

Basic Survey (Radiation Dose Estimates) reported on 12 November 2013

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), which targeted the entire population of Fukushima Prefecture, was 23.6% (484,864/2,056,994) as of 30 September 2013.

Regional variations in the response rates were observed, ranging from 13%–15% in Aizu and Minami-aizu to 44% in Soso area. (Table 1)

1.2 Radiation Dose Estimates

Recorded movements of respondents are converted to digital data, and effective external cumulative doses are calculated using the dose calculation system developed by the National Institute of Radiological Sciences. Doses have been estimated for 460,887/484,864 respondents (95.1%) as of 30 September 2013 (Table 1), and the results have been returned to 440,642 respondents.

Table 1 Response rates to the Basic Survey

As of 30 September 2013

Area(preceding and full-scale surveys)	Target population a	Response b	Response rates c=b/a	Completed dose estimation d	Proportion e=d/b	Returned results f	Proportion g=f/b
Kempoku	505,539	133,953	26.5%	129,716	96.8%	125,606	93.8%
Kenchu	560,116	117,020	20.9%	111,756	95.5%	106,714	91.2%
Kennan	152,776	26,932	17.6%	25,727	95.5%	24,399	90.6%
Aizu	267,696	40,434	15.1%	37,601	93.0%	35,922	88.8%
Minami-aizu	30,831	4,141	13.4%	3,789	91.5%	3,631	87.7%
Soso	196,205	87,196	44.4%	81,243	93.2%	78,072	89.5%
Iwaki	343,831	75,188	21.9%	71,055	94.5%	66,298	88.2%
Total	2,056,994	484,864	23.6%	460,887	95.1%	440,642	90.9%

Including Yamakiya of Kawamata, Namie and Iitate

1.3 Response Rates (Visitors)

The survey questionnaire was distributed upon request to non-residents who were visiting or staying in Fukushima Prefecture at the time of the accident. Of 2,070 responses, doses have been estimated for 1,779 respondents (85.9%), and the results shall be returned accordingly. (Table 2)

Table 2 Response rates to the Basic Survey						
(Visitors)					As of 30 September 2013	
Number of request a	Response b	Response rates c=b/a	Completed dose estimation d	Proportion e=d/b	Returned results f	Proportion g=f/b
3,801	2,070	54.5%	1,779	85.9%	1,705	82.4%

2. Results of Radiation Dose Estimates

Radiation doses for a total of 460,887 residents have been estimated to date. The results for 451,364 respondents (excluding radiation workers) suggested that the doses for more than 90% of the respondents were <2 mSv in Kempoku and Kenchu areas. The doses for approximately 91% of the respondents in Kennan area and more than 99% of those in Aizu and Minami-aizu were <1 mSv. Doses for 78% of respondents in Soso area and more than 99% of respondents in Iwaki were also <1 mSv. (Table 3)

Effective Dose (mSv)	Total	Excluding radiation workers				By region (excluding radiation workers)															
						Kempoku *		Kenchu		Kennan		Aizu		Minami-aizu		Soso **		Iwaki			
<1	304,418	298,332	66.1%	94.9%	99.8%	40,602	31.7%	65,167	59.0%	23,076	90.7%	36,971	99.4%	3,732	99.4%	59,689	77.9%	69,095	99.2%		
1-2	132,159	129,817	28.8%			74,887	58.4%	38,989	35.3%	2,364	9.3%	217	0.6%	23	0.6%	12,782	16.7%	555	0.8%		
2-3	20,519	20,141	4.5%			12,136	9.5%	6,057	5.5%	12	0.0%	8	0.0%	0	-	1,908	2.5%	20	0.0%		
3-4	1,508	1,432	0.3%			439	0.3%	290	0.3%	0	-	1	0.0%	0	-	699	0.9%	3	0.0%		
4-5	618	576	0.1%	0.2%	0.2%	44	0.0%	6	0.0%	0	-	0	-	0	-	524	0.7%	2	0.0%		
5-6	488	432	0.1%			25	0.0%	2	0.0%	0	-	0	-	0	-	405	0.5%	0	-		
6-7	288	253	0.1%			8	0.0%	0	-	0	-	0	-	0	-	245	0.3%	0	-		
7-8	163	127	0.0%			1	0.0%	0	-	0	-	0	-	0	-	126	0.2%	0	-		
8-9	123	82	0.0%	0.0%	0.0%	0	-	0	-	0	-	0	-	0	-	82	0.1%	0	-		
9-10	76	46	0.0%			0	-	0	-	0	-	0	-	0	-	46	0.1%	0	-		
10-11	75	45	0.0%			0	-	0	-	0	-	0	-	0	-	45	0.1%	0	-		
11-12	52	32	0.0%			1	0.0%	0	-	0	-	0	-	0	-	31	0.0%	0	-		
12-13	37	14	0.0%	0.0%	0.0%	0	-	0	-	0	-	0	-	0	-	14	0.0%	0	-		
13-14	35	13	0.0%			0	-	0	-	0	-	0	-	0	-	13	0.0%	0	-		
14-15	32	11	0.0%			0	-	0	-	0	-	0	-	0	-	11	0.0%	0	-		
15≤	296	11	0.0%			0	-	0	-	0	-	0	-	0	-	11	0.0%	0	-		
Total	460,887	451,364	100.0%	100.0%	100.0%	128,143	100%	110,511	100%	25,452	100%	37,197	100%	3,755	100%	76,631	100%	69,675	100%		
Max	66mSv	25mSv				11mSv		5.9mSv		2.6mSv		3.6mSv		1.6mSv		25mSv		4.8mSv			
Mean value	0.8mSv	0.8mSv				1.2mSv		0.9mSv		0.5mSv		0.2mSv		0.1mSv		0.7mSv		0.3mSv			

* Including Yamakiya of Kawamata. Percentages have been rounded and may not total to 100%.

** Including Namie and Iitate.

3. Evaluation of the results

The latest effective radiation dose estimates showed similar trends to those observed so far. Since previous epidemiological studies 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.

References

- 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.

Response rates to the Basic Survey by district

Preceding and full-scale surveys

As of 30 September 2013

Area	District	Target population	Response	Response rates	Completed dose estimation	Proportion	Returned results	Proportion
		a	b	c=b/a	d	e=d/b	f	g=f/b
Kempoku	Fukushima	296,421	83,150	28.1%	80,874	97.3%	79,138	95.2%
	Nihonmatsu	60,967	14,585	23.9%	14,082	96.6%	13,224	90.7%
	Date	67,854	15,890	23.4%	15,201	95.7%	14,427	90.8%
	Motomiya	31,874	7,503	23.5%	7,244	96.5%	6,949	92.6%
	Kori	13,293	3,560	26.8%	3,415	95.9%	3,291	92.4%
	Kunimi	10,342	2,693	26.0%	2,587	96.1%	2,495	92.6%
	Kawamata	15,916	4,966	31.2%	4,780	96.3%	4,618	93.0%
	Otama	8,872	1,606	18.1%	1,533	95.5%	1,464	91.2%
	Subtotal	505,539	133,953	26.5%	129,716	96.8%	125,606	93.8%
Kenchu	Koriyama	341,841	74,553	21.8%	71,510	95.9%	68,374	91.7%
	Sukagawa	80,425	13,792	17.1%	13,304	96.5%	12,538	90.9%
	Tamura	41,805	10,117	24.2%	9,197	90.9%	8,811	87.1%
	Kagamiishi	13,172	2,487	18.9%	2,351	94.5%	2,183	87.8%
	Tenei	6,481	944	14.6%	884	93.6%	795	84.2%
	Ishikawa	17,518	3,670	20.9%	3,502	95.4%	3,351	91.3%
	Tamakawa	7,385	1,284	17.4%	1,220	95.0%	1,162	90.5%
	Hirata	7,088	1,395	19.7%	1,329	95.3%	1,266	90.8%
	Asakawa	7,200	1,234	17.1%	1,181	95.7%	1,141	92.5%
	Furudono	6,349	1,092	17.2%	1,044	95.6%	1,001	91.7%
	Miharu	19,086	4,298	22.5%	4,145	96.4%	4,034	93.9%
	Ono	11,766	2,154	18.3%	2,089	97.0%	2,058	95.5%
	Subtotal	560,116	117,020	20.9%	111,756	95.5%	106,714	91.2%
Kennan	Shirakawa	65,542	11,726	17.9%	11,197	95.5%	10,604	90.4%
	Nishigo	20,137	4,117	20.4%	3,950	95.9%	3,786	92.0%
	Izumizaki	7,025	1,140	16.2%	1,079	94.6%	991	86.9%
	Nakajima	5,316	729	13.7%	693	95.1%	662	90.8%
	Yabuki	18,509	3,350	18.1%	3,190	95.2%	3,011	89.9%
	Tanagura	15,416	2,306	15.0%	2,217	96.1%	2,102	91.2%
	Yamatsuri	6,494	1,171	18.0%	1,118	95.5%	1,068	91.2%
	Hanawa	10,125	1,728	17.1%	1,650	95.5%	1,579	91.4%
	Samekawa	4,212	665	15.8%	633	95.2%	596	89.6%
	Subtotal	152,776	26,932	17.6%	25,727	95.5%	24,399	90.6%
Aizu	Aizuwakamatsu	128,052	21,107	16.5%	19,810	93.9%	19,055	90.3%
	Kitakata	53,270	6,681	12.5%	6,170	92.4%	5,995	89.7%
	Kitashiobara	3,283	415	12.6%	391	94.2%	366	88.2%
	Nishiaizu	7,732	1,163	15.0%	1,047	90.0%	1,008	86.7%
	Bandai	3,897	556	14.3%	527	94.8%	496	89.2%
	Inawashiro	16,328	2,795	17.1%	2,612	93.5%	2,499	89.4%
	Aizubange	17,914	2,266	12.6%	2,075	91.6%	1,797	79.3%
	Yukawa	3,524	426	12.1%	383	89.9%	366	85.9%
	Yanaizu	4,081	528	12.9%	489	92.6%	465	88.1%
	Mishima	2,048	315	15.4%	280	88.9%	263	83.5%
	Kaneyama	2,549	530	20.8%	471	88.9%	454	85.7%
	Showa	1,570	316	20.1%	281	88.9%	237	75.0%
	Aizumisato	23,448	3,336	14.2%	3,065	91.9%	2,921	87.6%
	Subtotal	267,696	40,434	15.1%	37,601	93.0%	35,922	88.8%
Minami-aizu	Shimogo	6,656	896	13.5%	822	91.7%	800	89.3%
	Hinoemata	618	97	15.7%	86	88.7%	84	86.6%
	Tadami	5,038	792	15.7%	714	90.2%	684	86.4%
	Minami-aizu	18,519	2,356	12.7%	2,167	92.0%	2,063	87.6%
	Subtotal	30,831	4,141	13.4%	3,789	91.5%	3,631	87.7%
Soso	Soma	37,511	12,337	32.9%	11,533	93.5%	10,816	87.7%
	Minami-soma	70,326	29,428	41.8%	27,469	93.3%	26,061	88.6%
	Hirono	5,141	2,168	42.2%	1,847	85.2%	1,757	81.0%
	Naraha	8,052	4,083	50.7%	3,493	85.5%	3,371	82.6%
	Tomioka	15,794	8,484	53.7%	7,971	94.0%	7,782	91.7%
	Kawauchi	3,039	1,503	49.5%	1,355	90.2%	1,297	86.3%
	Okuma	11,500	5,903	51.3%	5,174	87.7%	5,058	85.7%
	Futaba	7,140	3,882	54.4%	3,638	93.7%	3,562	91.8%
	Namie	21,249	12,765	60.1%	12,537	98.2%	12,351	96.8%
	Katsurao	1,545	812	52.6%	647	79.7%	640	78.8%
	Shinchi	8,361	2,451	29.3%	2,274	92.8%	2,165	88.3%
	Iitate	6,547	3,380	51.6%	3,305	97.8%	3,212	95.0%
	Subtotal	196,205	87,196	44.4%	81,243	93.2%	78,072	89.5%
Iwaki	Iwaki	343,831	75,188	21.9%	71,055	94.5%	66,298	88.2%
Total		2,056,994	484,864	23.6%	460,887	95.1%	440,642	90.9%

*Including Yamakiya of Kawamata, Namie and Iitate

Basic Survey, Fukushima Health Management Survey

Estimated external radiation doses

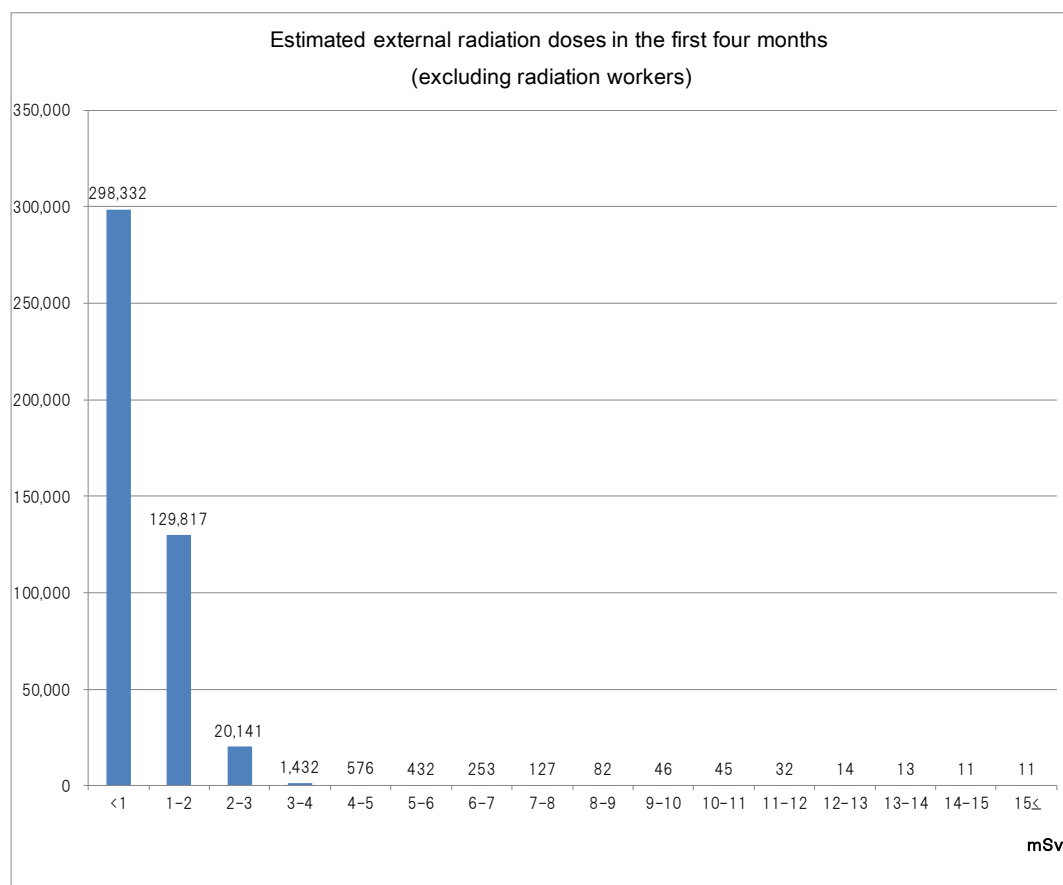
As of 30 September 2013

Preceding Survey and full-scale survey

Estimated external radiation doses by region in the first four months

Effective Dose (mSv)	Total	Excluding radiation workers	By region							Proportion (%) excluding radiation workers		
			Kempoku	Kenchu	Kennan	Aizu	Minami-aizu	Soso	Iwaki			
<1	304,418	298,332	40,602	65,167	23,076	36,971	3,732	59,689	69,095	66.1	94.9	99.8
1-2	132,159	129,817	74,887	38,989	2,364	217	23	12,782	555	28.8		
2-3	20,519	20,141	12,136	6,057	12	8	0	1,908	20	4.5	4.8	
3-4	1,508	1,432	439	290	0	1	0	699	3	0.3		
4-5	618	576	44	6	0	0	0	524	2	0.1	0.2	0.2
5-6	488	432	25	2	0	0	0	405	0	0.1		
6-7	288	253	8	0	0	0	0	245	0	0.1	0.1	
7-8	163	127	1	0	0	0	0	126	0	0.0		
8-9	123	82	0	0	0	0	0	82	0	0.0	0.0	
9-10	76	46	0	0	0	0	0	46	0	0.0		
10-11	75	45	0	0	0	0	0	45	0	0.0	0.0	0.0
11-12	52	32	1	0	0	0	0	31	0	0.0		
12-13	37	14	0	0	0	0	0	14	0	0.0	0.0	
13-14	35	13	0	0	0	0	0	13	0	0.0		
14-15	32	11	0	0	0	0	0	11	0	0.0	0.0	
15≤	296	11	0	0	0	0	0	11	0	0.0	0.0	0.0
Total	460,887	451,364	128,143	110,511	25,452	37,197	3,755	76,631	69,675	100.0	100.0	100.0
Max	66	25	11	5.9	2.6	3.6	1.6	25	4.8			
Mean value	0.8	0.8	1.2	0.9	0.5	0.2	0.1	0.7	0.3			

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



As of 30 September 2013

Estimated external radiation dose by age group in the first four months (excluding radiation workers)

Effective Dose (mSv)	Age at the time of the disaster									Total
	0 - 9	10 - 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 -	
<1	33,376	28,019	22,047	34,341	29,171	36,891	48,981	39,151	26,355	298,332
1-2	15,110	13,318	9,447	17,055	15,896	18,260	20,206	13,111	7,414	129,817
2-3	3,697	2,091	1,038	2,155	2,080	2,852	3,337	2,004	887	20,141
3-4	166	114	85	153	151	254	248	178	83	1,432
4-5	22	53	41	44	82	109	95	81	49	576
5-6	17	20	26	36	48	100	84	71	30	432
6-7	4	7	12	20	30	47	61	48	24	253
7-8	2	7	8	7	15	36	23	19	10	127
8-9	1	6	3	8	8	18	16	10	12	82
9-10	0	1	1	2	4	13	13	8	4	46
10-11	1	1	1	2	9	14	6	8	3	45
11-12	0	0	0	2	0	7	10	11	2	32
12-13	0	0	0	0	1	6	4	2	1	14
13-14	0	0	1	1	1	5	3	2	0	13
14-15	0	0	0	0	0	6	4	1	0	11
15≤	0	1	0	0	2	2	5	0	1	11
Total	52,396	43,638	32,710	53,826	47,498	58,620	73,096	54,705	34,875	451,364

Estimated external radiation doses by sex in the first four months (excluding radiation workers)

Effective Dose (mSv)	By sex				Total	Proportion (%)
	Male	Proportion (%)	Female	Proportion (%)		
<1	131,042	64.4	167,290	67.5	298,332	66.1
1-2	59,562	29.3	70,255	28.3	129,817	28.8
2-3	10,965	5.4	9,176	3.7	20,141	4.5
3-4	899	0.4	533	0.2	1,432	0.3
4-5	316	0.2	260	0.1	576	0.1
5-6	224	0.1	208	0.1	432	0.1
6-7	144	0.1	109	0.0	253	0.1
7-8	72	0.0	55	0.0	127	0.0
8-9	46	0.0	36	0.0	82	0.0
9-10	28	0.0	18	0.0	46	0.0
10-11	31	0.0	14	0.0	45	0.0
11-12	17	0.0	15	0.0	32	0.0
12-13	6	0.0	8	0.0	14	0.0
13-14	9	0.0	4	0.0	13	0.0
14-15	7	0.0	4	0.0	11	0.0
15≤	9	0.0	2	0.0	11	0.0
Total	203,377	100.0	247,987	100.0	451,364	100.0

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

As of 30 September 2013

Estimated external radiation doses by region in the first four months (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	25,047	47,362	7,221	127	9	7	2	0	0	0	0	0	0	0	0	0	79,775
	Nihonmatsu	3,334	7,864	2,658	76	1	0	0	0	0	0	0	0	0	0	0	0	13,933
	Date	6,235	7,690	988	137	7	2	1	0	0	0	0	0	0	0	0	0	15,060
	Motomiya	1,709	4,588	857	20	1	0	0	0	0	0	0	0	0	0	0	0	7,175
	Kori	803	2,528	62	1	0	1	0	0	0	0	0	0	0	0	0	0	3,395
	Kunimi	1,334	1,225	12	0	0	0	0	0	0	0	0	0	0	0	0	0	2,571
	Kawamata	1,581	2,775	239	76	26	15	5	1	0	0	0	1	0	0	0	0	4,719
	Otama	559	855	99	2	0	0	0	0	0	0	0	0	0	0	0	0	1,515
Kempoku Subtotal		40,602	74,887	12,136	439	44	25	8	1	0	0	0	1	0	0	0	0	128,143
Kenchu	Koriyama	30,120	34,532	5,743	280	6	2	0	0	0	0	0	0	0	0	0	0	70,683
	Sukagawa	10,410	2,537	232	4	0	0	0	0	0	0	0	0	0	0	0	0	13,183
	Tamura	8,389	627	21	3	0	0	0	0	0	0	0	0	0	0	0	0	9,040
	Kagamiishi	2,276	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,329
	Tenei	418	423	38	1	0	0	0	0	0	0	0	0	0	0	0	0	880
	Ishikawa	3,444	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,476
	Tamakawa	1,193	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1,209
	Hirata	1,290	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,319
	Asakawa	1,164	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1,177
	Furudono	1,020	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1,033
	Miharu	3,429	661	19	2	0	0	0	0	0	0	0	0	0	0	0	0	4,111
	Ono	2,014	56	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2,071
Kenchu Subtotal		65,167	38,989	6,057	290	6	2	0	0	0	0	0	0	0	0	0	0	110,511
Kennan	Shirakawa	10,226	817	5	0	0	0	0	0	0	0	0	0	0	0	0	0	11,048
	Nishigo	2,506	1,407	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3,916
	Izumizaki	1,056	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,073
	Nakajima	679	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	687
	Yabuki	3,100	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,158
	Tanagura	2,167	25	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2,195
	Yamatsuri	1,104	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,112
	Hanawa	1,619	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,637
	Samekawa	619	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	626
	Kennan Subtotal	23,076	2,364	12	0	0	0	0	0	0	0	0	0	0	0	0	0	25,452
Aizu	Aizuwakamatsu	19,459	115	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19,577
	Kitakata	6,053	39	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6,093
	Kitashiobara	386	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	388
	Nishiaizu	1,039	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,041
	Bandai	513	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	523
	Inawashiro	2,568	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,590
	Aizubange	2,048	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,056
	Yukawa	378	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	381
	Yanaizu	483	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	488
	Mishima	278	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	278
	Kaneyama	465	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	466
	Showa	279	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	280
	Aizumisato	3,022	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3,036
Aizu Subtotal		36,971	217	8	1	0	0	0	0	0	0	0	0	0	0	0	0	37,197
Minami-aizu	Shimogo	816	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	818
	Hinoemata	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85
	Tadami	707	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	710
	Minami-aizu	2,124	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,142
	Minami-aizu Subtotal	3,732	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,755
Soso	Soma	10,850	411	85	19	5	0	0	0	0	2	0	0	0	0	0	0	11,372
	Minami-soma	20,063	5,968	469	88	35	3	5	4	1	0	0	1	0	0	0	0	26,637
	Hirono	1,691	46	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1,739
	Naraha	3,094	124	13	2	0	1	0	0	0	0	0	0	0	0	0	0	3,234
	Tomioka	5,883	1,068	95	16	3	1	0	2	2	0	0	0	0	0	0	0	7,070
	Kawauchi	952	314	16	0	0	0	0	1	0	0	0	0	0	0	0	0	1,283
	Okuma	3,198	1,177	95	14	9	4	4	3	0	2	2	1	0	4	0	0	4,513
	Futaba	2,679	449	72	19	5	3	3	6	2	1	0	1	0	0	0	0	3,240
	Namie	8,206	2,448	485	102	49	29	27	17	12	7	16	9	5	4	4	8	11,428
	Katsurao	475	136	17	4	0	0	0	0	0	0	0	0	0	0	0	0	632
	Shinchi	2,226	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2,245
	Iitate	372	623	560	435	418	364	205	93	64	34	27	19	9	5	7	3	3,238
Soso Subtotal		59,689	12,782	1,908	699	524	405	245	126	82	46	45	31	14	13	11	11	76,631
Iwaki	Iwaki	69,095	555	20	3	2	0	0	0	0	0	0	0	0	0	0	0	69,675
Total		298,332	129,817	20,141	1,432	576	432	253	127	82	46	45	32	14	13	11	11	451,364
Proportion (%)		66.1	28.8	4.5	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
		94.9		4.8		0.2		0.1		0.0			0.0				0.0	100.0
				99.8				0.2					0.0				0.0	100.0
Visitors		1,463	275	19	2	1	0	0	1	0	0	0	0	0	0	0	0	1,761
Total+Visitors		299,795	130,092	20,160	1,434	577	432	253	128	82	46	45	32	14	13	11	11	453,125

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

Response rates by area, sex, age group

As of 30 September 2013

Area	Sex	Age							Total
		0-9	10-19	20-29	30-39	40-49	50-59	60≤	
Kempoku	Male	34.0%	24.1%	15.7%	20.7%	21.3%	23.4%	30.0%	24.9%
	Female	34.1%	25.7%	22.3%	29.1%	26.3%	27.1%	29.3%	28.0%
	Subtotal	34.1%	24.8%	19.0%	24.8%	23.8%	25.2%	29.6%	26.5%
Kenchu	Male	29.5%	18.8%	11.8%	16.9%	16.5%	16.6%	23.6%	19.4%
	Female	29.6%	19.9%	17.7%	25.4%	21.0%	20.3%	22.8%	22.3%
	Subtotal	29.6%	19.3%	14.6%	21.0%	18.8%	18.5%	23.2%	20.9%
Kennan	Male	22.9%	15.5%	10.1%	14.9%	14.9%	14.7%	20.6%	16.7%
	Female	24.1%	15.9%	15.3%	20.6%	17.9%	16.3%	19.3%	18.6%
	Subtotal	23.5%	15.7%	12.6%	17.6%	16.4%	15.5%	19.9%	17.6%
Aizu	Male	17.7%	12.0%	8.6%	11.1%	11.7%	13.2%	18.9%	14.4%
	Female	17.3%	12.9%	11.8%	15.9%	13.8%	15.0%	17.8%	15.7%
	Subtotal	17.5%	12.4%	10.2%	13.4%	12.8%	14.1%	18.2%	15.1%
Minami-aizu	Male	12.4%	8.7%	8.6%	11.5%	10.3%	11.5%	17.3%	13.2%
	Female	13.5%	10.5%	11.4%	13.3%	11.7%	12.3%	15.4%	13.7%
	Subtotal	12.9%	9.6%	10.0%	12.4%	11.0%	11.8%	16.2%	13.4%
Soso	Male	46.7%	41.4%	26.9%	35.8%	35.6%	39.8%	51.5%	41.7%
	Female	48.2%	43.8%	36.0%	45.5%	43.7%	47.8%	51.8%	47.1%
	Subtotal	47.4%	42.6%	31.1%	40.4%	39.6%	43.7%	51.7%	44.4%
Iwaki	Male	26.9%	19.5%	12.1%	17.9%	16.6%	17.3%	26.8%	20.6%
	Female	26.8%	20.2%	17.2%	24.4%	20.6%	21.0%	25.8%	23.1%
	Subtotal	26.8%	19.8%	14.6%	21.0%	18.6%	19.1%	26.2%	21.9%
Total	Male	30.1%	21.1%	13.7%	18.9%	18.6%	19.9%	27.8%	22.1%
	Female	29.9%	22.2%	19.8%	26.5%	23.0%	23.6%	26.6%	24.9%
	Total	29.7%	21.6%	16.6%	22.6%	20.8%	21.7%	27.0%	23.6%

Response to the Basic Survey, Fukushima Health Management Survey: By fiscal year, by month.

As of 30 September 2013

Fiscal Year	Month	Preceding and Full-scale survey	Total	Subtotal	Kempoku	Kenchu	Kennan	Aizu	Minami-aizu	Soso	Iwaki
2011	June	451,631	435,647	0	0	0	0	0	0	0	0
	July			1	0	0	0	0	0	1	0
	August			484	0	0	0	3	0	481	0
	September			36,731	473	1,296	295	520	61	34,075	11
	October			202,899	84,419	54,552	12,521	29,152	3,263	18,812	180
	November			118,026	23,246	37,484	9,202	6,147	411	3,615	37,921
	December			41,406	7,477	7,650	1,695	1,493	96	1,723	21,272
	January			17,118	4,206	4,043	983	681	75	1,159	5,971
	February			9,330	2,377	2,506	409	396	47	1,229	2,366
	March			9,652	2,588	2,493	397	344	60	1,572	2,198
	April			8,944	1,893	1,232	232	260	27	4,093	1,207
	May			4,436	1,614	813	218	258	39	729	765
2012	June	29,868	28,945	2,278	676	666	149	161	14	294	318
	July			1,577	533	389	126	99	3	212	215
	August			1,501	523	378	73	183	5	165	174
	September			1,632	573	507	98	146	14	84	210
	October			1,570	615	393	126	90	7	103	236
	November			1,050	427	214	65	176	2	77	89
	December			688	272	197	45	41	0	53	80
	January			1,365	327	395	49	69	2	408	115
	February			2,387	309	490	60	31	2	1,366	129
	March			1,517	157	410	90	30	0	534	296
	April			470	112	117	25	81	0	57	78
	May			260	65	79	24	19	5	20	48
2013	June	3,365	3,336	296	57	81	10	10	7	48	83
	July			563	62	73	20	25	0	20	363
	August			843	75	179	4	5	0	88	492
	September			904	86	383	16	14	1	33	371
	Total			484,864	133,162	117,020	26,932	40,434	4,141	71,051	75,188

Fiscal year 2011 is from 1 April 2011 through 31 March 2012.

Fiscal year 2012 is from 1 April 2012 through 31 March 2013.

Fiscal year 2013 is from 1 April 2013 through 31 March 2014.

Preceding Survey						
Fiscal Year	Month	Total	Subtotal	Kawamata of Yamakiya	Nome	litate
2011	June	15,984	15		15	
	July		9475	603	7122	1750
	August		3564	87	2612	865
	September		820	11	648	161
	October		272	3	200	69
	November		195	2	127	66
	December		170		143	27
	January		675	11	540	124
	February		688	20	551	117
	March		110	1	96	13
	April		36	2	30	4
	May		36		23	13
2012	June	923	87	3	68	16
	July		64		62	2
	August		44		42	2
	September		17		13	4
	October		50		50	
	November		15		12	3
	December		3		2	1
	January		138	15	98	25
	February		287	25	204	58
	March		146	8	97	41
	April		8		4	4
	May		13		1	12
2013	June	29	5		2	3
	July		3		3	
	August					
	September					
	Total	16,936	16,936	791	12,765	3,380

Thyroid Ultrasound Examination, Fukushima Health Management Survey

1. Summary

1.1 Thyroid Ultrasound Examination (TUE) Program

The TUE Program for the fiscal year 2013/14 started on 22 April 2013, and roughly 158,000 children from 34 municipalities have participated in the program so far. With an increase in the number of participants including those from past target municipalities, the program has covered 82.4% of the target population to date (Appendix 1). Starting on 1 November 2012, the TUE Program has been carried out at institutions outside Fukushima Prefecture (Appendix 2). The results have been returned to 94.5% of the 238,785 participants (Appendices 3 and 4).

Screening test coverage as of 30 September 2013 (last screening on 23 August 2013)

Screening test coverage as of 30 September 2015 (last screening on 23 August 2015)

	Target population	Participants		Proportion (%)	Test results			
		Proportion (%)	Screened outside Fukushima		Class	Requiring confirmatory test		
						A	B f (f/c)	C g (g/c)
a	b (b/a)	c (c/b)						
FY 2011/12	47,766	41,493 (86.9)	1,923	41,339 (99.6)	26,187 (63.3)	14,936 (36.1)	216 (0.5)	0 (0.0)
FY 2012/13	163,264	138,865 (85.1)	3,688	136,936 (98.6)	74,920 (54.7)	61,045 (44.6)	970 (0.7)	1 (0.0)
FY 2013/14	78,930	58,427 (74.0)	0	47,262 (80.9)	20,418 (43.2)	26,472 (56.0)	372 (0.8)	0 (0.0)
Total	289,960	238,785 (82.4)	5,611	225,537 (94.5)	121,525 (53.9)	102,453 (45.4)	1,558 (0.7)	1 (0.0)

Number and proportion of children with nodules/cysts as of 30 September 2013 (last screening on 23 August 2013)

	No of confirmed screening results a	Number and proportion of children with nodules/cysts			
		Nodules		Cysts	
		≥ 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 2011/12	41,339	214 (0.5)	227 (0.5)	1 (0.0)	14,859 (35.9)
FY 2012/13	136,936	956 (0.7)	701 (0.5)	9 (0.0)	61,158 (44.7)
FY 2013/14	47,262	371 (0.8)	241 (0.5)	1 (0.0)	26,566 (56.2)
Total	225,537	1,541 (0.7)	1,169 (0.5)	11 (0.0)	102,583 (45.5)

1) Fractions are rounded and may not total 100%

1.2 Confirmatory Examination

The number of children who required further testing is 1,559, of whom 73.6% underwent the

confirmatory testing. Among them, 78.1% have completed the tests (Appendix 5). In addition to Fukushima Medical University Hospital, two institutes, in Koriyama and Iwaki respectively, have provided confirmatory testing since late July 2013. We expect to have some more confirmatory testing venues outside Fukushima Prefecture from November 2013 onwards.

Confirmatory testing coverage and results as of 30 September 2013

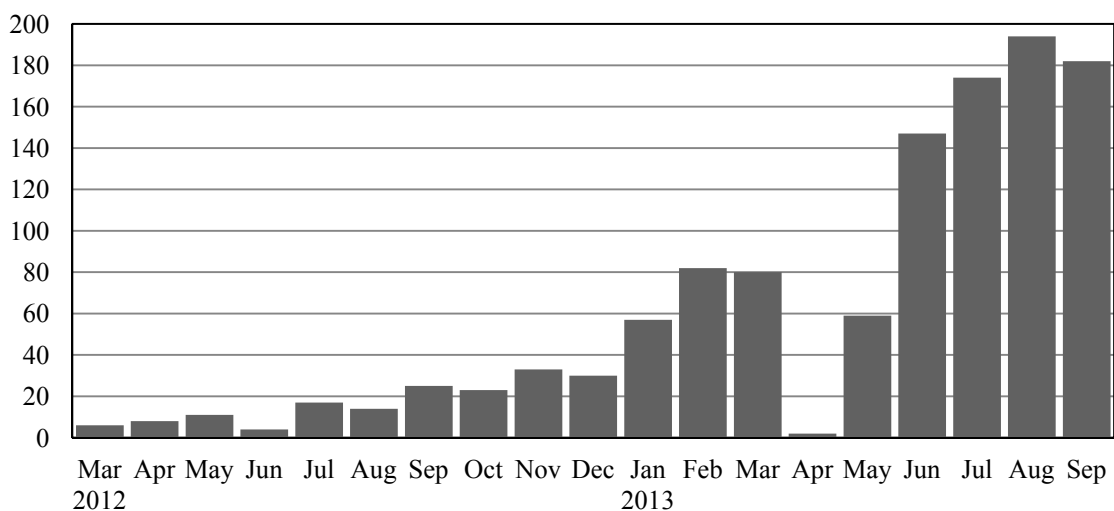
	Number of children requiring confirmatory test a	Participants Proportion (%) b (b/a)	Confirmatory test coverage (%) c (c/b)	Confirmed test results			
				Next screening advised		Follow-up advised	
				A1 d (d/c)	A2 e (e/c)	f (f/c)	Cytology g (g/f)
FY 2011/12	216	188 (87.0)	176 (93.6)	11 (6.3)	39 (22.2)	126 (71.6)	85 (67.5)
FY 2012/13	971	839 (86.4)	698 (83.2)	44 (6.3)	190 (27.2)	464 (66.5)	189 (40.7)
FY 2013/14	372	121 (32.5)	23 (19.0)	0 (0.0)	11 (47.8)	12 (52.2)	3 (25.0)
Total	1,559	1,148 (73.6)	897 (78.1)	55 (6.1)	240 (26.8)	602 (67.1)	277 (46.0)

2) Priority given to those in urgent clinical need

3) Those confirmed within the range of A1 and A2 (including those with other thyroid conditions) advised to take the next examination

4) Those who require 6- or 12-month follow-up (provided by health insurance), and those beyond the specified level of A2

Number of first visits for confirmatory testing



2. Fine Needle Aspiration Biopsy and Cytology (FNAC)

2.1 Aspiration biopsy cytology results as of 30 September 2013

2.1.1 Target municipalities in FY 2011

Suspicious or malignant 14 (11 surgical cases: 1 of benign nodules; 10 of papillary adenocarcinoma)

Male:female ratio 5:9

Mean age (SD, min-max) 17.2 (2.0, 13-20)
15.6 (2.0, 11-18) at the time of the disaster

Mean tumor size 14.7 mm (6.7 mm, 6.0-33.0 mm)

2.1.2 Target municipalities in FY 2012

Suspicious or malignant 44 (16 surgical cases: 16 of papillary adenocarcinoma)

Male:female ratio 19:25

Mean age (SD, min-max) 16.7 (2.8, 8-21)
14.6 (2.7, 6-18) at the time of the disaster

Mean tumor size 14.6 mm (8.6 mm, 5.2-40.5 mm)

2.1.3 Target municipalities in FY 2013

Suspicious or malignant 1 (non-surgical)

Sex Male

Age 13 (11 at the time of the disaster)

Tumor size 30.3 mm

Total for cases FY 2011 – FY 2013

Suspicious or malignant 59 (27 surgical cases: 1 of benign nodules; 26 of papillary adenocarcinoma)

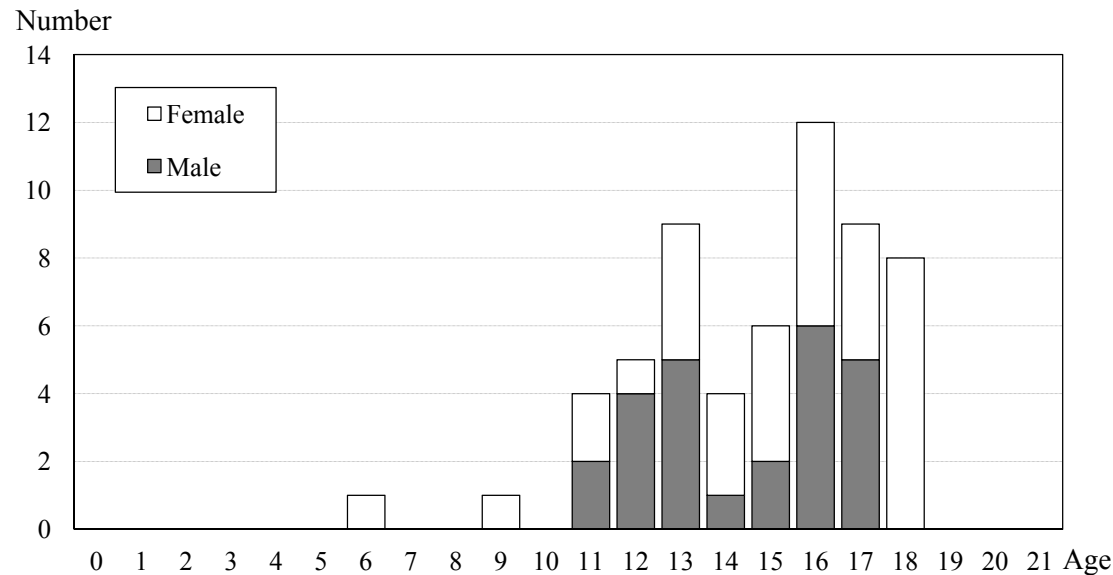
Male:female ratio 25:34

Mean age (SD, min-max) 16.8 (2.6, 8-21)
14.8 (2.6, 6-18) at the time of the disaster

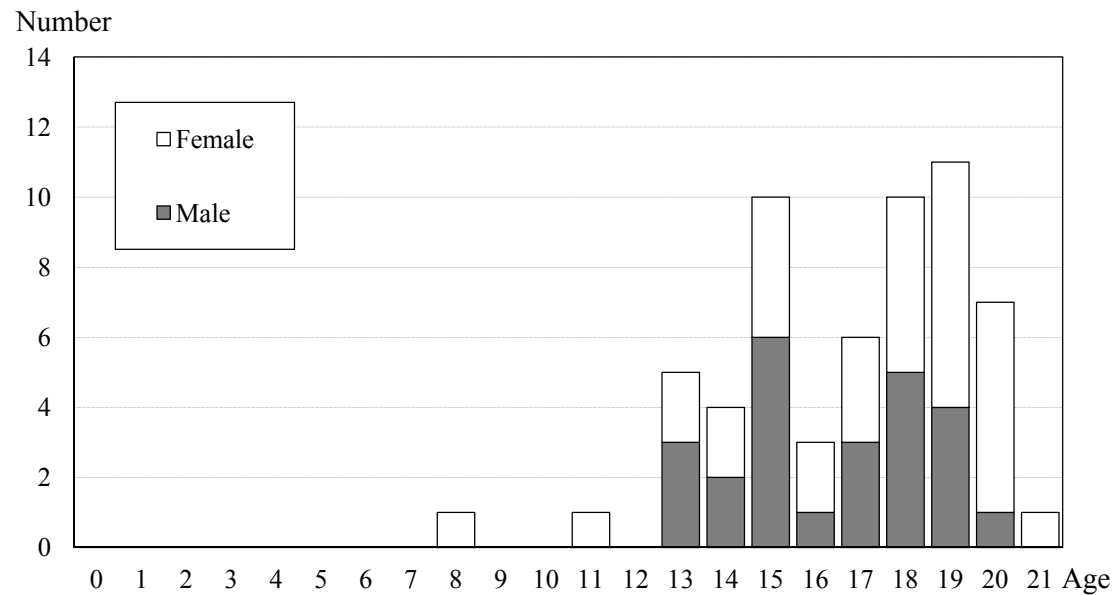
Mean tumor size 14.9 mm (8.3 mm, 5.2-40.5 mm)

2.2 Suspicious or malignant cases on FNAC by age and sex (including one confirmed case of benign nodules as of 30 September 2013)

2.2.1 Suspicious or malignant cases by age as of 11 March 2011



2.2.2 Suspicious or malignant cases by age as of the date of confirmatory examination



2.3 Suspicious or malignant cases on FNAC by estimated radiation dose

Twenty-one of the 59 cases (35.6%) participated in the Basic Survey (radiation dose estimates), of which 12 (57.1%) had estimated radiation exposure dose below 1 mSv.

Number of suspicious or malignant cases by age and dose

Effective dose (mSv)	Sex	Age at the time of disaster				
		0-5	6-10	11-15	16-18	Total
< 0.5	Male	0	0	0	1	1
	Female	0	0	1	2	3
0.5-1.0	Male	0	0	3	0	3
	Female	0	1	0	4	5
1.0-1.5	Male	0	0	2	1	3
	Female	0	0	3	1	4
1.5-2.0	Male	0	0	1	0	1
	Female	0	0	1	0	1
Total	Male	0	0	6	2	8
	Female	0	1	5	7	13

2.4 Blood and urinary iodine test results as of 30 September 2013

2.4.1 Blood test results of 59 suspicious or malignant cases

	FT4 ¹⁾ (ng/dL)	FT3 ²⁾ (pg/mL)	TSH ³⁾ (μ IU/mL)	Tg ⁴⁾ (ng/mL)	TgAb ⁵⁾ (IU/mL)	TPOAb ⁶⁾ (IU/mL)
Reference Range	0.8-1.9	2.2-4.1 ⁷⁾	0.4-4.0	≤ 32.7	< 28.0	< 16.0
Mean $\pm$ SD	1.2 $\pm$ 0.2	3.4 $\pm$ 0.5	1.3 $\pm$ 0.7	49.0 $\pm$ 103.3		
Abnormality ratio (%)	0	0	3.4	37.3	23.7	13.6

2.4.2 Blood test results of 1,087 children who underwent confirmatory test (excluding suspicious or malignant cases)

	FT4 (ng/dL)	FT3 (pg/mL)	TSH (μ IU/mL)	Tg (ng/mL)	TgAb (IU/mL)	TPOAb (IU/mL)
Reference Range	0.8-1.9	2.2-4.1	0.4-4.0	≤ 32.7	< 28.0	< 16.0
Mean $\pm$ SD	1.3 $\pm$ 0.3	3.7 $\pm$ 1.0	2.1 $\pm$ 16.2	34.5 $\pm$ 202.5		
Abnormality ratio (%)	1.4	1.1	6.2	17.1	12.3	10.1

- 1) FT4: Free Thyroxine; higher among patients with Graves' disease and lower with Hashimoto's disease.
- 2) FT3: Free Triiodothyronine; higher among patients with Graves' disease and lower with Hashimoto's disease.
- 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.
- 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) FT3 reference range is adjusted for age.

2.4.3 Urinary iodine ($\mu\text{g/day}$)

	59 suspicious/malignant	Other 1,085 cases
Minimum	61	28
25th percentile	148	120
Median	249	188
75th percentile	382	348
Maximum	6,020	27,100

2.5 Confirmatory test results by municipality as of 30 September 2013

Confirmatory test results in FY 2011 (13 municipalities in the nationally designated evacuation zones)

	Number of children screened	Number 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	2,236	8	0.4	8	2	0.09
Namie	3,222	25	0.8	23	1	0.03
Itate	941	6	0.6	6	0	0.00
Minami-soma	10,638	52	0.5	48	2	0.02
Date	10,636	50	0.5	45	2	0.02
Tamura	6,368	33	0.5	26	3	0.05
Hirono	808	4	0.5	3	0	0.00
Naraha	1,103	6	0.5	4	0	0.00
Tomioka	2,204	11	0.5	9	1	0.05
Kawauchi	272	4	1.5	4	1	0.37
Okuma	1,929	13	0.7	9	1	0.05
Futaba	922	3	0.3	2	0	0.00
Katsurao	180	1	0.6	1	0	0.00
Other areas ²⁾	34	0	0.0	0	0	0.00
Total	41,493	216	0.5	188	13	0.03

1) Excluding one suspected case found benign by aspiration biopsy cytology

2) Number of children who underwent tests at an institute outside the 13 nationally designated evacuation zones

Confirmatory test results by municipality in FY 2012 (Iwaki not fully covered)

	Number of children screened	Number who required confirmatory test	Proportion who required confirmatory test (%)	Number who underwent confirmatory test	Suspicious or malignant cases	Proportion of suspicious or malignant cases (%)
Fukushima	47,030	275	0.6	253	12	0.03
Nihonmatsu	8,709	53	0.6	47	5	0.06
Motomiya	5,187	28	0.5	26	3	0.06
Otama	1,359	7	0.5	7	2	0.15
Koriyama	53,838	458	0.9	377	16	0.03
Kori	1,806	12	0.7	10	0	0.00
Kunimi	1,372	15	1.1	13	0	0.00
Tenei	862	6	0.7	5	0	0.00
Shirakawa	11,081	63	0.6	57	4	0.04
Nishigo	3,627	30	0.8	24	1	0.03
Izumizaki	1,153	5	0.4	5	0	0.00
Miharu	2,500	16	0.6	13	1	0.04
Iwaki	341	3	0.9	2	0	0.00
Total	138,865	971	0.7	839	44	0.03

Confirmatory test results by municipality in FY 2013

	Number of children screened	Number 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	40,480	263	0.6	65	1	0.00
Sukagawa	10,391	54	0.5	27	0	0.00
Soma	4,770	41	0.9	20	0	0.00
Kagamiishi	1,748	7	0.4	4	0	0.00
Shinchi	1,038	7	0.7	5	0	0.00
Total	58,427	372	0.6	121	1	0.00

Appendix 1. Thyroid Ultrasound Examination (TUE) coverage by municipality

Screening coverage by municipality in FY 2011 (13 municipalities in the nationally designated evacuation zones)

30 September 2013

	Target population	Participants		Proportion (%)	Number and proportion of participants by age group ⁶⁾				Participants currently living outside Fukushima	Proportion (%)	
		b	Screened outside Fukushima		b/a						
						0-5	6-10	11-15			16-18
Kawamata	2,403	2,236	33	93.1	561 ¹⁾	623	691	361	61	2.7	
					95.7 ²⁾	98.6	96.0	77.6			
					25.1 ³⁾	27.9	30.9	16.1			
Namie	3,645	3,222	180	88.4	906	854	913	549	1,204	37.4	
					89.6	92.7	88.5	80.6			
					28.1	26.5	28.3	17.0			
Iitate	1,090	941	14	86.3	249	268	264	160	71	7.5	
					89.6	89.0	87.1	76.9			
					26.5	28.5	28.1	17.0			
Minami-soma	12,530	10,638	838	84.9	3,151	3,002	2,904	1,581	3,445	32.4	
					85.8	87.9	88.1	73.8			
					29.6	28.2	27.3	14.9			
Date	11,357	10,636	152	93.7	2,566	3,003	3,298	1,769	272	2.6	
					93.5	99.2	97.7	80.0			
					24.1	28.2	31.0	16.6			
Tamura	7,081	6,368	57	89.9	1,541	1,799	2,003	1,025	69	1.1	
					89.6	99.3	96.5	69.4			
					24.2	28.3	31.5	16.1			
Hirono	1,077	808	51	75.0	194	210	285	119	162	20.0	
					76.1	84.0	81.9	53.1			
					24.0	26.0	35.3	14.7			
Naraha	1,429	1,103	70	77.2	266	308	341	188	209	18.9	
					76.9	85.1	82.4	61.2			
					24.1	27.9	30.9	17.0			
Tomioka	2,940	2,204	223	75.0	576	612	680	336	638	28.9	
					75.0	83.4	76.7	61.0			
					26.1	27.8	30.9	15.2			
Kawauchi	357	272	17	76.2	68	89	69	46	58	21.3	
					75.6	89.9	77.5	58.2			
					25.0	32.7	25.4	16.9			
Okuma	2,386	1,929	174	80.8	633	569	521	206	441	22.9	
					81.4	89.6	84.2	58.2			
					32.8	29.5	27.0	10.7			
Futaba	1,204	922	111	76.6	282	237	269	134	474	51.4	
					76.8	80.1	80.3	65.0			
					30.6	25.7	29.2	14.5			
Katsurao	233	180	3	77.3	43	53	57	27	15	8.3	
					76.8	85.5	85.1	56.3			
					23.9	29.4	31.7	15.0			
Other areas ⁵⁾	34	34	0	100.0	0	6	10	18	2	5.9	
					0.0	100.0	100.0	100.0			
					0.0	17.6	29.4	52.9			
Total	47,766	41,493	1,923	86.9	11,036	11,633	12,305	6,519	7,121	17.2	
					87.1	92.7	90.7	72.7			
					26.6	28.0	29.7	15.7			

- 1) Number of participants
- 2) Number of participants/Number in the target population age group
- 3) Number of participants in the age group/Number of participants
- 4) Number of participants currently living outside Fukushima who underwent the test either in or

outside Fukushima

5) Number of participants who underwent the test outside nationally designated evacuation zones

6) Age at the time of the disaster

Target municipalities for Screening in FY 2012/13 (Iwaki not fully covered)

30 September 2013

	Target population a	Participants		Proportion (%) b/a	Number and proportion of participants by age group				Participants living outside Fukushima c	Proportion (%) c/b
		b	Screened outside Fukushima		0-5	6-10	11-15	16-18		
Fukushima-shi	53,852	47,030	1,183	87.3	13,143	13,602	13,684	6,601	2,659	5.7
					85.8	96.0	91.4	70.2		
					27.9	28.9	29.1	14.0		
Nihonmatsu	10,243	8,709	155	85.0	2,483	2,586	2,616	1,024	220	2.5
					89.2	97.5	89.3	54.6		
					28.5	29.7	30.0	11.8		
Motomiya	6,147	5,187	102	84.4	1,523	1,559	1,489	616	133	2.6
					85.7	97.6	88.0	57.1		
					29.4	30.1	28.7	11.9		
Otama	1,620	1,359	17	83.9	445	394	383	137	24	1.8
					91.2	99.0	89.1	45.1		
					32.7	29.0	28.2	10.1		
Koriyama	65,586	53,838	1,777	82.1	15,724	16,005	15,970	6,139	2,846	5.3
					81.6	94.1	87.6	55.4		
					29.2	29.7	29.7	11.4		
Kori	2,058	1,806	29	87.8	478	527	545	256	32	1.8
					90.7	97.2	92.1	64.5		
					26.5	29.2	30.2	14.2		
Kunimi	1,557	1,372	27	88.1	343	388	439	202	20	1.5
					90.5	97.7	93.0	65.4		
					25.0	28.3	32.0	14.7		
Tenei	1,070	862	12	80.6	287	283	217	75	21	2.4
					93.8	98.6	77.5	38.1		
					33.3	32.8	25.2	8.7		
Shirakawa	12,590	11,081	267	88.0	3,054	3,202	3,466	1,359	272	2.5
					90.6	97.5	92.4	62.3		
					27.6	28.9	31.3	12.3		
Nishigo	4,021	3,627	78	90.2	1,088	1,068	1,028	443	82	2.3
					94.4	98.1	93.5	65.1		
					30.0	29.4	28.3	12.2		
Izumizaki	1,299	1,153	13	88.8	346	344	307	156	15	1.3
					95.3	97.5	91.1	63.4		
					30.0	29.8	26.6	13.5		
Miharu	2,879	2,500	28	86.8	683	718	732	367	48	1.9
					91.1	96.9	89.5	64.4		
					27.3	28.7	29.3	14.7		
Iwaki	342	341	0	99.7	32	179	130	0	0	0.0
					100.0	99.4	100.0	0.0		
					9.4	52.5	38.1	0.0		
Total	163,264	138,865	3,688	85.1	39,629	40,855	41,006	17,375	6,372	4.6
					85.2	95.7	89.7	61.4		
					28.5	29.4	29.5	12.5		

Target municipalities for Screening in FY 2013/14

30 September 2013

Target municipalities for screening in FY 2015/14					30 September 2015						
	Target population	Participants		Proportion (%)	Number and proportion of participants by age group				Participants living outside Fukushima	Proportion (%)	
		b	Screened outside Fukushima		b/a	0-5	6-10	11-15			16-18
	a	b							c	c/b	
Iwaki	53,367	40,480	0	75.9	10,375	14,804	11,814	3,487	627	1.5	
	61,834				60.3	93.0	67.1	31.4			
Sukagawa	14,828	10,391	0	70.1	25.6	36.6	29.2	8.6	81	0.8	
	3,294				3,850	2,571	676				
Soma	6,798	4,770	0	70.2	76.2	95.3	65.0	27.0	171	3.6	
	31.7				37.1	24.7	6.5				
Kagamiishi	2,508	1,748	0	69.7	1,562	1,600	1,234	374	17	1.0	
	78.9				90.3	67.0	31.1				
Shinchi	1,429	1,038	0	72.6	32.7	33.5	25.9	7.8	25	2.4	
	560				660	416	112				
Subtotal	78,930	58,427	0	74.0	76.0	95.1	61.8	27.7	921	1.6	
	32.0				37.8	23.8	6.4				
	87,397			66.9	27.6	36.4	27.9	8.1			
Total	289,960	238,785	5,611	82.4	66,773	73,775	69,622	28,615	14,414	6.0	
					79.7	94.5	83.1	54.2			
	298,427				28.0	30.9	29.2	12.0			

Appendix 2. Thyroid Ultrasound Examination (TUE) coverage by prefecture

As of 30 September 2013

Prefecture	Number of test venues	Participants	Prefecture	Number of test venues	Participants	Prefecture	Number of test venues	Participants
Hokkaido	2	206	Fukui	1	15	Hiroshima	1	15
Aomori	1	114	Yamanashi	1	43	Yamaguchi	1	18
Iwate	1	116	Nagano	2	83	Tokushima	1	3
Miyagi	2	853	Gifu	1	30	Kagawa	1	24
Akita	1	142	Shizuoka	2	73	Ehime	1	13
Yamagata	2	394	Aichi	2	109	Kōchi	1	9
Ibaraki	2	195	Mie	1	20	Fukuoka	2	52
Tochigi	5	293	Shiga	1	12	Saga	1	5
Gunma	1	126	Kyōto	2	59	Nagasaki	2	17
Saitama	1	157	Ōsaka	5	134	Kumamoto	1	19
Chiba	3	120	Hyōgo	2	90	Ōita	1	29
Tōkyō	9	933	Nara	1	16	Miyazaki	1	28
Kanagawa	2	394	Wakayama	1	10	Kagoshima	1	24
Niigata	1	423	Tottori	1	12	Okinawa	1	73
Toyama	1	15	Shimane	1	10			
Ishikawa	1	34	Okayama	3	51	Total	78	5,611

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

Appendix 3. Thyroid Ultrasound Examination (TUE) results by municipality

Confirmatory test results in FY 2011 (13 municipalities in the nationally designated evacuation zones) as of 30 September 2013

	Participants a	Number confirmed b Proportion (%) b/a	Number by test result Proportion (%)				Nodules		Cysts	
			A		B	C	Proportion (%)		Proportion (%)	
			A1	A2			≥ 5.1 mm	≤ 5.0 mm	≥ 20.1 mm	≤ 20.0 mm
Kawamata	2,236	2,233	1,530	695	8	0	8	17	0	683
		99.9	68.5	31.1	0.4	0.0	0.4	0.8	0.0	30.6
Nanie	3,222	3,207	2,098	1,084	25	0	25	41	0	1,069
		99.5	65.4	33.8	0.8	0.0	0.8	1.3	0.0	33.3
Iitate	941	940	692	242	6	0	6	15	0	231
		99.9	73.6	25.7	0.6	0.0	0.6	1.6	0.0	24.6
Minami-soma	10,638	10,598	6,710	3,836	52	0	52	86	0	3,794
		99.6	63.3	36.2	0.5	0.0	0.5	0.8	0.0	35.8
Date	10,636	10,623	6,765	3,808	50	0	48	30	1	3,809
		99.9	63.7	35.8	0.5	0.0	0.5	0.3	0.0	35.9
Tamura	6,368	6,365	4,027	2,305	33	0	33	11	0	2,311
		100.0	63.3	36.2	0.5	0.0	0.5	0.2	0.0	36.3
Hirono	808	797	500	293	4	0	4	3	0	293
		98.6	62.7	36.8	0.5	0.0	0.5	0.4	0.0	36.8
Naraha	1,103	1,090	623	461	6	0	6	4	0	463
		98.8	57.2	42.3	0.6	0.0	0.6	0.4	0.0	42.5
Tomioka	2,204	2,184	1,293	880	11	0	11	6	0	879
		99.1	59.2	40.3	0.5	0.0	0.5	0.3	0.0	40.2
Kawauchi	272	267	149	114	4	0	4	1	0	114
		98.2	55.8	42.7	1.5	0.0	1.5	0.4	0.0	42.7
Okuma	1,929	1,917	1,117	787	13	0	13	7	0	784
		99.4	58.3	41.1	0.7	0.0	0.7	0.4	0.0	40.9
Futaba	922	904	552	349	3	0	3	3	0	348
		98.0	61.1	38.6	0.3	0.0	0.3	0.3	0.0	38.5
Katsurao	180	180	114	65	1	0	1	3	0	64
		100.0	63.3	36.1	0.6	0.0	0.6	1.7	0.0	35.6
Other areas	34	34	17	17	0	0	0	0	0	17
		100.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0
Total	41,493	41,339	26,187	14,936	216	0	214	227	1	14,859
		99.6	63.3	36.1	0.5	0.0	0.5	0.5	0.0	35.9

Target municipalities in FY 2012 (Iwaki not fully covered)

as of 30 September 2013

	Participants a	Number of confirmed tests b/a	Number by test result Proportion (%) by test result				Nodules		Cysts	
			A		B	C	Proportion (%)		Proportion (%)	
			A1	A2			≥ 5.1 mm	≤ 5.0 mm	≥ 20.1 mm	≤ 20.0 mm
Fukushima	47,030	46,896	26,780	19,841	275	0	268	190	3	19,857
		99.7	57.1	42.3	0.6	0.0	0.6	0.4	0.0	42.3
Nihonmatsu	8,709	8,687	5,110	3,524	52	1	52	42	1	3,525
		99.7	58.8	40.6	0.6	0.0	0.6	0.5	0.0	40.6
Motomiya	5,187	5,170	2,929	2,213	28	0	26	24	1	2,217
		99.7	56.7	42.8	0.5	0.0	0.5	0.5	0.0	42.9
Otama	1,359	1,358	810	541	7	0	7	8	0	541
		99.9	59.6	39.8	0.5	0.0	0.5	0.6	0.0	39.8
Koriyama	53,838	52,165	26,841	24,866	458	0	454	314	3	24,958
		96.9	51.5	47.7	0.9	0.0	0.9	0.6	0.0	47.8
Kori	1,806	1,805	995	798	12	0	12	9	0	799
		99.9	55.1	44.2	0.7	0.0	0.7	0.5	0.0	44.3
Kunimi	1,372	1,370	727	628	15	0	14	8	1	632
		99.9	53.1	45.8	1.1	0.0	1.0	0.6	0.1	46.1
Tenei	862	860	529	325	6	0	6	3	0	329
		99.8	61.5	37.8	0.7	0.0	0.7	0.3	0.0	38.3
Shirakawa	11,081	11,039	6,266	4,710	63	0	63	58	0	4,704
		99.6	56.8	42.7	0.6	0.0	0.6	0.5	0.0	42.6
Nishigo	3,627	3,623	2,102	1,491	30	0	30	20	0	1,492
		99.9	58.0	41.2	0.8	0.0	0.8	0.6	0.0	41.2
Izumizaki	1,153	1,150	520	625	5	0	5	10	0	622
		99.7	45.2	54.3	0.4	0.0	0.4	0.9	0.0	54.1
Miharu	2,500	2,472	1,171	1,285	16	0	16	14	0	1,284
		98.9	47.4	52.0	0.6	0.0	0.6	0.6	0.0	51.9
Iwaki	341	341	140	198	3	0	3	1	0	198
		100.0	41.1	58.1	0.9	0.0	0.9	0.3	0.0	58.1
Total	138,865	136,936	74,920	61,045	970	1	956	701	9	61,158
		98.6	54.7	44.6	0.7	0.0	0.7	0.5	0.0	44.7

Target municipalities in FY 2013

as of 30 September 2013

	Participants a	Number of confirmed tests	Number by test result				Nodules		Cysts	
			Proportion (%) by test result							
		Proportion (%) b/a	A		B	C	Proportion (%)		Proportion (%)	
			A1	A2			≥ 5.1 mm	≤ 5.0 mm	≥ 20.1 mm	≤ 20.0 mm
Iwaki	40,480	31,944	13,536	18,145	263	0	262	163	1	18,212
		78.9	42.4	56.8	0.8	0.0	0.8	0.5	0.0	57.0
Sukagawa	10,391	7,830	3,377	4,399	54	0	54	26	0	4,412
		75.4	43.1	56.2	0.7	0.0	0.7	0.3	0.0	56.3
Soma	4,770	4,758	2,252	2,465	41	0	41	43	0	2,474
		99.7	47.3	51.8	0.9	0.0	0.9	0.9	0.0	52.0
Kagamiishi	1,748	1,692	787	898	7	0	7	5	0	899
		96.8	46.5	53.1	0.4	0.0	0.4	0.3	0.0	53.1
Shinchi	1,038	1,038	466	565	7	0	7	4	0	569
		100.0	44.9	54.4	0.7	0.0	0.7	0.4	0.0	54.8
Subtotal	58,427	47,262	20,418	26,472	372	0	371	241	1	26,566
		80.9	43.2	56.0	0.8	0.0	0.8	0.5	0.0	56.2
Total	238,785	225,537	121,525	102,453	1,558	1	1,541	1,169	11	102,583
		94.5	53.9	45.4	0.7	0.0	0.7	0.5	0.0	45.5

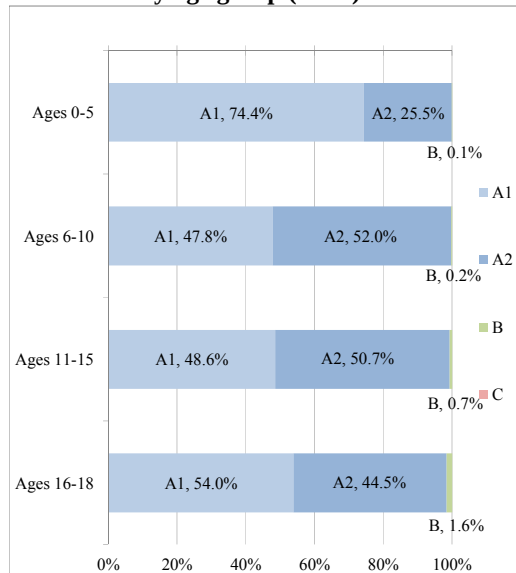
Appendix 4

4.1 Thyroid Ultrasound Examination (TUE) results by age and sex

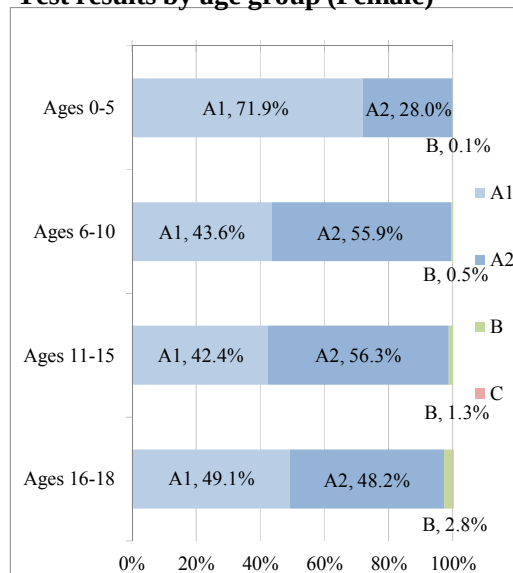
As of 30 September 2013 (last test on 23 August 2013)

	A						B			C			Total		
	A1			A2											
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Ages 0-5	23,639	21,729	45,368	8,095	8,476	16,571	27	35	62	0	0	0	31,761	30,240	62,001
Ages 6-10	17,393	15,027	32,420	18,914	19,268	38,182	85	159	244	0	0	0	36,392	34,454	70,846
Ages 11-15	16,195	13,874	30,069	16,910	18,442	35,352	226	441	667	0	0	0	33,331	32,757	66,088
Ages 16-18	6,787	6,881	13,668	5,595	6,753	12,348	198	387	585	0	1	1	12,580	14,022	26,602
Total	64,014	57,511	121,525	49,514	52,939	102,453	536	1,022	1,558	0	1	1	114,064	111,473	225,537

Test results by age group (Male)



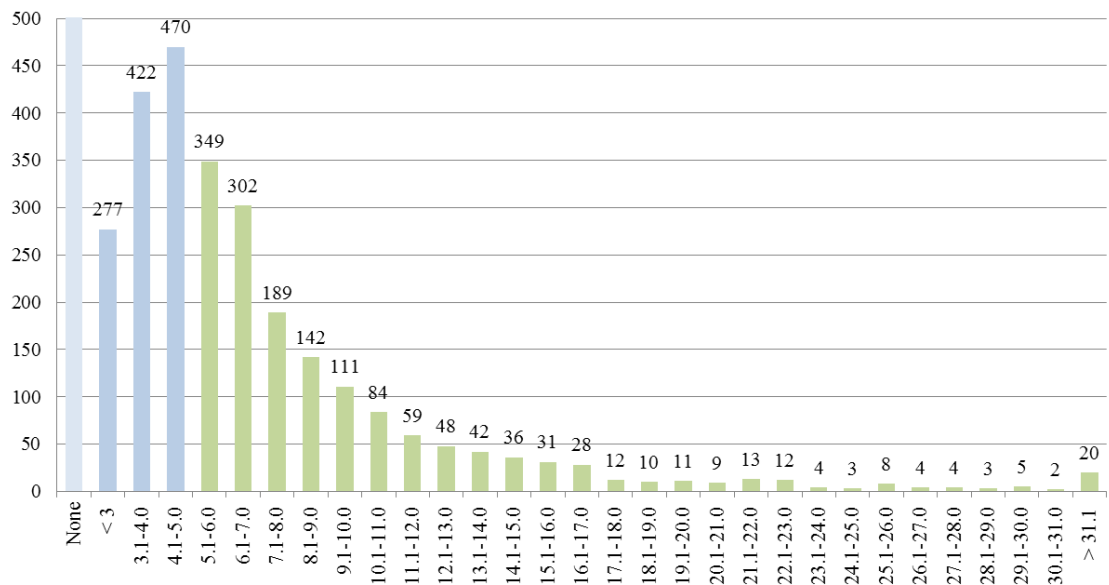
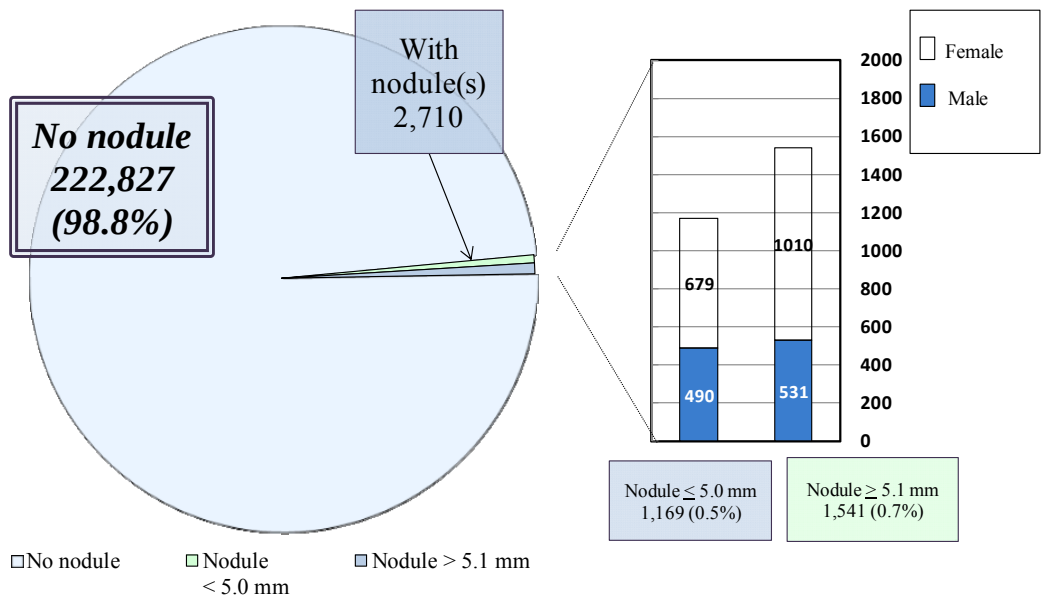
Test results by age group (Female)



4.2 Nodule size

As of 30 September 2013 (last test on 23 August 2013)

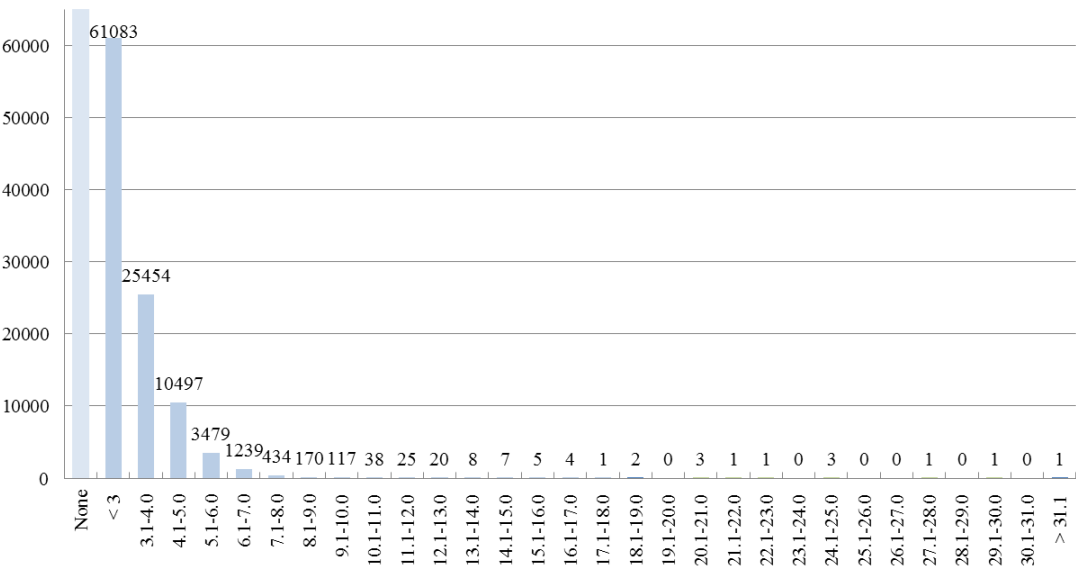
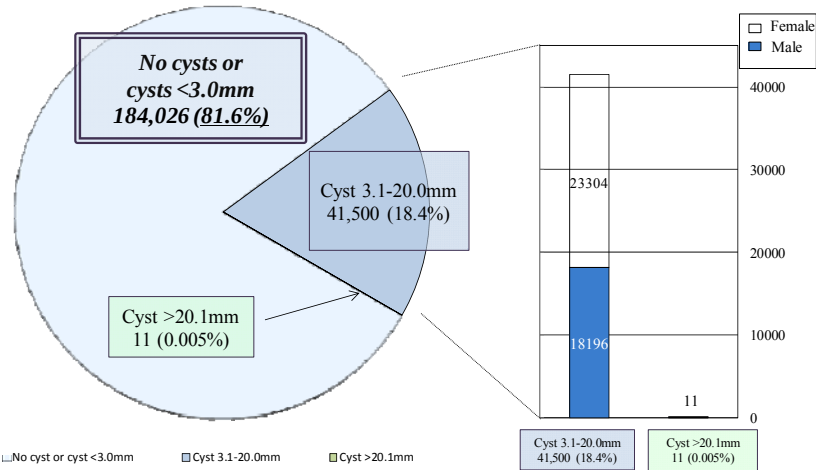
Nodule size	Total	Gender		Test result	Proportion
		Male	Female		
None	222,827	113,043	109,784	A1	98.8%
< 3.0 mm	277	130	147	A2	0.5%
3.1-5.0 mm	892	360	532	B	0.7%
5.1-10.0 mm	1,093	394	699		
10.1-15.0 mm	269	81	188		
15.1-20.0 mm	92	28	64		
20.1-25.0 mm	41	13	28		
> 25.1 mm	46	15	31		
Total	225,537	114,064	111,473		



4.3 Cyst size

As of 30 September 2013 (last test on 23 August 2013)

Cyst size	Total			Class	%
	Male	Female			
None	122,943	64,569	58,374	A1 (54.5%)	81.6%
< 3.0 mm	61,083	31,297	29,786	A2 (45.5%)	
3.1-5.0 mm	35,951	16,220	19,731		
5.1-10.0 mm	5,439	1,942	3,497		
10.1-15.0 mm	98	34	64		
15.1-20.0 mm	12	0	12		
20.1-25.0 mm	8	1	7	B (0.005%)	0.005%
> 25.1 mm	3	1	2		
Total	225,537	114,064	111,473		



Appendix 5. Confirmatory test results by municipality

as of 30 September 2013

	Number of children screened a	Number who required Confirmatory test b	Number of children who underwent confirmatory test by age				Number of confirmed results					Cumulative numbers of confirmed results	
			Total c	Ages 0-5 d	Ages 6-10 e	Ages 11-15 f	Ages 16-18 g	Total h	Next screening advised		Follow-up advised k		Aspiration biopsy cytology l
									A1 i	A2 j			
			Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)		Proportion (%)

Target municipalities for Confirmatory test in FY 2011 (13 municipalities in the nationally designated evacuation zones)

Kawamata	2,236	8	8	0	1	3	4	7	1	0	6	5	24
		0.4	100.0	0.0	12.5	37.5	50.0	87.5	14.3	0.0	85.7	83.3	
Namie	3,222	25	23	1	3	7	12	20	1	4	15	10	53
		0.8	92.0	4.3	13.0	30.4	52.2	87.0	5.0	20.0	75.0	66.7	
Iitate	941	6	6	0	2	1	3	6	0	3	3	3	16
		0.6	100.0	0.0	33.3	16.7	50.0	100.0	0.0	50.0	50.0	100.0	
Minami-soma	10,638	52	48	6	5	16	21	47	4	10	33	19	111
		0.5	92.3	12.5	10.4	33.3	43.8	97.9	8.5	21.3	70.2	57.6	
Date	10,636	50	45	0	3	16	26	45	4	8	33	24	119
		0.5	90.0	0.0	6.7	35.6	57.8	100.0	8.9	17.8	73.3	72.7	
Tamura	6,368	33	26	1	3	14	8	23	0	3	20	12	63
		0.5	78.8	3.8	11.5	53.8	30.8	88.5	0.0	13.0	87.0	60.0	
Hirono	808	4	3	0	1	0	2	3	1	2	0	0	6
		0.5	75.0	0.0	33.3	0.0	66.7	100.0	33.3	66.7	0.0	0.0	
Naraha	1,103	6	4	1	0	0	3	4	0	2	2	1	9
		0.5	66.7	25.0	0.0	0.0	75.0	100.0	0.0	50.0	50.0	50.0	
Tomioka	2,204	11	9	0	1	3	5	7	0	1	6	6	21
		0.5	81.8	0.0	11.1	33.3	55.6	77.8	0.0	14.3	85.7	100.0	
Kawauchi	272	4	4	0	1	0	3	4	0	1	3	2	11
		1.5	100.0	0.0	25.0	0.0	75.0	100.0	0.0	25.0	75.0	66.7	
Okuma	1,929	13	9	0	0	5	4	7	0	4	3	1	18
		0.7	69.2	0.0	0.0	55.6	44.4	77.8	0.0	57.1	42.9	33.3	
Futaba	922	3	2	0	0	1	1	2	0	0	2	2	4
		0.3	66.7	0.0	0.0	50.0	50.0	100.0	0.0	0.0	100.0	100.0	
Katsurao	180	1	1	0	1	0	0	1	0	1	0	0	2
		0.6	100.0	0.0	100.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	
Other areas	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%	0.0%	
Subtotal	41,493	216	188	9	21	66	92	176	11	39	126	85	457
		0.5	87.0	4.8	11.2	35.1	48.9	93.6	6.3	22.2	71.6	67.5	

Target municipalities for Confirmatory test in FY 2012 (Iwaki not fully covered)

Fukushima	47,030	275	253	5	27	101	120	236	11	56	169	84	599
		0.6	92.0	2.0	10.7	39.9	47.4	93.3	4.7	23.7	71.6	49.7	
Nihonmatsu	8,709	53	47	0	4	25	18	40	1	5	34	20	112
		0.6	88.7	0.0	8.5	53.2	38.3	85.1	2.5	12.5	85.0	58.8	
Motomiya	5,187	28	26	1	2	14	9	24	0	7	17	7	60
		0.5	92.9	3.8	7.7	53.8	34.6	92.3	0.0	29.2	70.8	41.2	
Otama	1,359	7	7	0	0	4	3	6	0	1	5	3	17
		0.5	100.0	0.0	0.0	57.1	42.9	85.7	0.0	16.7	83.3	60.0	
Koriyama	53,838	458	377	14	61	168	134	272	17	93	162	52	719
		0.9	82.3	3.7	16.2	44.6	35.5	72.1	6.3	34.2	59.6	32.1	
Kori	1,806	12	10	1	2	3	4	9	0	2	7	2	21
		0.7	83.3	10.0	20.0	30.0	40.0	90.0	0.0	22.2	77.8	28.6	
Kunimi	1,372	15	13	2	2	2	7	12	1	1	10	4	31
		1.1	86.7	15.4	15.4	15.4	53.8	92.3	8.3	8.3	83.3	40.0	
Tenei	862	6	5	1	2	1	1	5	1	2	2	0	13
		0.7	83.3	20.0	40.0	20.0	20.0	100.0	20.0	40.0	40.0	0.0	
Shirakawa	11,081	63	57	2	10	28	17	54	6	12	36	13	157
		0.6	90.5	3.5	17.5	49.1	29.8	94.7	11.1	22.2	66.7	36.1	
Nishigo	3,627	30	24	1	5	9	9	23	2	7	14	3	55
		0.8	80.0	4.2	20.8	37.5	37.5	95.8	8.7	30.4	60.9	21.4	
Izumizaki	1,153	5	5	0	2	0	3	4	1	2	1	0	12
		0.4	100.0	0.0	40.0	0.0	60.0	80.0	25.0	50.0	25.0	0.0	
Miharu	2,500	16	13	0	0	8	5	11	3	2	6	1	26
		0.6	81.3	0.0	0.0	61.5	38.5	84.6	27.3	18.2	54.5	16.7	
Iwaki	341	3	2	0	0	2	0	2	1	0	1	0	4
		0.9	66.7	0.0	0.0	100.0	0.0	100.0	50.0	0.0	50.0	0.0	
Subtotal	138,865	971	839	27	117	365	330	698	44	190	464	189	1,826
		0.7	86.4	3.2	13.9	43.5	39.3	83.2	6.3	27.2	66.5	40.7	

Target municipalities for Confirmatory test in FY 2013

Iwaki	40,480	263	65	6	29	28	2	20	0	8	12	3	81
		0.6	24.7	9.2	44.6	43.1	3.1	30.8	0.0	40.0	60.0	25.0	
Sukagawa	10,391	54	27	3	14	10	0	2	0	2	0	0	30
		0.5	50.0	11.1	51.9	37.0	0.0	7.4	0.0	100.0	0.0	0.0	
Soma	4,770	41	20	0	8	8	4	1	0	1	0	0	20
		0.9	48.8	0.0	40.0	40.0	20.0	5.0	0.0	100.0	0.0	0.0	
Kagamiishi	1,748	7	4	0	3	1	0	0	0	0	0	0	4
		0.4	57.1	0.0	75.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	
Shinchi	1,038	7	5	0	3	2	0	0	0	0	0	0	6
		0.7	71.4	0.0	60.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	
Subtotal	58,427	372	121	9	57	49	6	23	0	11	12	3	141
		0.6	32.5	7.4	47.1	40.5	5.0	19.0	0.0	47.8	52.2	25.0	

Total	238,785	1,559	1,148	45	195	480	428	897	55	240	602	277	2,424
		0.7	73.6	3.9	17.0	41.8	37.3	78.1	6.1	26.8	67.1	46.0	