

Results of survey of the proportion of thyroid ultrasound findings

1. Background and Objectives of the Survey

As the results of Fukushima Health Management Survey, thyroid cysts* (<20.0mm) are suspected among~40% children. Although these cysts don't need detailed examination, anxiety is occurred among people due to record such a minor status. It is a first trial in the world to survey a large number of participant's thyroid by such a high resolution thyroid ultrasound examinations, therefore the frequency of thyroid cysts and the variance of status are not well known. Under these circumstances, MOE conducts thyroid ultrasound examination same as Fukushima's one for sufficient number of children aged 18 years or younger in 3 areas and provide some helpful information on the thyroid survey to promote of understanding among people.

*cysts without solid component

Notes

The thyroid ultrasound examination in this survey was conducted to screen, not to determine Thyroid cancer.

2. Overview of the Survey

(1) Period of the Survey

November 2012 -March 2013

(2) Investigation Entruster

Japan Association of Breast and Thyroid Sonology

(3) Areas and Number of Participants

Areas	Number of Participants				
	Age 3-5	Age 6-10	Age 11-15	Age 16-18	Total
Hirosaki City, Aomori Prefecture	51	444	748	387	1,630
Kofu City, Yamanashi Prefecture	34	379	638	315	1,366
Nagasaki City, Nagasaki Prefecture	104	452	609	204	1,369

(4) Methods

- High resolution thyroid ultrasound examinations are conducted, which give the same quality data as the examination of the Fukushima Health Management Survey.
- Findings of the ultrasound examinations are classified in the same categories as the Fukushima Health Management Survey, and the proportion of thyroid cysts and nodules among children of the survey areas is estimated.

3. Results of the Survey

(1) Outlines of All areas

① Results of Number and Proportion

Total Number of Participants	4,365
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Results		Status	Number		Proportion (%)	
A	A1	No nodules/cysts	1,853	4,321	42.5	99.0
	A2	Nodules ≤ 5.0 mm or cysts* ≤ 20.0 mm	2,468		56.5	
B		Nodules ≥ 5.1 mm or cysts ≥ 20.1 mm	44		1.0	
C		Immediate need for secondary examination	0		0.0	
Total			4,365		100	

*cysts without solid component

③ Number and Proportion of Participants Suspected Nodules and Cysts

		Number	Proportion (%)	Number	Proportion(%)
Suspected Nodules	≥ 5.1 mm	44	1.0	72	1.6
	≤ 5.0 mm	28	0.6		
Suspected Cysts	≥ 20.1 mm	0	0.0	2,483	56.9
	≤ 20.0 mm	2,483	56.9		

Note: If the suspecting are both Nodules and Cysts, add up on the each number of both.

(2) Outlines of areas

		Hirosaki City			Kofu City			Nagasaki City					
Results		Number		Proportion (%)		Number		Proportion (%)		Number		Proportion (%)	
A	A1	670	1,609	41.1	98.7	404	1,351	29.6	98.9	779	1,361	56.9	99.4
	A2	939		57.6		947		69.3		582		42.5	
B		21		1.3		15		1.1		8		0.6	
C		0		0.0		0		0.0		0		0.0	
Total		1,630		100.0		1,366		100.0		1,369		100.0	