3%)	30	(17.6%)	11	(18.6%)	0	(0.0%)	7	(14.0%)

Age groups are calculated on the basis of 1 April 2015.
Areas are at the time of sending survey questionnaires in FY 2015.

4.5-3 Results of Telephone Counseling

Telephone support was provided to 251 individuals in total: 146 with 'HT/DM • BMI', 53 with 'HT/DM • Excessive drinking,' 14 with 'HT/DM • BMI • Excessive drinking,' and 38 with 'high-risk drinking.'

In the telephone counseling sessions, we asked how aware they are of the importance of exercising and diet, or risks from alcohol and smoking. Table 22 shows the results.

Table 22: Awareness of one's own lifestyle

Participants receiving support Total 251	HT/DM・BMI 146		HT/DM・Excessive drinking 53		HT/DM・BMI・Excessive drinking 14		High-risk drinking 38	
Exercise	84	(57.5%)	20	(37.7%)	7	(50.0%)	12	(31.6%)
Dietary habits	91	(62.3%)	21	(39.6%)	7	(50.0%)	17	(44.7%)
Drinking, smoking	57	(39.0%)	30	(56.6%)	10	(71.4%)	29	(76.3%)

Multiple answers allowed.

After the first telephone support, we found out that 122 (48.6%) had been to clinics. The number of those who require continued support, such as advice on lifestyle habits, was 129 (51.4%) in total: 68 with 'HT/DM • BMI,' 26 with 'HT/DM • Excessive drinking,' 10 with 'HT/DM • BMI • Excessive drinking,' and 25 with 'high-risk drinking.' (Table 23.)

Table 23: Results of the first telephone counseling

	Total	HT/DM・BMI	HT/DM・Excessive drinking	HT/DM・BMI・Excessive drinking	High-risk drinking
Participants receiving support	251	146	53	14	38
No follow-up support	122 (48.6%)	78 (53.4%)	27 (50.9%)	4 (28.6%)	13 (34.2%)
Follow-up support	129 (51.4%)	68 (46.6%)	26 (49.1%)	10 (71.4%)	25 (65.8%)

Among the 129 individuals requiring follow-up support, we have provided follow-up support for 111 (86.0%) in total: 54 with 'HT/DM • BMI,' 24 with 'HT/DM • Excessive drinking,' 8 with 'HT/DM • BMI • Excessive drinking,' and 25 with 'high-risk drinking.' The number of those who were confirmed to have sought professional help or made lifestyle changes was 99 (89.2%) in total: 51 with 'HT/DM • BMI,' 21 with 'HT/DM • Excessive drinking,' 8 with 'HT/DM • BMI • Excessive drinking,' and 19 with 'high-risk drinking.' 62 (62.6%) who saw improvement have sought professional help and made lifestyle changes. (See Table 24.)

Table 24: Results of follow-up support

Participants requiring follow-up support	Total 129	HT/DM・BMI 68	HT/DM・Excessive drinking 26	HT/DM・BMI・Excessive drinking 10	High-risk drinking 25
Participants receiving follow-up support	111 (86.0%)	54 (79.4%)	24 (92.3%)	8 (80.0%)	25 (100.0%)
Did not improve	12 (10.8%)	3 (5.6%)	2 (12.5%)	0 (0.0%)	6 (24.0%)
Improved	99 (89.2%)	51 (94.4%)	22 (87.5%)	8 (100.0%)	19 (76.0%)
Breakdown*					
a.Visited doctors	68 (68.7%)	32 (62.7%)	16 (76.2%)	5 (62.5%)	15 (78.9%)
b. Improved lifestyle	93 (93.9%)	49 (96.1%)	19 (90.5%)	6 (75.0%)	19 (100.0%)
a & b	62 (62.6%)	30 (58.8%)	14 (66.7%)	3 (37.5%)	15 (78.9%)

Multiple data allowed for improved content.

5. Conclusion

The number of respondents of the FY 2015 Mental Health and Lifestyle Survey was 50,456. Of these, individual notices of results were sent to 50,347 participants who responded by 31 August 2016.

The number of those who required support based on scores was 723 children and 8,882 adults. Based only on sending a booklet, the number was 1,981. Among the children, 288 required telephone counseling sessions and 435 required mail support. Based on the content of the written materials, 10 participants were assessed to require telephone support. Among the adults, 2,807 required telephone counseling sessions and 6,075 required mail support. Based on the content of the written materials, 178 participants were assessed to require telephone support. We sent a booklet to participants who required mail support on the basis of items other than scores to encourage lifestyle change. To those who were identified as requiring support but could not be reached for telephone support (except for the participants who only met the criteria for sending a booklet and for those who died), information was provided by sending a booklet made by FMU's Radiation Medical Science Center: *Mental Health and Lifestyle Support.*

After the telephone counseling sessions for children, 204 (81.6%) were categorized as 'Follow-up 1,' and 34 (13.6%) were categorized as 'Follow-up 2.' Frequently discussed issues of children were concerns related to school, physical health problems, and sleep problems. Among parent's or guardian's problems, frequently mentioned issues were the following: physical health problems, family problems, anxiety about the future and school-related issues.

Among the adults requiring telephone support, 1,983 (82.6%) were categorized as 'Follow-up 1' and 300 (12.5%) were categorized as 'Follow-up 2.' Among the respondents who required mail support, 155 (92.8%) were categorized as 'Follow-up 1' and 11 (6.6%) were categorized as 'Follow-up 2.' Frequently discussed issues were physical problems and sleep problems, followed by depression among the respondents who required telephone support, and exercise among those who required mail support.

The number of respondents who required telephone counseling based on lifestyle habits was 295, 251 (85.1%) of whom received support. Of these, 111 (86.0%) received continued telephone support. Ninety-nine (89.2%) of them were confirmed to be making lifestyle changes.

Pregnancy and Birth Survey for FY 2015

Reported on 20 February 2017

1. Outline

1.1 Purpose

We address anxieties associated with pregnancy and childbirth and provide necessary support through assessing participants' physical and mental health. The survey also aims to improve perinatal care in Fukushima Prefecture by listening to people's needs and expectations.

1.2 Group

Those who received Maternal and Child Health Handbooks from municipal offices in Fukushima Prefecture between 1 August 2014 and 31 July 2015, and those who had handbooks issued during the same period in other prefectures but received antenatal care or delivered babies in Fukushima Prefecture.

Number of participants: 14,572 (FY 2011: 16,001; FY 2012: 14,516; FY 2013: 15,218; FY 2014: 15,125)

1.3 Methods

Survey questionnaires were sent to the participants.

Survey questionnaires were sent on 19 November 2015, 21 January 2016, and 17 March 2016 based on the estimated date of delivery.

1.4 Data Tabulation Period

From 24 November 2015 through 16 December 2016

(FY 2014 survey: From 20 November 2014 through 18 December 2015)

(FY 2013 survey: From 24 December 2013 through 26 December 2014)

(FY 2012 survey: From 14 December 2012 through 30 November 2013)

(FY 2011 survey: From 20 January 2012 through 31 March 2013)

2. Survey Results

- Survey results are shown in the tables.
- The number of valid responses may not equal to the survey total because of missing answers.

2.1 Response Rates

- The total number of responses for FY 2015 Survey was 7,031 (48.3%). The number of valid responses was 6,999, and invalid responses were 32. (No response: 4; Exclusions: 28)
- Viewing the total number of responses (response rate) over time, for the FY 2011 Survey it was 9,316 (58.2%), and it was 7,181 (49.5%) in FY 2012, 7,260 (47.7%) in FY 2013 and 7,132 (47.2%) in FY 2014.

2.2 Respondents

- The number of responses (response rate) for FY 2015 by area was as follows: Kempoku, 1,806 (52.3%); Kenchu, 1,924 (45.2%); Kennan, 560 (47.9%); Aizu, 872 (49.0%); Minami-aizu, 80 (53.3%); Soso, 523 (44.2%); Iwaki, 1,148 (46.6%); outside Fukushima Prefecture, 118.
- Most respondents were in the 30-34 age group, followed by 25-29 and 35-39 age groups.

2.3 Pregnancy Outcomes

- The proportion of miscarriages and abortions among recipients of the Maternal and Child Health Handbooks in FY 2015, was 0.81%, 0.16%, respectively. Viewing the proportion to over time, miscarriages and abortions amounted to 0.77% and 0.06% in FY 2011, 0.81% and 0.08% in FY 2012, 0.78% and 0.04% in FY 2013, and 0.62% and 0.07% in FY 2014. (Q8)
- The proportion of preterm deliveries was 5.8%. Prior, it was 4.8% in FY 2011, 5.7% in FY 2012, 5.4% in both FY 2013 and FY 2014. According to 2015 Vital Statistics of the Ministry of Health, Labour and Welfare, the overall proportion in Japan was 5.6%. (Q13)
- The proportion of low birth weight infants was 9.8%. Prior, it was 8.9% in FY 2011, 9.6% in FY 2012, 9.9% in FY 2013, and 10.1% in FY 2015. According to 2015 Vital Statistics, the overall proportion in Japan was 9.5%. (Q14)
- The incidence of congenital anomalies in singleton pregnancies was 2.24%., Prior, it was 2.85%* in FY 2011, 2.39% in FY 2012, 2.35% in FY 2013, and 2.30% in FY 2014. In general, it is reported that the incidence is 3-5%. The most frequent anomaly was cardiovascular malformation with an incidence of 0.75%. Prior, it was 0.89%* in FY 2011, 0.79% in FY 2012, 0.91% in FY 2013, and 0.74% in FY 2014. In general, it is reported that the incidence is about 1%. (Q14)

  Note: The denominator was the total number of valid responses.

  * The figure in this survey excludes the number of invalid responses, whereas the survey for FY 2011 included the number of invalid responses.

2.4 Mental Health of Mothers

- The proportion of mothers with depressive symptoms was 22.0%. Prior, it was 27.1% in FY 2011, 25.5% in FY 2012, 24.5% in FY 2013, and 23.4% in FY 2014). (Q4-1, Q4-2)

  According to the national maternal and child health plan in Japan (*Sukoyaka Oyako 21**), the proportion of mothers with postpartum depression as measured using the Edinburgh Postnatal

Depression Scale, was 9.0% in 2013, and the estimated proportion of postpartum depression from this survey based on the Edinburgh Postnatal Depression Scale was 11.6%.
Reference: Mishina H, et al. Pediatr Int. 2009; 51: 48.

* The proportion of mothers with postpartum depression was modified to 8.4%, by reviewing a numeric value in the above reference (the Second version).

2.5 Perinatal Care

- Mothers were asked if they received sufficient antenatal and delivery care, and 2.4% answered NO or NOT AT ALL. Prior, it was 3.5% in FY 2012, 2.3% in FY 2013, and 2.7% in FY 2014. (Q3)

2.6 Family and Child Rearing

- The proportion of those who had evacuated their homes and now live in temporary housing or other kind of accommodation was 39.2% in the Soso area. Prior, the proportion was 61.3% in FY 2012, 50.8% in FY 2013, and 51.1% in FY 2014. (Q5)
- The proportion of those who were not confident in child rearing was 17.7%. Prior, it was 15.4% in FY 2012, 17.5% in FY 2013, and 16.6% in FY 2014. (Q15) According to the 2010 national survey to assess toddlers' health status, the proportion of mothers with one-year-old children, who were not confident in child rearing, was 23.0%.

2.7 Family Planning

- The proportion of those who were planning a pregnancy was 53.3%. Prior, it was 52.9% in FY 2012, 52.8% in FY 2013, and 57.1% in FY 2014. According to the 14th National Fertility Survey in 2010, 58% of couples married for less than 10 years were planning a pregnancy. The proportion was 51% among those who already had a child.
- Following services were requested by those who were planning a pregnancy: improvement of preschool, care for longer hours, or day care for sick children, 77.2%; information or services about child rearing and pediatric medicine, 68.5%.
- The reasons for not planning a pregnancy were as follows: no desire, 52.1%; age- or health-related reasons, 38.8%. The proportion of respondents who worried about the effects of radiation was 1.6%. Prior, it was 14.8% in FY 2012, 5.6% in FY 2013, and 3.9% in FY 2014.

2.8 Free Comments

- The total of 1,101 respondents (15.7%) provided free comments in a given space. Prior, it was 3,722 (42.2%) in FY 2011, 1,481 (20.7%) in FY 2012, 867 (12.0%) in FY 2013, and 745 (10.5%) in FY 2014.
- The most frequently discussed issues were about child rearing (29.3%) followed by requests for adequate parenting support services (24.1%).
- The proportion concerned about effects of radiation on the fetus and child was 5.2%. Prior, it was 29.6% in FY 2011, 26.4% in FY 2012, 12.9% in FY 2013, and 9.5% in FY 2014.

2.9 Conclusion

1. Pregnancy Outcomes

The proportions of miscarriage or abortion after receiving the Maternal and Child Health Handbooks, preterm deliveries and low birth weight infants stayed almost the same as previous results.

The incidence of congenital anomalies in singleton pregnancies was also roughly the same as previous results, and within the generally reported incidence.

2. Mental Health

The proportion of mothers with depressive symptoms decreased over time from FY 2011, but the estimated proportion with depression was still higher than the national average.

3. Free Comments

The most frequently discussed issues were about child rearing followed by requests for adequate parenting support services.

Concern about effects of radiation on the fetus and child came up most frequently in FY 2011 and 2012, but has decreased since then.

3. Support after the Survey

3.1 Purpose

In order to address the residents' anxiety, midwives and public health nurses provided counseling via telephone or email for those who were screened to be in need of support among the respondents of FY 2015 survey.

3.2 Support Group

Respondents of the Pregnancy and Birth Survey for FY 2015

3.3 Criteria for Support

- Respondents who had two depression symptoms
- Respondents who were screened based on their opinions written in a given free space:
  - Those who appeared to have a severely depressed mood
  - Those in need of support for child rearing
  - Those who are concerned about radiation exposure
  - Those who want detailed information
  - Those who requested support

3.4 Methods

Support via telephone and email

4. Results of the Support

Survey results are shown in the tables.

Note: Participants who responded after 16 December 2016 and received support were excluded from this report.

4.1 Number of Supports Given

- The number of those who required telephone support was 913 out of 7,031 who responded from 24 November 2015 through 16 December 2016. The proportion was 13.0%. Prior, it was 1,401 (15.0%) in FY 2011, 1,104 (15.4%) in FY 2012, 1,101 (15.2%) in FY 2013, and 830 (11.6%) in FY 2014. The number of those who received support via email was 8 (13 in FY 2011, 6 in FY 2012, 3 in FY 2013, and 10 in FY 2014).
- Among those who required support, 60.1% were screened based on their depression symptoms (87.4% in FY 2011, 68.0% in FY 2012, 67.6% in FY 2013, and 77.7% in FY 2014), and 39.9% based on their comments written in a free space (12.6% in FY 2011, 32.0% in FY 2012, 32.4% in FY 2013, and 22.3% in FY 2014).

4.2 Content

- The most frequently discussed issue by the respondents was physical and mental health of mothers (53.1%), followed by child rearing (40.9%) and family life (21.8%). Physical and mental health of mothers was the most frequent category in FY 2012, FY 2013 and FY 2014.
- Viewing the category of concerns about effects of and anxiety about radiation (5.9% in FY 2015) over time, it was 29.2% in FY 2011, 23.7% in FY 2012, 17.1% in FY 2013, and 9.5% in FY 2014.

4.3 Reasons for Completing Support

We completed telephone support by listening carefully and sorting mothers' concerns in 669 (73.3%) cases, providing information about other counseling services in 452 (49.5%) cases, confirming that they were already receiving care in 275 (30.1%) cases. Note: Multiple answers allowed. The denominator is the total number of support encounters provided.

4.4 Conclusion

- The proportion of mothers to whom we provided support in FY 2015 was lower than in FY 2011, FY 2012, and FY 2013, but was higher than in FY 2014, possibly because the number of free comments requiring telephone support increased with the greater proportion of mothers writing free comments in FY 2015 compared with FY 2014.
- The most frequently discussed issue in the counseling in FY 2015 was physical and mental health of mothers as was the case in FY 2012, FY 2013, and FY 2014. Issues related to effects and anxiety of radiation became less frequent over time from FY 2011.

Results of Pregnancy and Birth Survey for FY2015

1. Response rates

Responses received from 24 November 2015 through 16 December 2016

Area	Survey population		Responses (Response rate)	
Kempoku	3,453	23.7%	1,806	52.3%
Kenchu	4,261	29.2%	1,924	45.2%
Kennan	1,168	8.0%	560	47.9%
Soso	1,183	8.1%	523	44.2%
Iwaki	2,461	16.9%	1,148	46.6%
Aizu	1,778	12.2%	872	49.0%
Minami-aizu	150	1.0%	80	53.3%
Outside Fukushima	118	0.8%	118	100.0%
Total	14,572	100.0%	7,031	48.3%

2. Results by Items

The total number is 6,999 of 7,031 participants excluding 32 invalid responses (4 nonrespondents and 28 exclusions). Each item includes nonrespondents and invalid responses. Percentages have been rounded and may not total to 100%.

Age group of participants

Area	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39		Ages 40-44		Ages 45-49		No response		Total	
Kempoku	10	0.6%	140	7.8%	507	28.2%	668	37.1%	381	21.2%	83	4.6%	0	0.0%	12	0.7%	1,801	100.0%
Kenchu	14	0.7%	171	8.9%	560	29.2%	649	33.9%	429	22.4%	83	4.3%	1	0.1%	10	0.5%	1,917	100.0%
Kennan	6	1.1%	46	8.2%	194	34.8%	180	32.3%	108	19.4%	18	3.2%	1	0.2%	5	0.9%	558	100.0%
Soso	3	0.6%	60	11.5%	167	32.1%	183	35.2%	88	16.9%	19	3.7%	0	0.0%	0	0.0%	520	100.0%
Iwaki	17	1.5%	113	9.9%	311	27.1%	386	33.7%	243	21.2%	64	5.6%	1	0.1%	11	1.0%	1,146	100.0%
Aizu	7	0.8%	68	7.9%	279	32.3%	308	35.6%	157	18.2%	37	4.3%	0	0.0%	8	0.9%	864	100.0%
Minami-aizu	0	0.0%	6	7.5%	24	30.0%	24	30.0%	16	20.0%	8	10.0%	0	0.0%	2	2.5%	80	100.0%
Outside Fukushima	0	0.0%	10	8.8%	49	43.4%	40	35.4%	12	10.6%	1	0.9%	0	0.0%	1	0.9%	113	100.0%
Total	57	0.8%	614	8.8%	2,091	29.9%	2,438	34.8%	1,434	20.5%	313	4.5%	3	0.0%	49	0.7%	6,999	100.0%

* Ages are at the time when pregnancy outcome occurred.

Q2. Do you think of yourself as healthy?

Area	Very much		A little		Not so much		No		No response		Total	
Kempoku	406	22.5%	1,319	73.2%	62	3.4%	11	0.6%	3	0.2%	1,801	100.0%
Kenchu	523	27.3%	1,331	69.4%	50	2.6%	10	0.5%	3	0.2%	1,917	100.0%
Kennan	147	26.3%	393	70.4%	17	3.0%	1	0.2%	0	0.0%	558	100.0%
Soso	98	18.8%	400	76.9%	19	3.7%	2	0.4%	1	0.2%	520	100.0%
Iwaki	326	28.4%	776	67.7%	38	3.3%	1	0.1%	5	0.4%	1,146	100.0%
Aizu	181	20.9%	644	74.5%	33	3.8%	2	0.2%	4	0.5%	864	100.0%
Minami-aizu	12	15.0%	61	76.3%	7	8.8%	0	0.0%	0	0.0%	80	100.0%
Outside Fukushima	38	33.6%	75	66.4%	0	0.0%	0	0.0%	0	0.0%	113	100.0%
Total	1,731	24.7%	4,999	71.4%	226	3.2%	27	0.4%	16	0.2%	6,999	100.0%

Q3. Did you receive sufficient antenatal or delivery care for the current pregnancy?

Area	Very much		Yes		Not sure		No		Not at all		No response		Total	
Kempoku	549	30.5%	1,042	57.9%	161	8.9%	41	2.3%	4	0.2%	4	0.2%	1,801	100.0%
Kenchu	542	28.3%	1,106	57.7%	208	10.9%	50	2.6%	5	0.3%	6	0.3%	1,917	100.0%
Kennan	144	25.8%	332	59.5%	66	11.8%	16	2.9%	0	0.0%	0	0.0%	558	100.0%
Soso	124	23.8%	334	64.2%	51	9.8%	7	1.3%	1	0.2%	3	0.6%	520	100.0%
Iwaki	361	31.5%	656	57.2%	104	9.1%	20	1.7%	3	0.3%	2	0.2%	1,146	100.0%
Aizu	215	24.9%	542	62.7%	87	10.1%	14	1.6%	3	0.3%	3	0.3%	864	100.0%
Minami-aizu	23	28.8%	50	62.5%	6	7.5%	1	1.3%	0	0.0%	0	0.0%	80	100.0%
Outside Fukushima	38	33.6%	64	56.6%	10	8.8%	0	0.0%	0	0.0%	1	0.9%	113	100.0%
Total	1,996	28.5%	4,126	59.0%	693	9.9%	149	2.1%	16	0.2%	19	0.3%	6,999	100.0%

Q4-1. Have you often been feeling down or depressed for the past month?

Area	Yes		No		No response		Total	
Kempoku	387	21.5%	1,407	78.1%	7	0.4%	1,801	100.0%
Kenchu	371	19.4%	1,540	80.3%	6	0.3%	1,917	100.0%
Kennan	122	21.9%	432	77.4%	4	0.7%	558	100.0%
Soso	127	24.4%	392	75.4%	1	0.2%	520	100.0%
Iwaki	212	18.5%	931	81.2%	3	0.3%	1,146	100.0%
Aizu	172	19.9%	685	79.3%	7	0.8%	864	100.0%
Minami-aizu	21	26.3%	59	73.8%	0	0.0%	80	100.0%
Outside Fukushima	26	23.0%	87	77.0%	0	0.0%	113	100.0%
Total	1,438	20.5%	5,533	79.1%	28	0.4%	6,999	100.0%

Q4-2. Have you lost interest in activities or found things unpleasurable for the past month?

Area	Yes		No		No response		Total	
Kempoku	184	10.2%	1,610	89.4%	7	0.4%	1,801	100.0%
Kenchu	150	7.8%	1,761	91.9%	6	0.3%	1,917	100.0%
Kennan	53	9.5%	501	89.8%	4	0.7%	558	100.0%
Soso	69	13.3%	450	86.5%	1	0.2%	520	100.0%
Iwaki	97	8.5%	1,046	91.3%	3	0.3%	1,146	100.0%
Aizu	77	8.9%	780	90.3%	7	0.8%	864	100.0%
Minami-aizu	7	8.8%	73	91.3%	0	0.0%	80	100.0%
Outside Fukushima	11	9.7%	102	90.3%	0	0.0%	113	100.0%
Total	648	9.3%	6,323	90.3%	28	0.4%	6,999	100.0%

Depressive tendencies (Answers to above questions)

Area	Yes to both questions		Yes to either of the question		No to both questions		No response		Total	
Kempoku	148	8.2%	275	15.3%	1,371	76.1%	7	0.4%	1,801	100.0%
Kenchu	125	6.5%	271	14.1%	1,515	79.0%	6	0.3%	1,917	100.0%
Kennan	49	8.8%	77	13.8%	428	76.7%	4	0.7%	558	100.0%
Soso	59	11.3%	78	15.0%	382	73.5%	1	0.2%	520	100.0%
Iwaki	83	7.2%	143	12.5%	917	80.0%	3	0.3%	1,146	100.0%
Aizu	67	7.8%	115	13.3%	675	78.1%	7	0.8%	864	100.0%
Minami-aizu	6	7.5%	16	20.0%	58	72.5%	0	0.0%	80	100.0%
Outside Fukushima	8	7.1%	21	18.6%	84	74.3%	0	0.0%	113	100.0%
Total	545	7.8%	996	14.2%	5,430	77.6%	28	0.4%	6,999	100.0%

Proportion of those with depressive tendencies: 22.0% (545 checked both boxes of *Yes*+996 checked either of *Yes*/total of 6,999)

Q5. Are you evacuated from your home?

Area	Yes, I am living in temporary housing		Yes, I am living in other kind of accommodation		Have evacuated but returned home		Have never been evacuated		No response		Total	
Kempoku	0	0.0%	22	1.2%	243	13.5%	1,515	84.1%	21	1.2%	1,801	100.0%
Kenchu	1	0.1%	16	0.8%	305	15.9%	1,559	81.3%	36	1.9%	1,917	100.0%
Kennan	0	0.0%	4	0.7%	36	6.5%	508	91.0%	10	1.8%	558	100.0%
Soso	18	3.5%	186	35.8%	168	32.3%	142	27.3%	6	1.2%	520	100.0%
Iwaki	0	0.0%	16	1.4%	480	41.9%	632	55.1%	18	1.6%	1,146	100.0%
Aizu	0	0.0%	4	0.5%	37	4.3%	798	92.4%	25	2.9%	864	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	77	96.3%	3	3.8%	80	100.0%
Outside Fukushima	0	0.0%	1	0.9%	7	6.2%	103	91.2%	2	1.8%	113	100.0%
Total	19	0.3%	249	3.6%	1,276	18.2%	5,334	76.2%	121	1.7%	6,999	100.0%

Q5. Are you living apart from family members you previously lived with because of evacuation?

This question is for 268 respondents who answered *Yes* to the previous question.

Area	Yes		No		No response		Total	
Kempoku	16	72.7%	6	27.3%	0	0.0%	22	100.0%
Kenchu	8	47.1%	9	52.9%	0	0.0%	17	100.0%
Kennan	2	50.0%	2	50.0%	0	0.0%	4	100.0%
Soso	78	38.2%	125	61.3%	1	0.5%	204	100.0%
Iwaki	9	56.3%	7	43.8%	0	0.0%	16	100.0%
Aizu	1	25.0%	3	75.0%	0	0.0%	4	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	1	100.0%	0	0.0%	1	100.0%
Total	114	42.5%	153	57.1%	1	0.4%	268	100.0%

Q5. Are you communicating well with your family?

This question is for 114 respondents who answered *Yes* to the previous question.

Area	Yes		No		Not sure		No response		Total	
Kempoku	13	81.3%	0	0.0%	3	18.8%	0	0.0%	16	100.0%
Kenchu	6	75.0%	0	0.0%	2	25.0%	0	0.0%	8	100.0%
Kennan	2	100.0%	0	0.0%	0	0.0%	0	0.0%	2	100.0%
Soso	62	79.5%	1	1.3%	15	19.2%	0	0.0%	78	100.0%
Iwaki	9	100.0%	0	0.0%	0	0.0%	0	0.0%	9	100.0%
Aizu	0	0.0%	0	0.0%	1	100.0%	0	0.0%	1	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	92	80.7%	1	0.9%	21	18.4%	0	0.0%	114	100.0%

Q6. Whom are you living with? Check all that apply.

Area	No one		Husband or partner		Children		Parents or parents-in-law		Other		Valid response
Kempoku	0	0.0%	1,702	94.7%	1,640	91.3%	496	27.6%	134	7.5%	1,797
Kenchu	0	0.0%	1,798	94.0%	1,682	87.9%	530	27.7%	125	6.5%	1,913
Kennan	0	0.0%	515	92.6%	499	89.7%	212	38.1%	55	9.9%	556
Soso	0	0.0%	500	96.5%	469	90.5%	155	29.9%	41	7.9%	518
Iwaki	2	0.2%	1,083	94.7%	998	87.2%	265	23.2%	56	4.9%	1,144
Aizu	0	0.0%	801	93.0%	759	88.2%	342	39.7%	93	10.8%	861
Minami-aizu	1	1.3%	75	93.8%	69	86.3%	32	40.0%	9	11.3%	80
Outside Fukushima	0	0.0%	110	97.3%	84	74.3%	7	6.2%	4	3.5%	113
Total	3	0.0%	6,584	94.3%	6,200	88.8%	2,039	29.2%	517	7.4%	6,982

The denominator is the sum of valid responses of Q6. Proportion does not total to 100.0% because of the multiple answers.

Q7. Smoking

Tell us about your tobacco use.

1) Did you smoke when you were notified of your recent pregnancy?

Area	Have never smoked		Quit before detecting pregnancy		Quit after detecting pregnancy		Yes		No response		Total	
Kempoku	1,288	71.5%	228	12.7%	195	10.8%	88	4.9%	2	0.1%	1,801	100.0%
Kenchu	1,335	69.6%	215	11.2%	232	12.1%	134	7.0%	1	0.1%	1,917	100.0%
Kennan	367	65.8%	61	10.9%	91	16.3%	38	6.8%	1	0.2%	558	100.0%
Soso	349	67.1%	60	11.5%	75	14.4%	34	6.5%	2	0.4%	520	100.0%
Iwaki	754	65.8%	145	12.7%	153	13.4%	91	7.9%	3	0.3%	1,146	100.0%
Aizu	588	68.1%	101	11.7%	116	13.4%	56	6.5%	3	0.3%	864	100.0%
Minami-aizu	47	58.8%	16	20.0%	12	15.0%	5	6.3%	0	0.0%	80	100.0%
Outside Fukushima	82	72.6%	14	12.4%	14	12.4%	3	2.7%	0	0.0%	113	100.0%
Total	4,810	68.7%	840	12.0%	888	12.7%	449	6.4%	12	0.2%	6,999	100.0%

2) Did you smoke during the pregnancy?

Area	No		Yes		No response		Total	
Kempoku	1,763	97.9%	34	1.9%	4	0.2%	1,801	100.0%
Kenchu	1,847	96.3%	66	3.4%	4	0.2%	1,917	100.0%
Kennan	530	95.0%	23	4.1%	5	0.9%	558	100.0%
Soso	490	94.2%	29	5.6%	1	0.2%	520	100.0%
Iwaki	1,093	95.4%	50	4.4%	3	0.3%	1,146	100.0%
Aizu	828	95.8%	34	3.9%	2	0.2%	864	100.0%
Minami-aizu	79	98.8%	1	1.3%	0	0.0%	80	100.0%
Outside Fukushima	112	99.1%	1	0.9%	0	0.0%	113	100.0%
Total	6,742	96.3%	238	3.4%	19	0.3%	6,999	100.0%

3) Do you smoke?

Area	No		Yes		No response		Total	
Kempoku	1,737	96.4%	62	3.4%	2	0.1%	1,801	100.0%
Kenchu	1,807	94.3%	108	5.6%	2	0.1%	1,917	100.0%
Kennan	525	94.1%	30	5.4%	3	0.5%	558	100.0%
Soso	476	91.5%	42	8.1%	2	0.4%	520	100.0%
Iwaki	1,070	93.4%	72	6.3%	4	0.3%	1,146	100.0%
Aizu	807	93.4%	55	6.4%	2	0.2%	864	100.0%
Minami-aizu	76	95.0%	4	5.0%	0	0.0%	80	100.0%
Outside Fukushima	112	99.1%	1	0.9%	0	0.0%	113	100.0%
Total	6,610	94.4%	374	5.3%	15	0.2%	6,999	100.0%

Q8. Tell us about the current pregnancy.

Details of pregnancy

Area	Natural conception		Ovarian hyper-stimulation		Artificial insemination		In vitro fertilization		Ovarian hyperstimulation and artificial insemination		Ovarian hyperstimulation and in vitro fertilization		No response		Total	
Kempoku	1,640	91.1%	69	3.8%	26	1.4%	59	3.3%	1	0.1%	0	0.0%	6	0.3%	1,801	100.0%
Kenchu	1,801	93.9%	36	1.9%	8	0.4%	65	3.4%	0	0.0%	0	0.0%	7	0.4%	1,917	100.0%
Kennan	524	93.9%	13	2.3%	6	1.1%	12	2.2%	1	0.2%	0	0.0%	2	0.4%	558	100.0%
Soso	476	91.5%	19	3.7%	5	1.0%	16	3.1%	0	0.0%	0	0.0%	4	0.8%	520	100.0%
Iwaki	1,057	92.2%	27	2.4%	10	0.9%	45	3.9%	1	0.1%	0	0.0%	6	0.5%	1,146	100.0%
Aizu	809	93.6%	15	1.7%	10	1.2%	26	3.0%	0	0.0%	0	0.0%	4	0.5%	864	100.0%
Minami-aizu	75	93.8%	4	5.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.3%	80	100.0%
Outside Fukushima	105	92.9%	4	3.5%	2	1.8%	1	0.9%	0	0.0%	0	0.0%	1	0.9%	113	100.0%
Total	6,487	92.7%	187	2.7%	67	1.0%	224	3.2%	3	0.0%	0	0.0%	31	0.4%	6,999	100.0%

Outcome

Area	Delivered		Miscarriage		Induced abortion		Stillbirth		Total	
Kempoku	1,781	98.89%	14	0.78%	2	0.11%	4	0.22%	1,801	100.00%
Kenchu	1,894	98.80%	18	0.94%	0	0.00%	5	0.26%	1,917	100.00%
Kennan	548	98.21%	5	0.90%	2	0.36%	3	0.54%	558	100.00%
Soso	515	99.04%	4	0.77%	0	0.00%	1	0.19%	520	100.00%
Iwaki	1,128	98.43%	11	0.96%	5	0.44%	2	0.17%	1,146	100.00%
Aizu	854	98.96%	5	0.58%	2	0.23%	2	0.23%	863	100.00%
Minami-aizu	80	100.00%	0	0.00%	0	0.00%	0	0.00%	80	100.00%
Outside Fukushima	113	100.00%	0	0.00%	0	0.00%	0	0.00%	113	100.00%
Total	6,913	98.79%	57	0.81%	11	0.16%	17	0.24%	6,998	100.00%

Excluding two mothers who gave birth to triplets.

Twin pregnancy was counted as one except the respondent with different outcomes in twin pregnancy. The participant checked for each outcome.

Q9. Singleton pregnancy or twin pregnancy (including the case of a stillbirth)

Area	Singleton		Twin		No response		Total	
Kempoku	1,779	98.8%	15	0.8%	7	0.4%	1,801	100.0%
Kenchu	1,897	99.0%	18	0.9%	2	0.1%	1,917	100.0%
Kennan	551	98.7%	5	0.9%	2	0.4%	558	100.0%
Soso	516	99.2%	3	0.6%	1	0.2%	520	100.0%
Iwaki	1,133	99.0%	10	0.9%	2	0.2%	1,145	100.0%
Aizu	853	98.8%	7	0.8%	3	0.3%	863	100.0%
Minami-aizu	80	100.0%	0	0.0%	0	0.0%	80	100.0%
Outside Fukushima	113	100.0%	0	0.0%	0	0.0%	113	100.0%
Total	6,922	98.9%	58	0.8%	17	0.2%	6,997	100.0%

Excluding two mothers who gave birth to triplets.

Q10. Pregnancy History

1) Have you ever had a miscarriage?

Area	Yes		No		No response		Total	
Kempoku	364	20.2%	1,401	77.8%	36	2.0%	1,801	100.0%
Kenchu	415	21.6%	1,476	77.0%	26	1.4%	1,917	100.0%
Kennan	112	20.1%	442	79.2%	4	0.7%	558	100.0%
Soso	93	17.9%	416	80.0%	11	2.1%	520	100.0%
Iwaki	237	20.7%	900	78.5%	9	0.8%	1,146	100.0%
Aizu	178	20.6%	668	77.3%	18	2.1%	864	100.0%
Minami-aizu	17	21.3%	63	78.8%	0	0.0%	80	100.0%
Outside Fukushima	17	15.0%	95	84.1%	1	0.9%	113	100.0%
Total	1,433	20.5%	5,461	78.0%	105	1.5%	6,999	100.0%

2) Have you ever had an abortion?

Area	Yes		No		No response		Total	
Kempoku	247	13.7%	1,487	82.6%	67	3.7%	1,801	100.0%
Kenchu	310	16.2%	1,558	81.3%	49	2.6%	1,917	100.0%
Kennan	71	12.7%	470	84.2%	17	3.0%	558	100.0%
Soso	75	14.4%	424	81.5%	21	4.0%	520	100.0%
Iwaki	183	16.0%	927	80.9%	36	3.1%	1,146	100.0%
Aizu	145	16.8%	684	79.2%	35	4.1%	864	100.0%
Minami-aizu	11	13.8%	66	82.5%	3	3.8%	80	100.0%
Outside Fukushima	10	8.8%	96	85.0%	7	6.2%	113	100.0%
Total	1,052	15.0%	5,712	81.6%	235	3.4%	6,999	100.0%

3) Have you ever had a stillbirth?

Area	Yes		No		No response		Total	
Kempoku	22	1.2%	1,736	96.4%	43	2.4%	1,801	100.0%
Kenchu	18	0.9%	1,869	97.5%	30	1.6%	1,917	100.0%
Kennan	9	1.6%	544	97.5%	5	0.9%	558	100.0%
Soso	5	1.0%	503	96.7%	12	2.3%	520	100.0%
Iwaki	18	1.6%	1,114	97.2%	14	1.2%	1,146	100.0%
Aizu	11	1.3%	833	96.4%	20	2.3%	864	100.0%
Minami-aizu	2	2.5%	78	97.5%	0	0.0%	80	100.0%
Outside Fukushima	1	0.9%	111	98.2%	1	0.9%	113	100.0%
Total	86	1.2%	6,788	97.0%	125	1.8%	6,999	100.0%

4) Have you ever given birth?

Area	Yes		No		No response		Total	
Kempoku	940	52.2%	793	44.0%	68	3.8%	1,801	100.0%
Kenchu	990	51.6%	883	46.1%	44	2.3%	1,917	100.0%
Kennan	299	53.6%	239	42.8%	20	3.6%	558	100.0%
Soso	270	51.9%	226	43.5%	24	4.6%	520	100.0%
Iwaki	558	48.7%	553	48.3%	35	3.1%	1,146	100.0%
Aizu	443	51.3%	379	43.9%	42	4.9%	864	100.0%
Minami-aizu	40	50.0%	38	47.5%	2	2.5%	80	100.0%
Outside Fukushima	39	34.5%	68	60.2%	6	5.3%	113	100.0%
Total	3,579	51.1%	3,179	45.4%	241	3.4%	6,999	100.0%

5) Have you ever had twins?

Area	Yes		No		No response		Total	
Kempoku	9	0.5%	1,752	97.3%	40	2.2%	1,801	100.0%
Kenchu	7	0.4%	1,880	98.1%	30	1.6%	1,917	100.0%
Kennan	3	0.5%	550	98.6%	5	0.9%	558	100.0%
Soso	3	0.6%	503	96.7%	14	2.7%	520	100.0%
Iwaki	9	0.8%	1,117	97.5%	20	1.7%	1,146	100.0%
Aizu	5	0.6%	840	97.2%	19	2.2%	864	100.0%
Minami-aizu	0	0.0%	80	100.0%	0	0.0%	80	100.0%
Outside Fukushima	0	0.0%	112	99.1%	1	0.9%	113	100.0%
Total	36	0.5%	6,834	97.6%	129	1.8%	6,999	100.0%

Q11. Have you suffered from any disease prior to the current pregnancy?

Area	Yes		No		No response		Total	
Kempoku	542	30.1%	1,249	69.4%	10	0.6%	1,801	100.0%
Kenchu	591	30.8%	1,316	68.6%	10	0.5%	1,917	100.0%
Kennan	170	30.5%	385	69.0%	3	0.5%	558	100.0%
Soso	159	30.6%	358	68.8%	3	0.6%	520	100.0%
Iwaki	366	31.9%	773	67.5%	7	0.6%	1,146	100.0%
Aizu	245	28.4%	615	71.2%	4	0.5%	864	100.0%
Minami-aizu	30	37.5%	50	62.5%	0	0.0%	80	100.0%
Outside Fukushima	35	31.0%	78	69.0%	0	0.0%	113	100.0%
Total	2,138	30.5%	4,824	68.9%	37	0.5%	6,999	100.0%

Breakdown of YES (Multiple answers allowed) Valid response: 2,135 Invalid response: 3

Area	Other allergic disease[1]		Respiratory disease[2]		Mental illness[3]		Thyroid disease		Intestinal disorder		Neurological disorder[4]		Heart disease[5]		Cancer		Liver disease[6]	
Kempoku	327	45.8%	118	16.5%	63	8.8%	33	4.6%	22	3.1%	12	1.7%	11	1.5%	10	1.4%	5	0.7%
Kenchu	328	42.7%	136	17.7%	68	8.8%	39	5.1%	22	2.9%	26	3.4%	18	2.3%	10	1.3%	4	0.5%
Kennan	86	38.7%	40	18.0%	21	9.5%	8	3.6%	5	2.3%	7	3.2%	7	3.2%	3	1.4%	5	2.3%
Soso	86	41.7%	34	16.5%	21	10.2%	10	4.9%	8	3.9%	3	1.5%	3	1.5%	2	1.0%	4	1.9%
Iwaki	194	38.9%	92	18.4%	45	9.0%	23	4.6%	27	5.4%	13	2.6%	14	2.8%	7	1.4%	6	1.2%
Aizu	135	39.6%	73	21.4%	33	9.7%	17	5.0%	10	2.9%	8	2.3%	5	1.5%	2	0.6%	7	2.1%
Minami-aizu	22	50.0%	7	15.9%	5	11.4%	0	0.0%	0	0.0%	1	2.3%	1	2.3%	0	0.0%	0	0.0%
Outside Fukushima	29	60.4%	5	10.4%	3	6.3%	4	8.3%	2	4.2%	0	0.0%	1	2.1%	1	2.1%	0	0.0%
Total	1,207	42.5%	505	17.8%	259	9.1%	134	4.7%	96	3.4%	70	2.5%	60	2.1%	35	1.2%	31	1.1%

Area	Collagen disease[7]		Hypertension		Diabetes		Hyperlipemia		Infection[8]		Blood disorders[9]		Neuromuscular disease[10]		Other		Total	
Kempoku	7	1.0%	5	0.7%	3	0.4%	5	0.7%	5	0.7%	4	0.6%	6	0.8%	78	10.9%	714	100.0%
Kenchu	6	0.8%	5	0.7%	7	0.9%	1	0.1%	5	0.7%	3	0.4%	2	0.3%	89	11.6%	769	100.0%
Kennan	1	0.5%	3	1.4%	2	0.9%	3	1.4%	1	0.5%	0	0.0%	2	0.9%	28	12.6%	222	100.0%
Soso	3	1.5%	3	1.5%	1	0.5%	4	1.9%	1	0.5%	0	0.0%	1	0.5%	22	10.7%	206	100.0%
Iwaki	7	1.4%	6	1.2%	4	0.8%	2	0.4%	4	0.8%	3	0.6%	1	0.2%	51	10.2%	499	100.0%
Aizu	4	1.2%	2	0.6%	3	0.9%	1	0.3%	1	0.3%	2	0.6%	0	0.0%	38	11.1%	341	100.0%
Minami-aizu	1	2.3%	0	0.0%	0	0.0%	1	2.3%	0	0.0%	1	2.3%	0	0.0%	5	11.4%	44	100.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	2.1%	0	0.0%	0	0.0%	2	4.2%	48	100.0%
Total	29	1.0%	24	0.8%	20	0.7%	17	0.6%	18	0.6%	13	0.5%	12	0.4%	313	11.0%	2,843	100.0%

1) Atopic dermatitis, Allergic rhinitis, etc. 2) Pneumonia, asthma, etc. 3) Depression, schizophrenia, etc.

4) Cerebral apoplexy, epilepsy, etc. 5) Myocardial infarction, angina pectoris, arrhythmia, congenital heart disease, etc.

6) Chronic hepatitis, etc. 7) Lupus erythematosus, etc. 8) Tuberculosis, etc. 9) Idiopathic thrombocytopenia, etc. 10) Myasthenia gravis, etc.

Incidence rate is not shown because of uncertain duration of the disease

Breakdown of OTHER (Multiple answers allowed)

Ovarian tumor	73	Tonsillitis	3	Acetabular dysplasia	1	Renal cyst	1
Myoma of the uterus	55	Pancreatitis	3	Alopecia areata	1	Renal calculus	1
Endometriosis	26	Hemangioma	2	Hypophysial diabetes insipidus	1	Kidney disease	1
Pyelonephritis	15	Adenomyosis of the uterus	2	Familial Mediterranean fever	1	Kidney failure	1
Glaucoma	11	Endometrial polyp	2	Nervus abducens palsy	1	Venous thrombosis	1
IgA nephropathy	10	Glomerulonephritis	2	Psoriatic arthritis	1	Congenital bone marrow spondylolisthesis	1
Cervical intraepithelial neoplasia	9	Squint	2	Sensorineural deafness	1	Condylomata Acuminata	1
Polycystic ovary syndrome	8	Habitual abortion	2	Interstitial cystitis	1	Fibrous dysplasia of bone	1
Cholelithiasis	6	Inflammation of the gallbladder	2	Acute maxillary sinusitis	1	Cyst of femur	1
Sarcoidosis	5	Sudden deafness	2	Cleft of lip and alveolar process	1	Femur head necrosis	1
Ureteral lithiasis	5	Ovarian hemorrhage	2	Hyperprolactinemia	1	Cartilage tumor	1
Meniere's disease	4	Atheroma	1	Lumbar disc herniation	1	Sepsis	1
Extrauterine pregnancy	4	Anaphylactic shock	1	Bone tumors	1	Cataracta	1
Nephritis	4	Ranula	1	Osteoporosis	1	Hydatidiform mole	1
Sinusitis	4	Ganglion	1	Pelviperitonitis	1	Retinal detachment	1
Allergic purpura	3	Nephrotic syndrome	1	Peliosis	1	A drug rash	1
Psoriasis	3	Protein S deficiency	1	Hemorrhoids	1	Salpinx edema	1
Tumor of the parotid gland	3	Dizziness	1	Otosclerosiss	1	Giant cell tumor of tibia	1
Carpal tunnel syndrome	3	Livedo vasculopathy	1	Autosensitization dermatitis	1	Splenic cystis	1
Deep thrombophlebitis	3	Lymph adenopathy	1	Eczema	1		
Kidney disease	3	Lymphoma	1	Palmoplantar pustulosis	1		
Kawasaki disease	3	Ectopic pregnancy	1	Invasive hydatidiform mole	1		
Otitis media	3	Right congenital hydronephrosis	1	Vitiligo vulgaris	1		

Q12. Have you suffered from any disease during the current pregnancy?

Area	Yes		No		No response		Total	
Kempoku	556	30.9%	1,237	68.7%	8	0.4%	1,801	100.0%
Kenchu	560	29.2%	1,349	70.4%	8	0.4%	1,917	100.0%
Kennan	148	26.5%	409	73.3%	1	0.2%	558	100.0%
Soso	137	26.3%	382	73.5%	1	0.2%	520	100.0%
Iwaki	291	25.4%	848	74.0%	7	0.6%	1,146	100.0%
Aizu	258	29.9%	601	69.6%	5	0.6%	864	100.0%
Minami-aizu	29	36.3%	51	63.8%	0	0.0%	80	100.0%
Outside Fukushima	30	26.5%	83	73.5%	0	0.0%	113	100.0%
Total	2,009	28.7%	4,960	70.9%	30	0.4%	6,999	100.0%

Area	Incidence of all diseases		Valid response
Kempoku	556	31.0%	1,793
Kenchu	560	29.3%	1,909
Kennan	148	26.6%	557
Soso	137	26.4%	519
Iwaki	291	25.5%	1,139
Aizu	258	30.0%	859
Minami-aizu	29	36.3%	80
Outside Fukushima	30	26.5%	113
Total	2,009	28.8%	6,969

The denominator is the sum of valid response of YES and NO.

Incidence

Area	Threatened premature delivery		Threatened abortion		Hypertension in pregnancy		Gestational diabetes mellitus		Infectious disease[1]		Oligohydramnios		Premature birth	
Kempoku	250	13.9%	147	8.2%	56	3.1%	63	3.5%	51	2.8%	28	1.6%	28	1.6%
Kenchu	248	13.0%	146	7.6%	80	4.2%	63	3.3%	45	2.4%	36	1.9%	35	1.8%
Kennan	60	10.8%	40	7.2%	18	3.2%	13	2.3%	19	3.4%	13	2.3%	17	3.1%
Soso	51	9.8%	39	7.5%	21	4.0%	15	2.9%	16	3.1%	7	1.3%	3	0.6%
Iwaki	125	11.0%	98	8.6%	35	3.1%	21	1.8%	19	1.7%	15	1.3%	11	1.0%
Aizu	107	12.5%	77	9.0%	32	3.7%	21	2.4%	32	3.7%	11	1.3%	9	1.0%
Minami-aizu	17	21.3%	10	12.5%	2	2.5%	4	5.0%	2	2.5%	2	2.5%	2	2.5%
Outside Fukushima	16	14.2%	8	7.1%	0	0.0%	0	0.0%	0	0.0%	3	2.7%	0	0.0%
Total	874	12.5%	565	8.1%	244	3.5%	200	2.9%	184	2.6%	115	1.7%	105	1.5%

Area	Placenta previa		Mental problems including insomnia and anxiety		Polyhydramnios		Miscarriage		Injury		Thrombosis[2]		Cerebral apoplexy[3]		Other	
Kempoku	23	1.3%	13	0.7%	5	0.3%	5	0.3%	2	0.1%	1	0.1%	0	0.0%	35	2.0%
Kenchu	21	1.1%	13	0.7%	12	0.6%	2	0.1%	0	0.0%	1	0.1%	0	0.0%	47	2.5%
Kennan	9	1.6%	2	0.4%	3	0.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	12	2.2%
Soso	6	1.2%	3	0.6%	3	0.6%	0	0.0%	0	0.0%	1	0.2%	0	0.0%	15	2.9%
Iwaki	13	1.1%	1	0.1%	2	0.2%	3	0.3%	1	0.1%	0	0.0%	0	0.0%	21	1.8%
Aizu	6	0.7%	9	1.0%	4	0.5%	2	0.2%	0	0.0%	0	0.0%	0	0.0%	21	2.4%
Minami-aizu	3	3.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	3.8%
Outside Fukushima	2	1.8%	1	0.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	6	5.3%
Total	83	1.2%	42	0.6%	29	0.4%	12	0.2%	3	0.0%	3	0.0%	0	0.0%	160	2.3%

1) Pneumonia, influenza, tetanus, etc. 2) Thrombosis, pulmonary embolism 3) Brain infarction, cerebral hemorrhage, etc.

The denominator is the sum of valid responses. (The 6,969 people who said *Yes* or *No* to Q12.)

Proportion does not total to 100.0% because of multiple answers

Breakdown of ‘Other’ (Multiple answers allowed)

Myoma of the uterus	29	Varicose Veins	3	Herpangina	1	Rosacea-like dermatitis	1
Ovarian tumor	12	Hashimoto's thyroiditis	2	Hyperventilation syndrome	1	Calculus renum	1
Asthma	11	Combined pregnancy	2	Mesenchymal variant placenta	1	Kidney failure	1
Sinusitis	10	Cervical incompetence	2	Facial nerve palsy	1	Impending uterine rupture	1
Pyelonephritis	8	Shingles	2	Erythema nodosum	1	Alopecia	1
Cancer of the uterine cervix	6	Placenta accreta	2	Blood type incompatible pregnancy	1	Gallbladder polyp	1
Premature ablation of normally implanted placenta	6	Hives	2	Coxitis	1	Gall stone	1
Cervical intraepithelial neoplasia	5	Inguinal hernia	2	Hypothyroidism	1	Aneurysm	1
Endocervical polyp	5	Ileus	1	Hyperthyroidism	1	Breast neoplasm	1
Twin-to-twin transfusion syndrome	5	Ranula	1	Thyroid disease	1	Pregnancy epulis	1
Calculus of ureter	5	Condyloma	1	Neuralgia sciatica	1	Leukemia	1
Prurigo gestationalis	4	Pityriasis rosea	1	Uterine prolapse	1	Arrhythmia a	1
Polyp	3	Epilepsy	1	Endometriosis	1	Benign paroxysmal positional vertigo	1
Bronchitis	3	Basedow disease	1	Peliosis	1	Cystocele	1

Participants who were pregnant for more than 12 weeks and gave birth (excluding triplets)

Area	Singleton		Twin		No response		Total	
Kempoku	1,772	99.1%	15	0.8%	1	0.1%	1,788	100.0%
Kenchu	1,889	99.0%	18	0.9%	1	0.1%	1,908	100.0%
Kennan	550	99.1%	5	0.9%	0	0.0%	555	100.0%
Soso	513	99.2%	3	0.6%	1	0.2%	517	100.0%
Iwaki	1,124	99.1%	10	0.9%	0	0.0%	1,134	100.0%
Aizu	851	99.2%	7	0.8%	0	0.0%	858	100.0%
Minami-aizu	78	100.0%	0	0.0%	0	0.0%	78	100.0%
Outside Fukushima	113	100.0%	0	0.0%	0	0.0%	113	100.0%
Total	6,890	99.1%	58	0.8%	3	0.0%	6,951	100.0%

Q13. How many weeks' gestation were you when you gave birth?

Singleton

Area	12-21 weeks		22-23 weeks		24-27 weeks		28-31 weeks		32-36 weeks		37-41 weeks		≥42 weeks		Total	
Kempoku	7	0.4%	2	0.1%	4	0.2%	17	1.0%	78	4.4%	1,663	93.8%	1	0.1%	1,772	100.0%
Kenchu	10	0.5%	1	0.1%	7	0.4%	15	0.8%	84	4.4%	1,768	93.6%	4	0.2%	1,889	100.0%
Kennan	4	0.7%	1	0.2%	3	0.5%	3	0.5%	20	3.6%	519	94.4%	0	0.0%	550	100.0%
Soso	1	0.2%	0	0.0%	0	0.0%	2	0.4%	27	5.3%	480	93.6%	3	0.6%	513	100.0%
Iwaki	8	0.7%	0	0.0%	0	0.0%	7	0.6%	37	3.3%	1,069	95.1%	3	0.3%	1,124	100.0%
Aizu	3	0.4%	1	0.1%	3	0.4%	6	0.7%	33	3.9%	804	94.5%	1	0.1%	851	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	1	1.3%	4	5.1%	73	93.6%	0	0.0%	78	100.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	2	1.8%	1	0.9%	110	97.3%	0	0.0%	113	100.0%
Total	33	0.5%	5	0.1%	17	0.2%	53	0.8%	284	4.1%	6,486	94.1%	12	0.2%	6,890	100.0%

Twin

Area	12-21 weeks		22-23 weeks		24-27 weeks		28-31 weeks		32-36 weeks		37-41 weeks		≥42 weeks		Total	
Kempoku	0	0.0%	0	0.0%	1	6.7%	0	0.0%	3	20.0%	11	73.3%	0	0.0%	15	100.0%
Kenchu	0	0.0%	0	0.0%	1	5.6%	0	0.0%	7	38.9%	10	55.6%	0	0.0%	18	100.0%
Kennan	0	0.0%	0	0.0%	1	20.0%	0	0.0%	3	60.0%	1	20.0%	0	0.0%	5	100.0%
Soso	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	33.3%	2	66.7%	0	0.0%	3	100.0%
Iwaki	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	10.0%	9	90.0%	0	0.0%	10	100.0%
Aizu	0	0.0%	0	0.0%	0	0.0%	1	14.3%	2	28.6%	4	57.1%	0	0.0%	7	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	0	0.0%	0	0.0%	3	5.2%	1	1.7%	17	29.3%	37	63.8%	0	0.0%	58	100.0%

Proportion of premature birth (Premature birth is one that occurs between 22 and 36 week of pregnancy.)

Singleton and twin pregnancy

Area	Number of delivery by weeks (Singleton and twin pregnancy)								Proportion of premature birth
	12-21	22-23	24-27	28-31	32-36	37-41	42-	Total	22-36 weeks / Total-(12-21weeks)
Kempoku	7	2	6	17	84	1,685	1	1,802	6.1%
Kenchu	10	1	9	15	98	1,788	4	1,925	6.4%
Kennan	4	1	5	3	26	521	0	560	6.3%
Soso	1	0	0	2	29	484	3	519	6.0%
Iwaki	8	0	0	7	39	1,087	3	1,144	4.1%
Aizu	3	1	3	8	37	812	1	865	5.7%
Minami-aizu	0	0	0	1	4	73	0	78	6.4%
Outside Fukushima	0	0	0	2	1	110	0	113	2.7%
Total	33	5	23	55	318	6,560	12	7,006	5.8%

*Excluding those who checked NOT SURE, and were pregnant for less than 12 weeks.

**The denominator excludes the number of delivery less than 22 weeks.

Details of delivery

Singleton

Area	Spontaneous labor		Vacuum extraction or forceps delivery		Cesarean section		No response		Total	
Kempoku	1,209	68.2%	208	11.7%	342	19.3%	13	0.7%	1,772	100.0%
Kenchu	1,253	66.3%	190	10.1%	434	23.0%	12	0.6%	1,889	100.0%
Kennan	395	71.8%	59	10.7%	91	16.5%	5	0.9%	550	100.0%
Soso	294	57.3%	108	21.1%	108	21.1%	3	0.6%	513	100.0%
Iwaki	724	64.4%	152	13.5%	239	21.3%	9	0.8%	1,124	100.0%
Aizu	515	60.5%	108	12.7%	224	26.3%	4	0.5%	851	100.0%
Minami-aizu	50	64.1%	10	12.8%	16	20.5%	2	2.6%	78	100.0%
Outside Fukushima	68	60.2%	22	19.5%	23	20.4%	0	0.0%	113	100.0%
Total	4,508	65.4%	857	12.4%	1,477	21.4%	48	0.7%	6,890	100.0%

The first child of twins

Area	Spontaneous labor		Vacuum extraction or forceps delivery		Cesarean section		No response		Total	
Kempoku	1	6.7%	0	0.0%	14	93.3%	0	0.0%	15	100.0%
Kenchu	1	5.6%	0	0.0%	17	94.4%	0	0.0%	18	100.0%
Kennan	0	0.0%	0	0.0%	5	100.0%	0	0.0%	5	100.0%
Soso	0	0.0%	0	0.0%	3	100.0%	0	0.0%	3	100.0%
Iwaki	0	0.0%	0	0.0%	10	100.0%	0	0.0%	10	100.0%
Aizu	0	0.0%	0	0.0%	7	100.0%	0	0.0%	7	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	2	3.4%	0	0.0%	56	96.6%	0	0.0%	58	100.0%

The second child of twins

Area	Spontaneous labor		Vacuum extraction or forceps delivery		Cesarean section		No response		Total	
Kempoku	1	6.7%	0	0.0%	13	86.7%	1	6.7%	15	100.0%
Kenchu	1	5.6%	0	0.0%	17	94.4%	0	0.0%	18	100.0%
Kennan	0	0.0%	0	0.0%	5	100.0%	0	0.0%	5	100.0%
Soso	0	0.0%	0	0.0%	3	100.0%	0	0.0%	3	100.0%
Iwaki	0	0.0%	0	0.0%	10	100.0%	0	0.0%	10	100.0%
Aizu	0	0.0%	0	0.0%	7	100.0%	0	0.0%	7	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	2	3.4%	0	0.0%	55	94.8%	1	1.7%	58	100.0%

Q14. State of newborn baby

(n): Number of valid response

The following total number includes babies with indeterminate sex.

The ratio of male to female by area (Singleton and twin pregnancies)

Area	Male		Female		No response		Total	
Kempoku	941	52.2%	856	47.5%	5	0.3%	1802	100.0%
Kenchu	961	49.9%	958	49.8%	6	0.3%	1925	100.0%
Kennan	257	45.9%	300	53.6%	3	0.5%	560	100.0%
Soso	248	47.8%	270	52.0%	1	0.2%	519	100.0%
Iwaki	580	50.7%	556	48.6%	8	0.7%	1144	100.0%
Aizu	416	48.1%	444	51.3%	5	0.6%	865	100.0%
Minami-aizu	38	48.7%	40	51.3%	0	0.0%	78	100.0%
Outside Fukushima	60	53.1%	53	46.9%	0	0.0%	113	100.0%
Total	3501	50.0%	3477	49.6%	28	0.4%	7006	100.0%

Newborn baby birth weight (Singleton pregnancy) Mean±SD (g) (n)

Area	Total	Male	Female	No response
Kempoku	3019.1 ± 461.7 (1,767)	3049.6 ± 484.1 (928)	2988.8 ± 421.2 (838)	5
Kenchu	2984.5 ± 471.4 (1,882)	3028.2 ± 481.9 (942)	2946.9 ± 437.6 (938)	7
Kennan	2995.6 ± 473.0 (547)	3049.1 ± 455.4 (254)	2949.2 ± 483.7 (293)	3
Soso	2961.4 ± 376.2 (512)	3004.8 ± 362.6 (245)	2921.6 ± 384.7 (267)	1
Iwaki	3019.9 ± 434.6 (1,118)	3087.4 ± 438.4 (571)	2954.7 ± 401.0 (546)	6
Aizu	3002.7 ± 437.1 (844)	3054.1 ± 443.9 (409)	2954.5 ± 425.6 (435)	7
Minami-aizu	3043.0 ± 409.4 (78)	3048.5 ± 434.0 (38)	3037.8 ± 390.1 (40)	0
Outside Fukushima	3060.3 ± 318.3 (113)	3142.1 ± 317.4 (60)	2967.7 ± 295.8 (53)	0
Total	3002.5 ± 449.8 (6,861)	3048.9 ± 458.8 (3,447)	2959.0 ± 424.4 (3,410)	29

Males and females (Singleton pregnancy)

Area	<1.0 kg		1.0-<1.5 kg		1.5-<2.0 kg		2.0-<2.5 kg		2.5-<3.0 kg	
Kempoku	10	0.6%	14	0.8%	16	0.9%	105	5.9%	649	36.6%
Kenchu	17	0.9%	6	0.3%	25	1.3%	143	7.6%	739	39.1%
Kennan	6	1.1%	1	0.2%	7	1.3%	33	6.0%	222	40.4%
Soso	1	0.2%	1	0.2%	7	1.4%	42	8.2%	221	43.1%
Iwaki	3	0.3%	3	0.3%	12	1.1%	70	6.2%	445	39.6%
Aizu	3	0.4%	7	0.8%	7	0.8%	48	5.6%	352	41.4%
Minami-aizu	0	0.0%	0	0.0%	2	2.6%	2	2.6%	37	47.4%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	4	3.5%	39	34.5%
Total	40	0.6%	32	0.5%	76	1.1%	447	6.5%	2,704	39.2%

Area	3.0-<3.5 kg		3.5-<4.0 kg		4.0-<4.5 kg		≥4.5 kg		No response		Total	
Kempoku	780	44.0%	182	10.3%	9	0.5%	2	0.1%	5	0.3%	1,772	100.0%
Kenchu	746	39.5%	196	10.4%	10	0.5%	0	0.0%	7	0.4%	1,889	100.0%
Kennan	221	40.2%	55	10.0%	1	0.2%	1	0.2%	3	0.5%	550	100.0%
Soso	214	41.7%	26	5.1%	0	0.0%	0	0.0%	1	0.2%	513	100.0%
Iwaki	470	41.8%	107	9.5%	5	0.4%	3	0.3%	6	0.5%	1,124	100.0%
Aizu	335	39.4%	87	10.2%	5	0.6%	0	0.0%	7	0.8%	851	100.0%
Minami-aizu	26	33.3%	9	11.5%	2	2.6%	0	0.0%	0	0.0%	78	100.0%
Outside Fukushima	63	55.8%	7	6.2%	0	0.0%	0	0.0%	0	0.0%	113	100.0%
Total	2,855	41.4%	669	9.7%	32	0.5%	6	0.1%	29	0.4%	6,890	100.0%

Males (Singleton pregnancy)

Area	<1.0 kg		1.0-<1.5 kg		1.5-<2.0 kg		2.0-<2.5 kg		2.5-<3.0 kg	
Kempoku	7	0.8%	8	0.9%	11	1.2%	44	4.7%	306	33.0%
Kenchu	11	1.2%	0	0.0%	12	1.3%	57	6.0%	330	34.9%
Kennan	2	0.8%	0	0.0%	4	1.6%	9	3.5%	97	38.2%
Soso	0	0.0%	0	0.0%	4	1.6%	15	6.1%	101	41.2%
Iwaki	2	0.4%	1	0.2%	4	0.7%	25	4.4%	203	35.6%
Aizu	2	0.5%	4	1.0%	2	0.5%	16	3.9%	160	38.9%
Minami-aizu	0	0.0%	0	0.0%	1	2.6%	1	2.6%	17	44.7%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	2	3.3%	14	23.3%
Total	24	0.7%	13	0.4%	38	1.1%	169	4.9%	1,228	35.6%

Area	3.0-<3.5 kg		3.5-<4.0 kg		4.0-<4.5 kg		≥4.5 kg		No response		Total	
Kempoku	438	47.2%	104	11.2%	8	0.9%	2	0.2%	0	0.0%	928	100.0%
Kenchu	407	43.1%	119	12.6%	6	0.6%	0	0.0%	3	0.3%	945	100.0%
Kennan	112	44.1%	28	11.0%	1	0.4%	1	0.4%	0	0.0%	254	100.0%
Soso	111	45.3%	14	5.7%	0	0.0%	0	0.0%	0	0.0%	245	100.0%
Iwaki	255	44.7%	75	13.1%	4	0.7%	2	0.4%	0	0.0%	571	100.0%
Aizu	170	41.4%	51	12.4%	4	1.0%	0	0.0%	2	0.5%	411	100.0%
Minami-aizu	14	36.8%	3	7.9%	2	5.3%	0	0.0%	0	0.0%	38	100.0%
Outside Fukushima	39	65.0%	5	8.3%	0	0.0%	0	0.0%	0	0.0%	60	100.0%
Total	1,546	44.8%	399	11.6%	25	0.7%	5	0.1%	5	0.1%	3,452	100.0%

Females (Singleton pregnancy)

Area	<1.0 kg		1.0-<1.5 kg		1.5-<2.0 kg		2.0-<2.5 kg		2.5-<3.0 kg	
Kempoku	2	0.2%	6	0.7%	5	0.6%	61	7.3%	343	40.9%
Kenchu	4	0.4%	6	0.6%	13	1.4%	86	9.2%	409	43.6%
Kennan	4	1.4%	1	0.3%	3	1.0%	24	8.2%	125	42.7%
Soso	1	0.4%	1	0.4%	3	1.1%	27	10.1%	120	44.9%
Iwaki	0	0.0%	2	0.4%	8	1.5%	45	8.2%	242	44.3%
Aizu	1	0.2%	3	0.7%	5	1.1%	32	7.4%	192	44.1%
Minami-aizu	0	0.0%	0	0.0%	1	2.5%	1	2.5%	20	50.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	2	3.8%	25	47.2%
Total	12	0.4%	19	0.6%	38	1.1%	278	8.2%	1,476	43.3%

Area	3.0-<3.5 kg		3.5-<4.0 kg		4.0-<4.5 kg		≥4.5 kg		No response		Total	
Kempoku	342	40.8%	78	9.3%	1	0.1%	0	0.0%	1	0.1%	839	100.0%
Kenchu	339	36.1%	77	8.2%	4	0.4%	0	0.0%	0	0.0%	938	100.0%
Kennan	109	37.2%	27	9.2%	0	0.0%	0	0.0%	0	0.0%	293	100.0%
Soso	103	38.6%	12	4.5%	0	0.0%	0	0.0%	0	0.0%	267	100.0%
Iwaki	215	39.4%	32	5.9%	1	0.2%	1	0.2%	0	0.0%	546	100.0%
Aizu	165	37.9%	36	8.3%	1	0.2%	0	0.0%	0	0.0%	435	100.0%
Minami-aizu	12	30.0%	6	15.0%	0	0.0%	0	0.0%	0	0.0%	40	100.0%
Outside Fukushima	24	45.3%	2	3.8%	0	0.0%	0	0.0%	0	0.0%	53	100.0%
Total	1,309	38.4%	270	7.9%	7	0.2%	1	0.0%	1	0.0%	3,411	100.0%

Newborn baby birth weight (Twin pregnancy) Mean (g) ±SD (Valid response)

Area	Total	Male	Female	No response
Kempoku	2282.2 ± 525.0 (30)	2475.5 ± 412.3 (13)	2134.5 ± 564.3 (17)	0
Kenchu	2123.6 ± 446.5 (36)	2135.4 ± 364.8 (16)	2114.1 ± 511.9 (20)	0
Kennan	1696.6 ± 818.7 (10)	1981.7 ± 473.7 (3)	1574.4 ± 934.0 (7)	0
Soso	2335.3 ± 92.9 (6)	2398.7 ± 53.7 (3)	2272.0 ± 81.6 (3)	0
Iwaki	2286.7 ± 581.2 (20)	2375.8 ± 138.5 (9)	2430.6 ± 326.7 (10)	0
Aizu	2162.0 ± 438.9 (14)	1899.2 ± 560.0 (5)	2308.0 ± 298.4 (9)	0
Minami-aizu	(0)	(0)	(0)	0
Outside Fukushima	(0)	(0)	(0)	0
Total	2171.5 ± 536.5 (116)	2252.4 ± 403.4 (49)	2143.7 ± 560.2 (66)	0

The total number includes babies with indeterminate sex.

Newborn baby birth weight

Males and females (Twin pregnancy)

Area	<1.0 kg		1.0-<1.5 kg		1.5-<2.0 kg		2.0-<2.5 kg		2.5-<3.0 kg		3.0-<3.5 kg		No response		Total	
Kempoku	1	3.3%	1	3.3%	3	10.0%	13	43.3%	9	30.0%	3	10.0 %	0	0.0%	30	100.0%
Kenchu	2	5.6%	2	5.6%	7	19.4%	19	52.8%	6	16.7%	0	0.0%	0	0.0%	36	100.0%
Kennan	3	30.0%	0	0.0%	3	30.0%	3	30.0%	1	10.0%	0	0.0%	0	0.0%	10	100.0%
Soso	0	0.0%	0	0.0%	0	0.0%	6	100.0 %	0	0.0%	0	0.0%	0	0.0%	6	100.0%
Iwaki	1	5.0%	0	0.0%	1	5.0%	12	60.0%	6	30.0%	0	0.0%	0	0.0%	20	100.0%
Aizu	0	0.0%	2	14.3%	1	7.1%	8	57.1%	3	21.4%	0	0.0%	0	0.0%	14	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	7	6.0%	5	4.3%	15	12.9%	61	52.6%	25	21.6%	3	2.6%	0	0.0%	116	100.0%

Males (Twin pregnancy)

Area	<1.0 kg		1.0-<1.5 kg		1.5-<2.0 kg		2.0-<2.5 kg		2.5-<3.0 kg		3.0-<3.5 kg		Total	
Kempoku	0	0.0%	0	0.0%	1	7.7%	6	46.2%	3	23.1%	3	23.1%	13	100.0%
Kenchu	0	0.0%	1	6.3%	5	31.3%	8	50.0%	2	12.5%	0	0.0%	16	100.0%
Kennan	0	0.0%	0	0.0%	2	66.7%	1	33.3%	0	0.0%	0	0.0%	3	100.0%
Soso	0	0.0%	0	0.0%	0	0.0%	3	100.0%	0	0.0%	0	0.0%	3	100.0%
Iwaki	0	0.0%	0	0.0%	0	0.0%	6	66.7%	3	33.3%	0	0.0%	9	100.0%
Aizu	0	0.0%	2	40.0%	0	0.0%	3	60.0%	0	0.0%	0	0.0%	5	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	0	0.0%	3	6.1%	8	16.3%	27	55.1%	8	16.3%	3	6.1%	49	100.0%

Females (Twin pregnancy)

Area	<1.0 kg		1.0-<1.5 kg		1.5-<2.0 kg		2.0-<2.5 kg		2.5-<3.0 kg		3.0-<3.5 kg		Total	
Kempoku	1	5.9%	1	5.9%	2	11.8%	7	41.2%	6	35.3%	0	0.0%	17	100.0%
Kenchu	2	10.0%	1	5.0%	2	10.0%	11	55.0%	4	20.0%	0	0.0%	20	100.0%
Kennan	3	42.9%	0	0.0%	1	14.3%	2	28.6%	1	14.3%	0	0.0%	7	100.0%
Soso	0	0.0%	0	0.0%	0	0.0%	3	100.0%	0	0.0%	0	0.0%	3	100.0%
Iwaki	0	0.0%	0	0.0%	1	10.0%	6	60.0%	3	30.0%	0	0.0%	10	100.0%
Aizu	0	0.0%	0	0.0%	1	11.1%	5	55.6%	3	33.3%	0	0.0%	9	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	6	9.1%	2	3.0%	7	10.6%	34	51.5%	17	25.8%	0	0.0%	66	100.0%

Newborn baby birth weight (Singleton and twin pregnancies)

Excluding 29 participants with no response

Area	<1.0 kg	1.0-<1.5 kg	1.5-<2.0 kg	2.0-<2.5 kg	2.5-<3.0 kg	3.0-<3.5 kg	3.5-<4.0 kg	4.0-<4.5 kg	≥4.5 kg	Total	Low birth weight infant	Proportion of low birth weight infant
Kempoku	11	15	19	118	658	783	182	9	2	1,797	163	9.1%
Kenchu	19	8	32	162	745	746	196	10	0	1,918	221	11.5%
Kennan	9	1	10	36	223	221	55	1	1	557	56	10.1%
Soso	1	1	7	48	221	214	26	0	0	518	57	11.0%
Iwaki	4	3	13	82	451	470	107	5	3	1,138	102	9.0%
Aizu	3	9	8	56	355	335	87	5	0	858	76	8.9%
Minami-aizu	0	0	2	2	37	26	9	2	0	78	4	5.1%
Outside Fukushima	0	0	0	4	39	63	7	0	0	113	4	3.5%
Total	47	37	91	508	2,729	2,858	669	32	6	6,977	683	9.8%

Newborn baby birth height (Singleton pregnancy) Mean (cm) ±SD (n)

Area	Total	Male	Female	No response
Kempoku	49.0 ± 3.0 (1,761)	49.2 ± 3.0 (925)	48.8 ± 2.5 (835)	11
Kenchu	48.8 ± 3.1 (1,873)	49.1 ± 3.1 (938)	48.6 ± 2.6 (933)	16
Kennan	49.2 ± 3.0 (546)	49.4 ± 2.7 (253)	49.0 ± 3.2 (293)	4
Soso	48.8 ± 2.0 (511)	49.1 ± 1.9 (245)	48.5 ± 2.1 (266)	2
Iwaki	49.1 ± 2.4 (1,109)	49.4 ± 2.7 (568)	48.8 ± 2.1 (541)	15
Aizu	48.6 ± 2.8 (841)	48.9 ± 3.1 (407)	48.3 ± 2.4 (434)	10
Minami-aizu	48.8 ± 2.1 (77)	49.3 ± 2.0 (38)	48.4 ± 2.1 (39)	1
Outside Fukushima	49.0 ± 1.7 (113)	49.5 ± 1.5 (60)	48.3 ± 1.8 (53)	0
Total	48.9 ± 2.8 (6,831)	49.2 ± 2.9 (3,434)	48.7 ± 2.5 (3,394)	59

Newborn baby birth height

Males and females (Singleton pregnancy)

Area	<47 cm		47-<48 cm		48-<49 cm		49-<50 cm		50-<51 cm	
Kempoku	197	11.1%	177	10.0%	267	15.1%	362	20.4%	391	22.1%
Kenchu	240	12.7%	184	9.7%	293	15.5%	389	20.6%	397	21.0%
Kennan	49	8.9%	33	6.0%	74	13.5%	118	21.5%	136	24.7%
Soso	63	12.3%	66	12.9%	88	17.2%	131	25.5%	91	17.7%
Iwaki	137	12.2%	130	11.6%	174	15.5%	226	20.1%	210	18.7%
Aizu	127	14.9%	120	14.1%	136	16.0%	168	19.7%	155	18.2%
Minami-aizu	8	10.3%	11	14.1%	13	16.7%	14	17.9%	20	25.6%
Outside Fukushima	12	10.6%	14	12.4%	19	16.8%	25	22.1%	28	24.8%
Total	833	12.1%	735	10.7%	1,064	15.4%	1,433	20.8%	1,428	20.7%

Area	51-<52 cm		≥52 cm		No response		Total	
Kempoku	214	12.1%	153	8.6%	11	0.6%	1,772	100.0%
Kenchu	248	13.1%	122	6.5%	16	0.8%	1,889	100.0%
Kennan	87	15.8%	49	8.9%	4	0.7%	550	100.0%
Soso	42	8.2%	30	5.8%	2	0.4%	513	100.0%
Iwaki	134	11.9%	98	8.7%	15	1.3%	1,124	100.0%
Aizu	85	10.0%	50	5.9%	10	1.2%	851	100.0%
Minami-aizu	7	9.0%	4	5.1%	1	1.3%	78	100.0%
Outside Fukushima	8	7.1%	7	6.2%	0	0.0%	113	100.0%
Total	825	12.0%	513	7.4%	59	0.9%	6,890	100.0%

Males (Singleton pregnancy)

Area	<47 cm		47-<48 cm		48-<49 cm		49-<50 cm		50-<51 cm	
Kempoku	82	8.8%	88	9.5%	121	13.0%	197	21.2%	216	23.3%
Kenchu	98	10.4%	76	8.0%	132	14.0%	200	21.2%	204	21.6%
Kennan	20	7.9%	13	5.1%	34	13.4%	48	18.9%	63	24.8%
Soso	25	10.2%	27	11.0%	36	14.7%	61	24.9%	48	19.6%
Iwaki	50	8.8%	55	9.6%	89	15.6%	127	22.2%	104	18.2%
Aizu	48	11.7%	45	10.9%	60	14.6%	81	19.7%	88	21.4%
Minami-aizu	3	7.9%	4	10.5%	5	13.2%	7	18.4%	12	31.6%
Outside Fukushima	3	5.0%	3	5.0%	10	16.7%	15	25.0%	17	28.3%
Total	329	9.5%	311	9.0%	487	14.1%	736	21.3%	752	21.8%

Area	51-<52 cm		≥52 cm		No response		Total	
Kempoku	121	13.0%	100	10.8%	3	0.3%	928	100.0%
Kenchu	146	15.4%	82	8.7%	7	0.7%	945	100.0%
Kennan	46	18.1%	29	11.4%	1	0.4%	254	100.0%
Soso	25	10.2%	23	9.4%	0	0.0%	245	100.0%
Iwaki	75	13.1%	68	11.9%	3	0.5%	571	100.0%
Aizu	53	12.9%	32	7.8%	4	1.0%	411	100.0%
Minami-aizu	4	10.5%	3	7.9%	0	0.0%	38	100.0%
Outside Fukushima	6	10.0%	6	10.0%	0	0.0%	60	100.0%
Total	476	13.8%	343	9.9%	18	0.5%	3,452	100.0%

Females (Singleton pregnancy)

Area	<47 cm		47-<48cm		48-<49 cm		49-<50 cm		50-<51 cm	
Kempoku	114	13.6%	89	10.6%	146	17.4%	165	19.7%	175	20.9%
Kenchu	140	14.9%	108	11.5%	161	17.2%	189	20.1%	193	20.6%
Kennan	29	9.9%	20	6.8%	40	13.7%	70	23.9%	73	24.9%
Soso	38	14.2%	39	14.6%	52	19.5%	70	26.2%	43	16.1%
Iwaki	87	15.9%	75	13.7%	85	15.6%	99	18.1%	106	19.4%
Aizu	79	18.2%	75	17.2%	76	17.5%	87	20.0%	67	15.4%
Minami-aizu	5	12.5%	7	17.5%	8	20.0%	7	17.5%	8	20.0%
Outside Fukushima	9	17.0%	11	20.8%	9	17.0%	10	18.9%	11	20.8%
Total	501	14.7%	424	12.4%	577	16.9%	697	20.4%	676	19.8%

Area	51-<52 cm		≥52 cm		No response		Total	
Kempoku	93	11.1%	53	6.3%	4	0.5%	839	100.0%
Kenchu	102	10.9%	40	4.3%	5	0.5%	938	100.0%
Kennan	41	14.0%	20	6.8%	0	0.0%	293	100.0%
Soso	17	6.4%	7	2.6%	1	0.4%	267	100.0%
Iwaki	59	10.8%	30	5.5%	5	0.9%	546	100.0%
Aizu	32	7.4%	18	4.1%	1	0.2%	435	100.0%
Minami-aizu	3	7.5%	1	2.5%	1	2.5%	40	100.0%
Outside Fukushima	2	3.8%	1	1.9%	0	0.0%	53	100.0%
Total	349	10.2%	170	5.0%	17	0.5%	3,411	100.0%

Newborn baby birth height (Twin pregnancy)

Mean (cm) ±SD (n)

Area	Total	Male	Female	No response
Kempoku	45.5 ± 4.0 (30)	46.8 ± 2.4 (13)	44.5 ± 4.8 (17)	0
Kenchu	43.4 ± 3.6 (36)	43.5 ± 2.4 (16)	43.4 ± 4.4 (20)	0
Kennan	39.7 ± 7.2 (10)	42.4 ± 3.4 (3)	38.6 ± 8.3 (7)	0
Soso	47.1 ± 1.7 (6)	48.0 ± 1.7 (3)	46.1 ± 1.2 (3)	0
Iwaki	46.4 ± 1.9 (19)	46.4 ± 1.1 (9)	46.3 ± 2.4 (10)	1
Aizu	44.2 ± 3.1 (14)	42.9 ± 3.6 (5)	44.9 ± 2.6 (9)	0
Minami-aizu	(0)	(0)	(0)	0
Outside Fukushima	(0)	(0)	(0)	0
Total	44.4 ± 4.2 (115)	45.0 ± 2.9 (49)	43.9 ± 4.9 (66)	1

Newborn baby birth height

Males and females (Twin pregnancy)

Area	<44 cm		44-<45 cm		45-<46 cm		46-<47 cm		47-<48 cm		48-<49 cm		≥49 cm		No response		Total	
Kempoku	6	20.0%	2	6.7%	5	16.7%	5	16.7%	3	10.0%	4	13.3%	5	16.7%	0	0.0%	30	100.0%
Kenchu	16	44.4%	4	11.1%	5	13.9%	7	19.4%	4	11.1%	0	0.0%	0	0.0%	0	0.0%	36	100.0%
Kennan	7	70.0%	0	0.0%	0	0.0%	2	20.0%	0	0.0%	1	10.0%	0	0.0%	0	0.0%	10	100.0%
Soso	0	0.0%	1	16.7%	0	0.0%	2	33.3%	1	16.7%	0	0.0%	2	33.3%	0	0.0%	6	100.0%
Iwaki	1	5.0%	1	5.0%	6	30.0%	4	20.0%	4	20.0%	1	5.0%	2	10.0%	1	5.0%	20	100.0%
Aizu	5	35.7%	2	14.3%	2	14.3%	2	14.3%	2	14.3%	1	7.1%	0	0.0%	0	0.0%	14	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	35	30.2%	10	8.6%	18	15.5%	22	19.0%	14	12.1%	7	6.0%	9	7.8%	1	0.9%	116	100.0%

Males (Twin pregnancy)

Area	<44 cm		44-<45 cm		45-<46 cm		46-<47 cm		47-<48 cm		48-<49 cm		≥49 cm		Total	
Kempoku	1	7.7%	1	7.7%	2	15.4%	2	15.4%	2	15.4%	2	15.4%	3	23.1%	13	100.0%
Kenchu	8	50.0%	1	6.3%	4	25.0%	2	12.5%	1	6.3%	0	0.0%	0	0.0%	16	100.0%
Kennan	2	66.7%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	3	100.0%
Soso	0	0.0%	0	0.0%	0	0.0%	1	33.3%	0	0.0%	0	0.0%	2	66.7%	3	100.0%
Iwaki	0	0.0%	0	0.0%	4	44.4%	1	11.1%	3	33.3%	1	11.1%	0	0.0%	9	100.0%
Aizu	3	60.0%	0	0.0%	0	0.0%	2	40.0%	0	0.0%	0	0.0%	0	0.0%	5	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	14	28.6%	2	4.1%	10	20.4%	9	18.4%	6	12.2%	3	6.1%	5	10.2%	49	100.0%

Females (Twin pregnancy)

Area	<44 cm		44-<45 cm		45-<46 cm		46-<47 cm		47-<48 cm		48-<49 cm		≥49 cm		Total	
Kempoku	5	29.4%	1	5.9%	3	17.6%	3	17.6%	1	5.9%	2	11.8%	2	11.8%	17	100.0%
Kenchu	8	40.0%	3	15.0%	1	5.0%	5	25.0%	3	15.0%	0	0.0%	0	0.0%	20	100.0%
Kennan	5	71.4%	0	0.0%	0	0.0%	1	14.3%	0	0.0%	1	14.3%	0	0.0%	7	100.0%
Soso	0	0.0%	1	33.3%	0	0.0%	1	33.3%	1	33.3%	0	0.0%	0	0.0%	3	100.0%
Iwaki	1	10.0%	1	10.0%	2	20.0%	3	30.0%	1	10.0%	0	0.0%	2	20.0%	10	100.0%
Aizu	2	22.2%	2	22.2%	2	22.2%	0	0.0%	2	22.2%	1	11.1%	0	0.0%	9	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	21	31.8%	8	12.1%	8	12.1%	13	19.7%	8	12.1%	4	6.1%	4	6.1%	66	100.0%

Chest circumference (Singleton pregnancy) Mean (cm)±SD (n)

Area	Total	Male	Female	No response
Kempoku	31.6 ± 2.1 (1,740)	31.7 ± 2.1 (911)	31.6 ± 1.8 (828)	32
Kenchu	31.8 ± 1.9 (1,845)	31.9 ± 1.9 (925)	31.6 ± 1.9 (920)	44
Kennan	31.7 ± 2.0 (539)	31.9 ± 1.6 (246)	31.5 ± 2.4 (293)	11
Soso	31.6 ± 1.6 (506)	31.7 ± 1.6 (242)	31.5 ± 1.7 (264)	7
Iwaki	31.7 ± 1.8 (1,093)	31.9 ± 1.8 (559)	31.5 ± 1.7 (534)	31
Aizu	31.7 ± 1.8 (827)	31.9 ± 1.8 (399)	31.5 ± 1.9 (428)	24
Minami-aizu	31.9 ± 1.8 (77)	31.9 ± 1.8 (38)	31.8 ± 1.8 (39)	1
Outside Fukushima	32.0 ± 1.3 (108)	32.2 ± 1.3 (58)	31.8 ± 1.3 (50)	5
Total	31.7 ± 1.9 (6,735)	31.8 ± 1.9 (3,378)	31.6 ± 1.9 (3,356)	155

Chest circumference (Twin pregnancy) Mean (cm) ±SD (n)

Area	Total	Male	Female	No response
Kempoku	28.9 ± 2.9 (30)	29.8 ± 2.3 (13)	28.2 ± 3.2 (17)	0
Kenchu	27.9 ± 2.4 (36)	28.1 ± 1.8 (16)	27.8 ± 2.8 (20)	0
Kennan	25.3 ± 5.5 (10)	27.7 ± 2.3 (3)	24.2 ± 6.3 (7)	0
Soso	30.3 ± 2.8 (6)	32.1 ± 3.1 (3)	28.5 ± 0.5 (3)	0
Iwaki	29.3 ± 1.5 (19)	29.2 ± 1.1 (9)	29.4 ± 1.8 (10)	1
Aizu	28.4 ± 2.2 (14)	27.6 ± 3.3 (5)	28.9 ± 1.3 (9)	0
Minami-aizu	(0)	(0)	(0)	0
Outside Fukushima	(0)	(0)	(0)	0
Total	28.4 ± 3.0 (115)	28.9 ± 2.3 (49)	27.9 ± 3.3 (66)	1

Head circumference (Singleton pregnancy) Mean (cm)±SD (n)

Area	Total	Male	Female	No response
Kempoku	33.2 ± 1.8 (1,739)	33.4 ± 1.8 (910)	33.0 ± 1.6 (828)	33
Kenchu	33.3 ± 1.6 (1,844)	33.5 ± 1.5 (925)	33.0 ± 1.5 (919)	45
Kennan	32.9 ± 1.9 (539)	33.2 ± 1.8 (247)	32.6 ± 2.0 (292)	11
Soso	32.9 ± 1.5 (507)	33.1 ± 1.5 (243)	32.8 ± 1.5 (264)	6
Iwaki	33.4 ± 1.5 (1,092)	33.7 ± 1.5 (559)	33.1 ± 1.4 (533)	32
Aizu	33.1 ± 1.6 (827)	33.5 ± 1.5 (399)	32.8 ± 1.6 (428)	24
Minami-aizu	33.4 ± 1.5 (77)	33.6 ± 1.7 (38)	33.2 ± 1.4 (39)	1
Outside Fukushima	33.3 ± 2.3 (109)	33.8 ± 1.2 (58)	32.7 ± 3.0 (51)	4
Total	33.2 ± 1.7 (6,734)	33.5 ± 1.6 (3,379)	32.9 ± 1.6 (3,354)	156

Head circumference (Twin pregnancy) Mean (cm) ±SD (n)

Area	Total	Male	Female	No response
Kempoku	31.9 ± 2.3 (30)	33.1 ± 1.2 (13)	31.1 ± 2.7 (17)	0
Kenchu	31.4 ± 2.1 (36)	32.0 ± 1.1 (16)	30.9 ± 2.6 (20)	0
Kennan	29.0 ± 4.3 (10)	31.2 ± 2.1 (3)	28.1 ± 4.8 (7)	0
Soso	31.7 ± 1.6 (6)	31.3 ± 2.4 (3)	32.0 ± 0.5 (3)	0
Iwaki	32.6 ± 1.4 (19)	32.3 ± 0.4 (9)	32.8 ± 1.9 (10)	1
Aizu	31.9 ± 1.9 (14)	30.8 ± 2.5 (5)	32.5 ± 1.3 (9)	0
Minami-aizu	(0)	(0)	(0)	0
Outside Fukushima	(0)	(0)	(0)	0
Total	31.6 ± 2.4 (115)	32.1 ± 1.5 (49)	31.2 ± 2.9 (66)	1

Newborn infants in apparent death (Singleton pregnancy)

Area	Yes		No		No response		Total	
Kempoku	31	1.7%	1,712	96.6%	29	1.6%	1,772	100.0%
Kenchu	18	1.0%	1,847	97.8%	24	1.3%	1,889	100.0%
Kennan	7	1.3%	535	97.3%	8	1.5%	550	100.0%
Soso	10	1.9%	496	96.7%	7	1.4%	513	100.0%
Iwaki	8	0.7%	1,097	97.6%	19	1.7%	1,124	100.0%
Aizu	7	0.8%	827	97.2%	17	2.0%	851	100.0%
Minami-aizu	0	0.0%	78	100.0%	0	0.0%	78	100.0%
Outside Fukushima	1	0.9%	111	98.2%	1	0.9%	113	100.0%
Total	82	1.2%	6,703	97.3%	105	1.5%	6,890	100.0%

Resuscitated or not (Singleton pregnancy)

This question is for 82 respondents who answered YES to the above question.

Area	Yes		No		Not sure		No response		Total	
Kempoku	21	67.7%	6	19.4%	4	12.9%	0	0.0%	31	100.0%
Kenchu	10	55.6%	2	11.1%	4	22.2%	2	11.1%	18	100.0%
Kennan	5	71.4%	2	28.6%	0	0.0%	0	0.0%	7	100.0%
Soso	8	80.0%	0	0.0%	2	20.0%	0	0.0%	10	100.0%
Iwaki	5	62.5%	2	25.0%	0	0.0%	1	12.5%	8	100.0%
Aizu	7	100.0%	0	0.0%	0	0.0%	0	0.0%	7	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	1	100.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%
Total	57	69.5%	12	14.6%	10	12.2%	3	3.7%	82	100.0%

Newborn infants in apparent death

(The first child of twins)

Area	Yes	No	No response	Total
Kempoku	1	14	0	15
Kenchu	1	17	0	18
Kennan	1	4	0	5
Soso	0	3	0	3
Iwaki	0	10	0	10
Aizu	0	7	0	7
Minami-aizu	0	0	0	0
Outside Fukushima	0	0	0	0
Total	3	55	0	58

Resuscitated or not (The first child of twins)

The question is for 3 respondents who said YES to the previous question.

Area	Yes	No	Not sure	Total
Kempoku	0	1	0	1
Kenchu	1	0	0	1
Kennan	1	0	0	1
Soso	0	0	0	0
Iwaki	0	0	0	0
Aizu	0	0	0	0
Minami-aizu	0	0	0	0
Outside Fukushima	0	0	0	0
Total	2	1	0	3

Newborn infants in apparent death

(The second child of twins)

Area	Yes	No	No response	Total
Kempoku	2	13	0	15
Kenchu	1	17	0	18
Kennan	1	4	0	5
Soso	0	3	0	3
Iwaki	0	9	1	10
Aizu	0	7	0	7
Minami-aizu	0	0	0	0
Outside Fukushima	0	0	0	0
Total	4	53	1	58

Resuscitated or not (The second child of twins)

The question is for 4 respondents who said YES to the previous question.

Area	Yes	No	Not sure	Total
Kempoku	0	1	1	2
Kenchu	1	0	0	1
Kennan	1	0	0	1
Soso	0	0	0	0
Iwaki	0	0	0	0
Aizu	0	0	0	0
Minami-aizu	0	0	0	0
Outside Fukushima	0	0	0	0
Total	2	1	1	4

Congenital anomaly: Yes/No

This question is for 6,890 respondents with singleton pregnancy of 12 weeks or after.

Area	Yes		No		No response		Total	
Kempoku	30	1.7%	1,718	97.0%	24	1.4%	1,772	100.0%
Kenchu	50	2.6%	1,814	96.0%	25	1.3%	1,889	100.0%
Kennan	18	3.3%	524	95.3%	8	1.5%	550	100.0%
Soso	7	1.4%	502	97.9%	4	0.8%	513	100.0%
Iwaki	27	2.4%	1,076	95.7%	21	1.9%	1,124	100.0%
Aizu	20	2.4%	819	96.2%	12	1.4%	851	100.0%
Minami-aizu	0	0.0%	77	98.7%	1	1.3%	78	100.0%
Outside Fukushima	0	0.0%	113	100.0%	0	0.0%	113	100.0%
Total	152	2.2%	6,643	96.4%	95	1.4%	6,890	100.0%

Area	Incidence of congenital anomalies*		Valid response
Kempoku	30	1.72%	1,748
Kenchu	50	2.68%	1,864
Kennan	18	3.32%	542
Soso	7	1.38%	509
Iwaki	27	2.45%	1,103
Aizu	20	2.38%	839
Minami-aizu	0	0.00%	77
Outside Fukushima	0	0.00%	113
Total	152	2.24%	6,795

*The denominator is the sum of valid response of YES and NO. Excludes invalid responses.

The figure differs from the survey for FY 2011 since the denominator included the number of invalid response.

Incidence of diseases

Participants of singleton pregnancy who answered YES to the question above (Multiple answers allowed)

Area	Cardiovascular malformation	Anomalies of kidney and urinary tract	Polydactyly and syndactyly	Cleft lip and plate	Gastro-intestinal atresia*	Rachischisis	Imperforate anus	Hydro-cephalus	Microcephaly	Cataract	Other
Kempoku	9	2	3	3	0	1	1	0	0	0	13
Kenchu	16	6	5	3	0	1	0	0	0	0	23
Kennan	6	1	1	3	0	0	0	0	0	0	7
Soso	1	1	0	0	0	1	0	0	0	0	4
Iwaki	10	2	3	3	1	1	1	1	0	0	10
Aizu	9	2	2	2	3	0	0	0	0	0	5
Minami-aizu	0	0	0	0	0	0	0	0	0	0	0
Outside Fukushima	0	0	0	0	0	0	0	0	0	0	0
Total	51	14	14	14	4	4	2	1	0	0	62
Incidence	0.75%	0.21%	0.21%	0.21%	0.06%	0.06%	0.03%	0.01%	0.00%	0.00%	0.91%

The denominator is the sum of valid response.

* Esophagus, duodenum, jejunum, ileum

Breakdown of OTHER (Multiple answers allowed)

Accessory auricles	11	Congenital tooth	2	Blepharoptosis	1	Undescended testes	1
Down syndrome	6	Trisomy 18	1	Laryngomalacia	1	Head congenital skin deficit	1
Hearing impairment	5	Galactosemia	1	Constriction band syndrome	1	Situs inversus viscerum	1
Hemangioma	3	Inguinal hernia	1	Finger deficit	1	Clubfoot	1
Fetal hydrops	3	Prader-Willi syndrome	1	Micrognathia	1	Rhinostenosis	1
Strawberry mark	2	Volvulus of the stomach	1	Incontinentia pigmenti	1	Buried penis	1
Diaphragmatic hernia	2	Hydrocele testicle	1	Congenital nasolacrimal duct obstruction	1	Acrania	1
ongenital hip dislocation	2	Labial fusion	1	Chromosomal abnormality	1		
Fetal pleural effusion	2	Perineal grove	1	Multiple malformation	1		
Dermal sinus	2	Lissencephaly	1	Fonticulus anterior	1		

Congenital anomaly: Yes/No

This question is for 116 respondents with twin pregnancy of 12 weeks or after.

Area	Yes		No		No response		Total	
Kempoku	3	10.0%	26	86.7%	1	3.3%	30	100.0%
Kenchu	0	0.0%	33	91.7%	3	8.3%	36	100.0%
Kennan	0	0.0%	10	100.0%	0	0.0%	10	100.0%
Soso	0	0.0%	6	100.0%	0	0.0%	6	100.0%
Iwaki	0	0.0%	19	95.0%	1	5.0%	20	100.0%
Aizu	0	0.0%	14	100.0%	0	0.0%	14	100.0%
Minami-aizu	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Outside Fukushima	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	3	2.6%	108	93.1%	5	4.3%	116	100.0%

Area	Incidence of congenital anomalies		Valid response
Kempoku	3	10.34%	29
Kenchu	0	0.00%	33
Kennan	0	0.00%	10
Soso	0	0.00%	6
Iwaki	0	0.00%	19
Aizu	0	0.00%	14
Minami-aizu	0	0.00%	0
Outside Fukushima	0	0.00%	0
Total	3	2.70%	111

The denominator is the sum of the valid response of YES and NO.

The figure differs from the survey for FY 2011 since the denominator included the number of invalid response.

Breakdown by disease

Participants of twin pregnancy who answered YES to the question above (Multiple answers allowed)

Area	vascular malformation	Cataract	Anomalies of kidney and urinary	Rachischisis	Micro-Cephaly	Hydro-cephalus	Cleft lip and plate	Gastro-intestinal atresia	Imperforate anus	Polydactyly and syndactyly	Other
Kempoku	3	0	0	0	0	0	0	0	0	0	0
Kenchu	0	0	0	0	0	0	0	0	0	0	0
Kennan	0	0	0	0	0	0	0	0	0	0	0
Soso	0	0	0	0	0	0	0	0	0	0	0
Iwaki	0	0	0	0	0	0	0	0	0	0	0
Aizu	0	0	0	0	0	0	0	0	0	0	0
Minami-aizu	0	0	0	0	0	0	0	0	0	0	0
Outside Fukushima	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	0	0	0	0	0	0	0	0	0

Breakdown of OTHER: none

Q15. Do you sometimes lose confidence in child rearing?

The questions Q15 and 16 are for 6,913 respondents who gave birth, excluding triplets (refer to Q8).

Area	Yes		No		Not sure		No response		Total	
Kempoku	343	19.3%	632	35.5%	784	44.0%	22	1.2%	1,781	100.0%
Kenchu	348	18.4%	713	37.6%	817	43.1%	16	0.8%	1,894	100.0%
Kennan	89	16.2%	231	42.2%	222	40.5%	6	1.1%	548	100.0%
Soso	86	16.7%	182	35.3%	244	47.4%	3	0.6%	515	100.0%
Iwaki	163	14.5%	559	49.6%	403	35.7%	3	0.3%	1,128	100.0%
Aizu	151	17.7%	333	39.0%	362	42.4%	8	0.9%	854	100.0%
Minami-aizu	21	26.3%	32	40.0%	26	32.5%	1	1.3%	80	100.0%
Outside Fukushima	26	23.0%	25	22.1%	61	54.0%	1	0.9%	113	100.0%
Total	1,227	17.7%	2,707	39.2%	2,919	42.2%	60	0.9%	6,913	100.0%

Q16. Write down the results of medical checkup of babies aged one month or more.

Number of participants was 6,856 (6,743 singletons, 113 twin pregnancies, and 0 unknown) who received medical checkup within 60 days after delivery.

(n): Number of valid response

The following total number includes babies with indeterminate sex.

The average time the participants went for a medical checkup of the babies.

Area	Participants	Mean age (Days)
Kempoku	1,760	35.1
Kenchu	1,894	32.6
Kennan	540	32.9
Soso	508	32.6
Iwaki	1,120	32.6
Aizu	844	32.5
Minami-aizu	79	31.9
Outside Fukushima	111	32.7
Total	6,856	33.2

Weight (Singleton pregnancy) Mean (g)±SD (n)

Area	Total	Male	Female	No response
Kempoku	4322.1 ± 640.9 (1,727)	4442.8 ± 682.6 (913)	4186.1 ± 561.4 (812)	5
Kenchu	4170.1 ± 582.5 (1,856)	4313.7 ± 591.4 (926)	4025.2 ± 536.5 (927)	2
Kennan	4186.9 ± 568.5 (529)	4329.5 ± 554.0 (246)	4063.0 ± 552.5 (283)	1
Soso	4127.2 ± 514.1 (499)	4245.9 ± 547.5 (238)	4018.9 ± 456.4 (261)	3
Iwaki	4196.2 ± 556.5 (1,099)	4321.2 ± 579.6 (562)	4065.4 ± 499.3 (537)	2
Aizu	4158.8 ± 578.1 (828)	4298.9 ± 562.3 (397)	4026.9 ± 562.4 (429)	2
Minami-aizu	4117.7 ± 515.9 (78)	4191.7 ± 520.9 (37)	4050.9 ± 508.3 (41)	1
Outside Fukushima	4258.6 ± 502.7 (110)	4423.5 ± 504.0 (60)	4060.8 ± 428.0 (50)	1
Total	4211.0 ± 589.5 (6,726)	4345.1 ± 607.7 (3,379)	4074.6 ± 537.6 (3,340)	17

Weight (Twin pregnancy) Mean (g) ±SD (n)

Area	Total	Male	Female	No response
Kempoku	3721.3 ± 943.0 (28)	4092.4 ± 639.4 (13)	3399.7 ± 1061.1 (15)	0
Kenchu	3040.8 ± 664.1 (36)	3138.2 ± 588.0 (16)	2962.8 ± 724.6 (20)	0
Kennan	2288.0 ± 1149.2 (10)	2403.3 ± 575.0 (3)	2238.6 ± 1364.3 (7)	0
Soso	3639.5 ± 455.5 (6)	3846.3 ± 448.1 (3)	3432.7 ± 435.4 (3)	0
Iwaki	3360.2 ± 448.9 (19)	3450.6 ± 348.5 (9)	3278.9 ± 528.7 (10)	0
Aizu	3150.2 ± 695.7 (14)	2867.2 ± 1110.4 (5)	3307.4 ± 303.7 (9)	0
Minami-aizu	(0)	(0)	(0)	0
Outside Fukushima	(0)	(0)	(0)	0
Total	3241.8 ± 848.4 (113)	3419.4 ± 782.5 (49)	3105.9 ± 877.4 (64)	0

Height (Singleton pregnancy) Mean (cm) ±SD (n)

Area	Total	Male	Female	No response
Kempoku	53.5 ± 2.9 (1,719)	54.0 ± 2.9 (906)	53.1 ± 2.8 (811)	13
Kenchu	53.0 ± 3.1 (1,846)	53.6 ± 2.8 (920)	52.4 ± 3.3 (923)	12
Kennan	52.4 ± 3.5 (528)	53.1 ± 2.8 (246)	51.8 ± 3.9 (282)	2
Soso	52.9 ± 2.7 (492)	53.3 ± 2.7 (236)	52.5 ± 2.6 (256)	10
Iwaki	52.9 ± 3.1 (1,094)	53.2 ± 3.5 (561)	52.5 ± 2.6 (533)	7
Aizu	53.0 ± 3.5 (827)	53.6 ± 3.2 (396)	52.4 ± 3.7 (429)	3
Minami-aizu	53.2 ± 2.8 (78)	53.2 ± 3.4 (37)	53.2 ± 2.2 (41)	1
Outside Fukushima	53.0 ± 2.6 (109)	53.9 ± 1.7 (58)	52.0 ± 3.1 (51)	2
Total	53.1 ± 3.1 (6,693)	53.6 ± 3.0 (3,360)	52.5 ± 3.2 (3,326)	50

Height (Twin pregnancy) Mean (cm) ±SD (n)

Area	Total	Male	Female	No response
Kempoku	50.5 ± 4.9 (28)	52.1 ± 2.7 (13)	49.2 ± 5.9 (15)	0
Kenchu	48.6 ± 3.5 (36)	49.1 ± 2.7 (16)	48.2 ± 4.1 (20)	0
Kennan	43.9 ± 7.7 (10)	46.5 ± 1.8 (3)	42.9 ± 9.1 (7)	0
Soso	50.6 ± 0.7 (6)	50.6 ± 1.0 (3)	50.5 ± 0.5 (3)	0
Iwaki	50.4 ± 2.5 (19)	50.8 ± 1.7 (9)	50.1 ± 3.0 (10)	0
Aizu	48.6 ± 5.4 (14)	47.7 ± 4.9 (5)	49.1 ± 5.9 (9)	0
Minami-aizu	(0)	(0)	(0)	0
Outside Fukushima	(0)	(0)	(0)	0
Total	49.1 ± 4.7 (113)	50.0 ± 3.1 (49)	48.4 ± 5.6 (64)	0

Q.17 Are you planning a pregnancy in Fukushima Prefecture?

Area	Yes		No		No response		Total	
Kempoku	956	53.1%	829	46.0%	16	0.9%	1,801	100.0%
Kenchu	992	51.7%	907	47.3%	18	0.9%	1,917	100.0%
Kennan	302	54.1%	249	44.6%	7	1.3%	558	100.0%
Soso	284	54.6%	230	44.2%	6	1.2%	520	100.0%
Iwaki	605	52.8%	527	46.0%	14	1.2%	1,146	100.0%
Aizu	466	53.9%	389	45.0%	9	1.0%	864	100.0%
Minami-aizu	45	56.3%	33	41.3%	2	2.5%	80	100.0%
Outside Fukushima	80	70.8%	33	29.2%	0	0.0%	113	100.0%
Total	3,730	53.3%	3,197	45.7%	72	1.0%	6,999	100.0%

Request for services for next pregnancy or childbirth

Area	Improvement of preschool, care for longer hours, or day care for sick children		Information or services about child rearing and pediatric medicine		Improvement of maternity or maternal leave		Information of radiation and health risk		Other		Valid response
Kempoku	763	82.0%	604	64.9%	568	61.0%	253	27.2%	87	9.3%	931
Kenchu	768	79.5%	665	68.8%	586	60.7%	305	31.6%	96	9.9%	966
Kennan	215	72.4%	199	67.0%	184	62.0%	91	30.6%	32	10.8%	297
Soso	203	73.6%	221	80.1%	156	56.5%	106	38.4%	22	8.0%	276
Iwaki	438	74.1%	406	68.7%	365	61.8%	207	35.0%	57	9.6%	591
Aizu	329	72.5%	312	68.7%	284	62.6%	107	23.6%	32	7.0%	454
Minami-aizu	27	61.4%	29	65.9%	26	59.1%	7	15.9%	5	11.4%	44
Outside Fukushima	64	84.2%	55	72.4%	48	63.2%	16	21.1%	2	2.6%	76
Total	2,807	77.2%	2,491	68.5%	2,217	61.0%	1,092	30.0%	333	9.2%	3,635

The denominator is the sum of valid responses (i.e., Respondents who answered the question)
Proportion does not total to 100.0% because of multiple answers.

Reasons for not planning a pregnancy

Area	Do not have a desire for it		Age or health related reason		Busy raising children		Financial reason		Have no one to support me in child rearing		Have no daycare service	
Kempoku	426	51.6%	320	38.8%	267	32.4%	211	25.6%	76	9.2%	105	12.7%
Kenchu	454	50.2%	362	40.0%	328	36.3%	250	27.7%	108	11.9%	94	10.4%
Kennan	153	61.7%	75	30.2%	95	38.3%	61	24.6%	24	9.7%	20	8.1%
Soso	123	53.7%	74	32.3%	86	37.6%	52	22.7%	24	10.5%	29	12.7%
Iwaki	261	49.6%	228	43.3%	169	32.1%	113	21.5%	49	9.3%	43	8.2%
Aizu	211	54.5%	154	39.8%	138	35.7%	104	26.9%	36	9.3%	29	7.5%
Minami-aizu	16	48.5%	12	36.4%	7	21.2%	8	24.2%	5	15.2%	0	0.0%
Outside Fukushima	15	46.9%	10	31.3%	14	43.8%	4	12.5%	7	21.9%	5	15.6%
Total	1,659	52.1%	1,235	38.8%	1,104	34.7%	803	25.2%	329	10.3%	325	10.2%

Area	Family living apart		Worried about the effects of radiation		Life as an evacuee		Other		Valid response
Kempoku	11	1.3%	12	1.5%	1	0.1%	28	3.4%	825
Kenchu	21	2.3%	19	2.1%	1	0.1%	34	3.8%	904
Kennan	3	1.2%	4	1.6%	2	0.8%	11	4.4%	248
Soso	6	2.6%	4	1.7%	5	2.2%	10	4.4%	229
Iwaki	10	1.9%	9	1.7%	0	0.0%	23	4.4%	526
Aizu	6	1.6%	3	0.8%	0	0.0%	14	3.6%	387
Minami-aizu	2	6.1%	0	0.0%	0	0.0%	2	6.1%	33
Outside Fukushima	3	9.4%	0	0.0%	0	0.0%	1	3.1%	32
Total	62	1.9%	51	1.6%	9	0.3%	123	3.9%	3,184

The denominator is the sum of valid responses (i.e., Respondents who answered the question). Proportion does not total to 100.0% because of multiple answers.

3. Free-answer questions

The participants are 1,101 of 6,999 valid responses who answered the free-answer question.

Content

Consultation of child rearing**	323	29.3%
Request for adequate child support services	265	24.1%
Request for adequate medical service and physical care	139	12.6%
Mental illness	126	11.4%
Physical problems**	124	11.3%
Anxiety and dissatisfaction about inadequate medical services	114	10.4%
Opinion or complain about the survey	91	8.3%
Relationships***	71	6.4%
Request for information on radiation and research results	67	6.1%
Regarding financial anxiety and burden	58	5.3%
Effects of radiation on fetus and child	57	5.2%
Request for financial support	52	4.7%
Positive comments about this survey	37	3.4%
Request for decontamination and provision of safe playgrounds	29	2.6%
Anxiety about radiation exposure of children when outside	21	1.9%
Effects of radiation on food or baby food	21	1.9%
Anxiety and dissatisfaction about reliability or lack of information	21	1.9%
Request for adequate mental health care services	16	1.5%
Request for the overall examination	13	1.2%
Request for Thyroid Ultrasound Examination	11	1.0%
Anxiety over the effects of radiation on water	8	0.7%
Issues related to the current pregnancy outcome	7	0.6%
Anxiety and dissatisfaction about evacuation and family living apart	7	0.6%
Request for Fukushima Health Management Survey	4	0.4%
Request for medical check-up and examinations	4	0.4%
Request to measure internal radiation exposure (by whole body counter, etc.)	4	0.4%
Regarding external radiation exposure (provision of glass badges and dosimeters)	4	0.4%
Request for test on breast milk	4	0.4%
Effects of radiation on breast milk or infant formula	2	0.2%
Anxiety about the effects of radiation on the next pregnancy	2	0.2%
Request for support about evacuation	1	0.1%
Other	121	11.0%

The denominator is the sum of 1,101 of respondents. Multiple answers allowed

** Issue not mentioned in FY 2011survey

*** Issue not mentioned in FY 2012survey

4. Support

The number of those who required support in FY 2015 is 913 of 7,031 respondents (13.0%).

The results of responses received from 24 November 2015 through 16 December 2016

Number of respondents required support

Area	Survey population	Response		Number of respondents who required support	
Kempoku	3,453	1,806	52.3%	236	13.1%
Kenchu	4,261	1,924	45.2%	242	12.6%
Kennan	1,168	560	47.9%	77	13.8%
Soso	1,183	523	44.2%	81	15.5%
Iwaki	2,461	1,148	46.6%	139	12.1%
Aizu	1,778	872	49.0%	107	12.3%
Minami-aizu	150	80	53.3%	14	17.5%
Outside Fukushima	118	118	100.0%	17	14.4%
Total	14,572	7,031	48.3%	913	13.0%

The denominator of response rate is the number of participants.

The denominator of number of respondents who required support is the number of response.

Respondents requiring support by area

Area	Support required based on the categories of depression		Support required based on the free-answer questions		Total	
Kempoku	149	63.1%	87	36.9%	236	100.0%
Kenchu	126	52.1%	116	47.9%	242	100.0%
Kennan	49	63.6%	28	36.4%	77	100.0%
Soso	59	72.8%	22	27.2%	81	100.0%
Iwaki	83	59.7%	56	40.3%	139	100.0%
Aizu	69	64.5%	38	35.5%	107	100.0%
Minami-aizu	6	42.9%	8	57.1%	14	100.0%
Outside Fukushima	8	47.1%	9	52.9%	17	100.0%
Total	549	60.1%	364	39.9%	913	100.0%

Content of counseling by area

Area	Health of mothers		Childrearing		Family life		Health of children		Effects of radiation		Evacuation		Other		Valid response
Kempoku	132	55.9%	100	42.4%	54	22.9%	56	23.7%	11	4.7%	0	0.0%	65	27.5%	236
Kenchu	121	50.0%	110	45.5%	54	22.3%	50	20.7%	18	7.4%	1	0.4%	75	31.0%	242
Kennan	47	61.0%	21	27.3%	15	19.5%	12	15.6%	6	7.8%	0	0.0%	21	27.3%	77
Soso	48	59.3%	32	39.5%	21	25.9%	14	17.3%	4	4.9%	3	3.7%	24	29.6%	81
Iwaki	71	51.1%	57	41.0%	27	19.4%	33	23.7%	9	6.5%	0	0.0%	46	33.1%	139
Aizu	53	49.5%	40	37.4%	25	23.4%	19	17.8%	5	4.7%	1	0.9%	39	36.4%	107
Minami-aizu	7	50.0%	7	50.0%	1	7.1%	0	0.0%	0	0.0%	0	0.0%	5	35.7%	14
Outside Fukushima	6	35.3%	6	35.3%	2	11.8%	4	23.5%	1	5.9%	0	0.0%	5	29.4%	17
Total	485	53.1%	373	40.9%	199	21.8%	188	20.6%	54	5.9%	5	0.5%	280	30.7%	913

The denominator is the sum of valid response (respondents who required support).

Proportion does not total to 100% because of multiple answers.

Reason for completing support

Area	A		B		C		D		E		F		G	
Kempoku	174	73.7%	142	60.2%	70	29.7%	30	12.7%	17	7.2%	0	0.0%	0	0.0%
Kenchu	181	74.8%	121	50.0%	72	29.8%	28	11.6%	16	6.6%	1	0.4%	0	0.0%
Kennan	58	75.3%	30	39.0%	27	35.1%	16	20.8%	3	3.9%	0	0.0%	0	0.0%
Soso	64	79.0%	40	49.4%	25	30.9%	10	12.3%	2	2.5%	0	0.0%	0	0.0%
Iwaki	99	71.2%	61	43.9%	35	25.2%	19	13.7%	11	7.9%	1	0.7%	0	0.0%
Aizu	70	65.4%	44	41.1%	37	34.6%	19	17.8%	7	6.5%	0	0.0%	0	0.0%
Minami-aizu	9	64.3%	3	21.4%	5	35.7%	3	21.4%	1	7.1%	0	0.0%	0	0.0%
Outside Fukushima	14	82.4%	11	64.7%	4	23.5%	0	0.0%	3	17.6%	0	0.0%	0	0.0%
Total	669	73.3%	452	49.5%	275	30.1%	125	13.7%	60	6.6%	2	0.2%	0	0.0%

Area	H		I		Absent		Phone number not shown		Denied Support		Other		Valid response
Kempoku	0	0.0%	0	0.0%	43	18.2%	10	4.2%	1	0.4%	2	0.8%	236
Kenchu	0	0.0%	0	0.0%	54	22.3%	6	2.5%	0	0.0%	0	0.0%	242
Kennan	0	0.0%	0	0.0%	13	16.9%	2	2.6%	1	1.3%	0	0.0%	77
Soso	0	0.0%	0	0.0%	14	17.3%	3	3.7%	0	0.0%	0	0.0%	81
Iwaki	0	0.0%	0	0.0%	33	23.7%	3	2.2%	0	0.0%	2	1.4%	139
Aizu	0	0.0%	0	0.0%	28	26.2%	2	1.9%	1	0.9%	3	2.8%	107
Minami-aizu	0	0.0%	0	0.0%	3	21.4%	2	14.3%	0	0.0%	0	0.0%	14
Outside Fukushima	0	0.0%	0	0.0%	2	11.8%	1	5.9%	0	0.0%	0	0.0%	17
Total	0	0.0%	0	0.0%	190	20.8%	29	3.2%	3	0.3%	7	0.8%	913

The denominator is the sum of valid response (respondents who required support).

Proportion does not total to 100.0% because of multiple answers.

A: We listened and dealt with the issues of respondents.

B: Respondents were given information about counseling services

C: Respondents who were confirmed to have visited clinics for consultation.

D: Respondents were advised to seek medical treatment.

E: We addressed respondents' questions.

F: Respondents were connected to municipal governments.

G: Respondents were referred to clinical psychologists.

H: Respondents were connected to a radiation consultation office.

I: Specialists answered to the respondents' questions.