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2022 Fukushima Medical University International Symposium on the Fukushima Health Management Survey Secretariat of International Symposium Office of Public Communications and International Cooperation, Radiation Medical Science Center for the Fukushima Health Management Survey, Fukushima Medical University ⊠ kenkani@fmu.ac.jp, TEL: +81-24-581-5454 (Weekday, 9a.m. - 5 p.m. IST)

# Fukushima Health Management Survey — Focusing on this year's report



Following-up the health of residents for a long time with the aim to promote health into the future



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



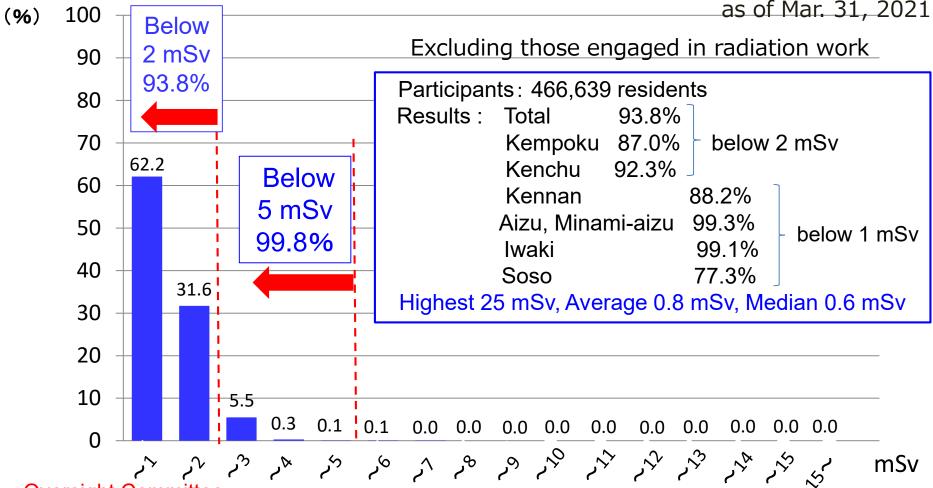
# **Outline of the Fukushima Health Management Survey**

Type of survey (Basic Survey to estimate individual external exposure dose for four months after the accident and Detailed Survey to understand individual health conditions)

Туре	Participants	Number Method	d of survey / response
Basic Survey	Residents / visitors of Fukushima Prefecture during the disaster	Approx. 2.06 million	Fill in survey form →post
Detailed Survey Thyroid Examination	Preliminary baseline : All residents of age 18 or less at the time of the disaster Full-scale : In addition to those mentioned above, people who were born	Approx. 368,000 Approx. 381,000	Consult at school / medical institution / public facility
Comprehensive Health Check	from April 2, 2011 to April 1, 2012 Residents of 13 municipals in evacuation zones (implemented as prefectural project except for mentioned above)	 _	Consult at medical institution / municipal health examination venue etc.
Mental Health and Lifestyle Survey	Residents of 13 municipals in evacuation zones	Approx. 210,000	Fill in survey form →post or Web response
Pregnancy and Birth Survey	Main survey : Those who received a Maternal and Child Handbook in Fukushima Those who delivered in Fukushima Follow-up survey : Those who responded to the main survey	12,000 -16,000 / each year 5,000 -7,000 / each year	Fill in survey form →post or Web response

42nd Oversight Committee for the Fukushima Health Management Survey

# Summary of External Exposure Effective Dose during the First 4 Months after the Disaster by an All Prefectural Survey



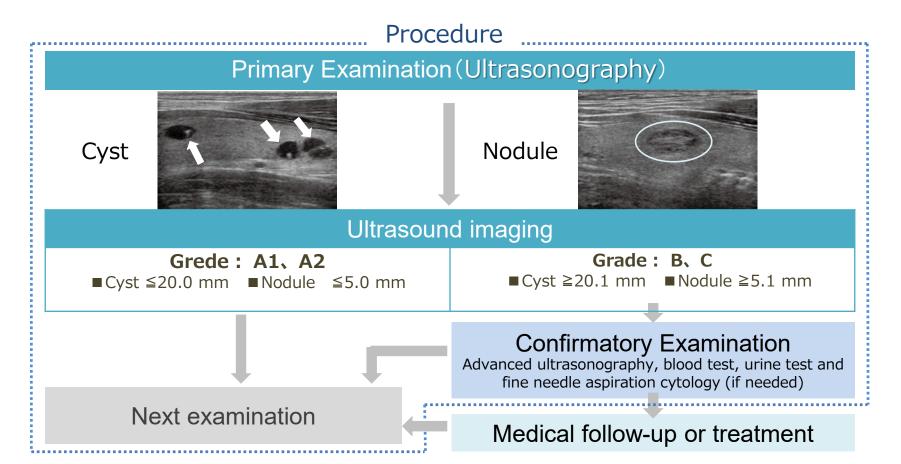
#### **Oversight Committee**

Judging from the knowledge of previous epidemiological studies, the committee evaluated that radiation doses estimated so far are unlikely to cause statistically significant effects on health.

# Thyroid Ultrasound Examination – Method

Preliminary baseline survey : Approx. 368,000 All residents of age 18 or less at the time of the disaster

# Full-scale survey : Approx. 381,000 In addition, people who were born from April 2, 2011 to April 1, 2012



# **Thyroid Ultrasound Examination [Provision of information]**

# Explanation sessions for parents

[Participants] Parents, teachers school staff, local gov't officials, Residents, etc.



民が抱える不安の解消に応

状腺ホルモンをつくる

放出された放射性ヨウ素による

#### [Contents]

Briefing by the doctors about details of the examination, the latest findings, medical characteristics of thyroid and thyroid cancer, etc.

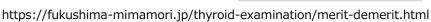
### 

#### Advantages and Disadvantages of Thyroid Examination

#### [Contents]

Explains in detail the advantages and disadvantages of thyroid examinations using ultrasonography ("echo").

#### Released on April 1<sup>st</sup>, 2020



#### O Visiting lectures for students

[Participants] From the 5<sup>th</sup> grade of elementary school to high school students

#### [Contents]

- Lecture upon request by the school for a lesson period etc.
  Doctors explain about the thyroid examination simply with purpose- made educational textbooks
- Demonstration of ultrasonography by medical technologist

#### **Thyroid Newsletter**

#### [Contents]

A regular publication with the latest information on thyroid examinations, Q&A, findings, etc.

> **Issued 17 times** since FY2012



なぜ?なに

小学生用テキスト

# Schedule and Targets

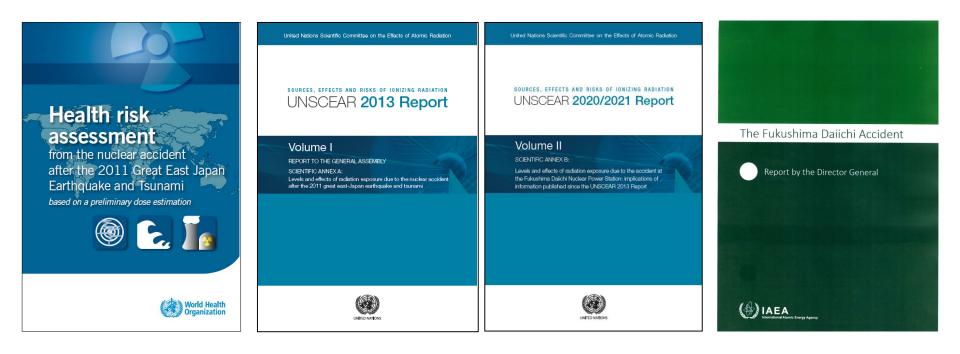
	Exam.	Duration	Location	Target
1 <sup>st</sup> Exam	Preliminary Baseline Screening (To check the baseline conditions of thyroid glands)	Oct 2011 ~ Mar 2014	FMU, schools, public facilities and screening facilities outside Fukushima	Residents of Fukushima Prefecture aged 18 or younger as of Mar. 11, 2011 (Approx. 368,000)
2 <sup>nd</sup> Exam	Full-scale Thyroid Screening	Apr 2014 $\sim$ Mar 2016	Schools, public facilities and screening facilities	In addition to the above- mentioned residents, those who were born between Apr. 2, 2011 and Apr. 1,
3 <sup>rd</sup> Exam	Program (long-term watch over the health of residents)	May 2016 ~ Mar 2018	outside/within Fukushima	2012. (Approx. 381,000)
4 <sup>th</sup> Exam		Apr 2018 $\sim$ Mar 2020		The above-mentioned residents are recommended to receive an examination every 2 years until they reach age 20 and at ages
5 <sup>th</sup> Exam~		Apr 2020 $\sim$		that are multiples of 5 after age 21.



# **Thyroid Examination - Results**

		Preliminary Baseline (1 <sup>st</sup> Exam)	Full-Scale Survey (2 <sup>nd</sup> Exam)	Full-Scale Survey (3 <sup>rd</sup> Exam)	Full-Scale Survey (4 <sup>th</sup> Exam)	Full-Scale Survey (5 <sup>th</sup> Exam)	Survey for Age 25
	cal Year of camination	2011- 2013	2014- 2015	2016- 2017	2018- 2019	2020- 2022	2017-
	ber of target opulation	367,637	381,237	336,667	294,237	252,850	87,694
	ipation rate of mary exam	81.7%	71.0%	64.7%	62.3%	12.8%	8.7%
	t population of matory exam	2,293	2,230	1,502	1,391	291	359
	ipation rate of matory exam	92.9%	84.2%	73.5%	73.4%	60.1%	66.6%
Maligna for mal	nt or suspicious ignancy (FNAC)	116	71	31	36	3	9
	s who received surgery	102	55	29	29	1	6
	Papillary cancer	100	54	29	29	1	5
Patho- logical	Undifferentiated cancer	1					
diag- nosis	Other thyroid cancers		1				1
	Benign nodules	1					

# Evaluation by international organizations on health effects of the Fukushima nuclear power plant accident



WHO

# 2013 Repot 2020 Report UNSCEAR

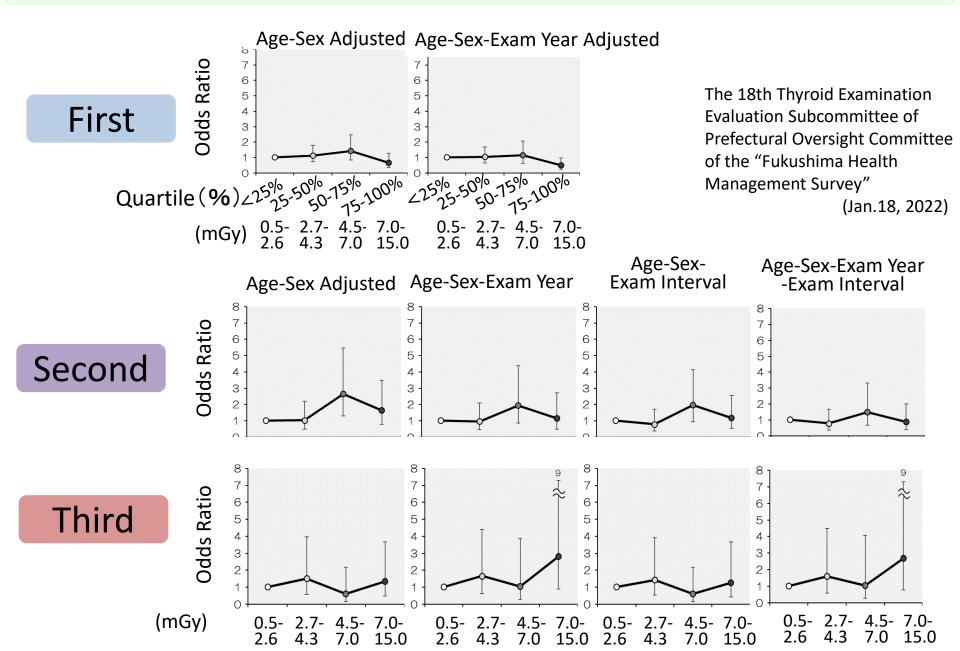
**IAEA** 

# UNSCEAR Radiation Exposure among Evacuation Groups from the Chernobyl and Fukushima Nuclear Accidents

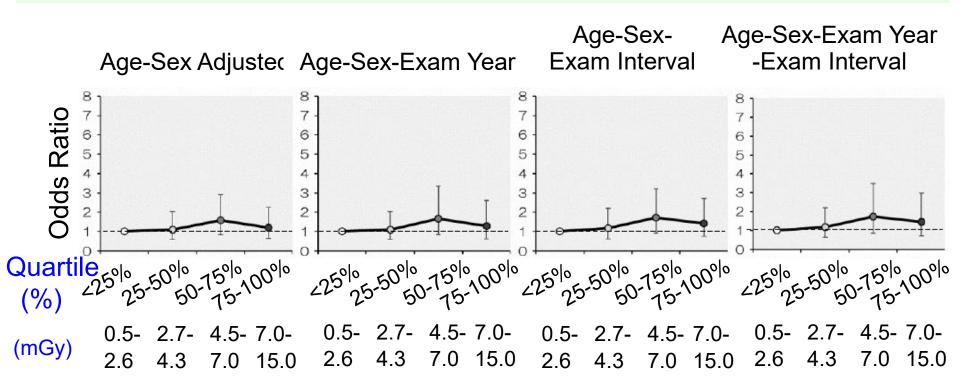
#### **UNSCEAR 2008 Report**

						-	
Chernobyl # of Accident (x1,000)		Mean ef (	Mean Thyroid dose				
Accident	(x1,000)	External	Intern	Internal		(mGy)	
Belarus	25	30	6		1	,100	
Russia	0.19	25	10	10		440	
Ukraine	90	20	10		330		
				UNSC	EAR 2	020 Report	
Fukushima Accident		effective doses ab			anges of average sorbed doses in oid (mGy/1 <sup>st</sup> year)		
		Adult	1 yo child	Ad	ult	1 yo child	
Municipalities not evacuated		0.079-3.8	0.12-5.3	0.48-11		1.2-21	
Groups of ev	vacuees	0.046-5.5	0.15-7.8	0.79	-15	2.2-30	

Adjusted odds ratio (95% CI) for thyroid cancer risk among children according to absorbed doses in thyroid, estimated by UNSCEAR 2020~Cross-sectional survey~



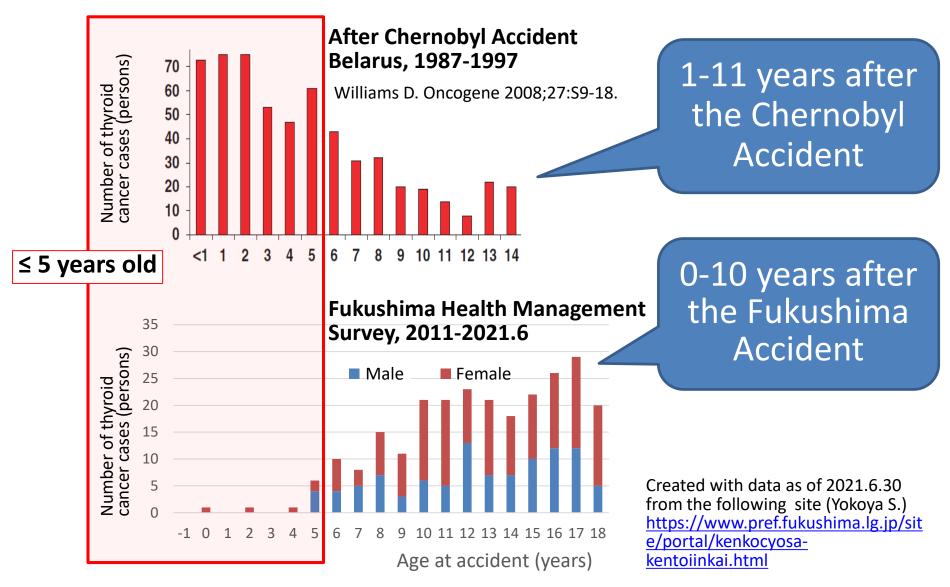
### Adjusted odds ratio (95% CI) for thyroid cancer among children according to absorbed doses in thyroid, estimated by UNSCEAR 2020 ~Longitudinal survey~



	Preliminary Baseline (1 <sup>st</sup> Exam)	Full-Scale Survey (2 <sup>nd</sup> Exam)	Full-Scale Survey (3 <sup>rd</sup> Exam)
Fiscal Year (period)	2011-2013 (First 3 years)	2014-2015 (4-5 years)	2016-2017 (6-7 years)
Malignant or suspicious for malignancy (FNAC)	116	71	31

The 18th Thyroid Examination Evaluation Subcommittee of Prefectural Oversight Committee of the "Fukushima Health Management Survey"

# Number of those diagnosed with thyroid cancer, by age at the accident



<sup>1st</sup> Exam. "Based on comprehensive considerations, thyroid cancers found in the Preliminary Baseline Survey cannot be considered to be attributable to radiation from the Fukushima accident."

Because... From "Interim Report on the Fukushima Health Management Survey"

- Exposure doses in the Fukushima accident were generally lower.
- Latent period of thyroid cancers is short (approximately one to four years).
- Cancers have not been found in those aged five and younger.
- There are no significant regional differences in detection rates.

**2<sup>nd</sup> Exam.** Oversight Committee confirmed its subcommittee's view that thyroid cancers found in the 2<sup>nd</sup> Exam. cannot be considered to have any correlation with radiation exposure.

Because…
 From "Documents 1-1 & 1-2 for the 36<sup>th</sup> Oversight Committee meeting"
 Analyses of an association between thyroid cancer detection rates and thyroid doses estimated by UNSCEAR revealed no dose-effect relationship.

• The age distribution of thyroid cancers in Fukushima is different from that of Chernobyl.

**3<sup>rd</sup> Exam.** Analyses classified into quartiles based on the distribution of estimated doses by UNSCEAR among Thyroid Examination subjects showed no significant association and no dose-response relationship. (The 18th Thyroid Examination Evaluation Subcommittee)

# **Thyroid Ultrasound Examination** [Support]

#### O Support for Primary Examination

#### The Diagnosis Explanation Booth

- Set up at public location/facility
- Provisional explanation by a doctor showing the scanned image

Provided explanation to 31,921 people since FY2015

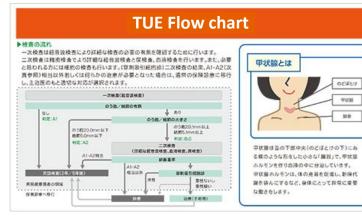
(The figures as of the end of March 2021)



In the booth (image)

### ○ Leaflet

- Distributed during check-ups in schools
- Explanation of nodules & cysts, diagnostic criteria, follow-up exams, etc.

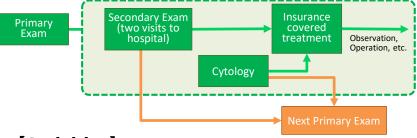


#### Support for Secondary Examination

#### Thyroid Support Team

#### [Members]

Nurse, Psychiatric Social Worker, Clinical Phycologist, Medical Social Worker, etc.



#### [Activities]

Psychosocial support for the confirmatory examination examinees and their families

#### Supported 2,010 people (4,188 times) since FY2013

(Figures as of the end of March 2021)

#### **Exclusive Medical Call Center**

#### [Target]

families

# Thyroid exam patients and their

392 calls since FY2016

(The figure as of the end of December 2021)

#### [Activities]

- Medical consultation on the diagnosis and thyroid diseases, etc.
- Doctors respond while checking the result and scan.

# **Thyroid Support Team**

# No way thyroid cancer?

# Should I have the examination ?

# **Confirmatory** = **Detailed** examination = examination



# The role of Thyroid Support Team

# Before examination Under examination After examination



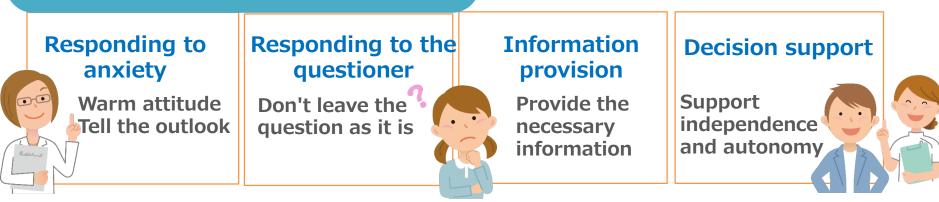


Listen carefully,and relieve tension

Attend a doctor's consultation or examination such as ultrasonography

 Check for unclear points, and supplement the explanation, or provide the necessary information

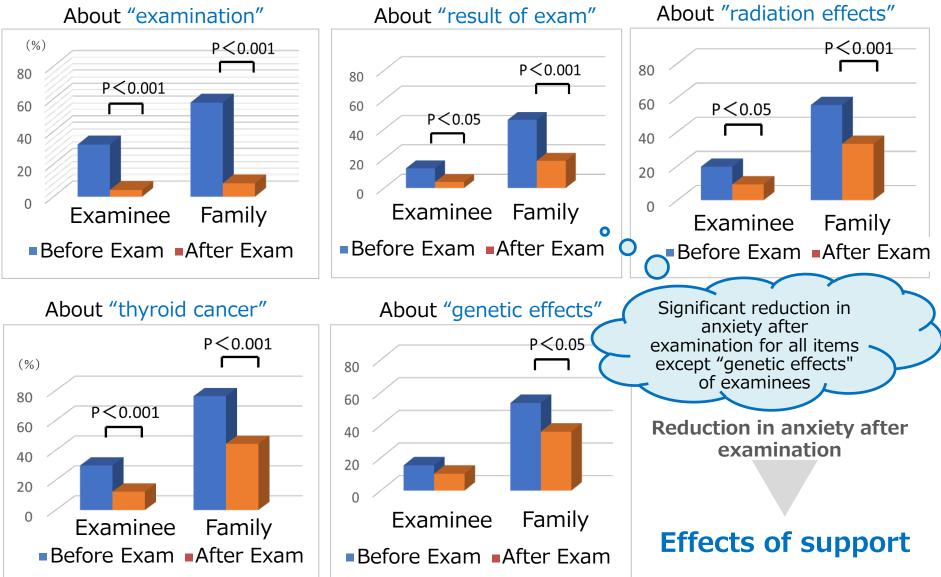
#### Help by the Thyroid Support Team



# Effect of support at the confirmatory examination

## Questionnaire of the examinees and their families

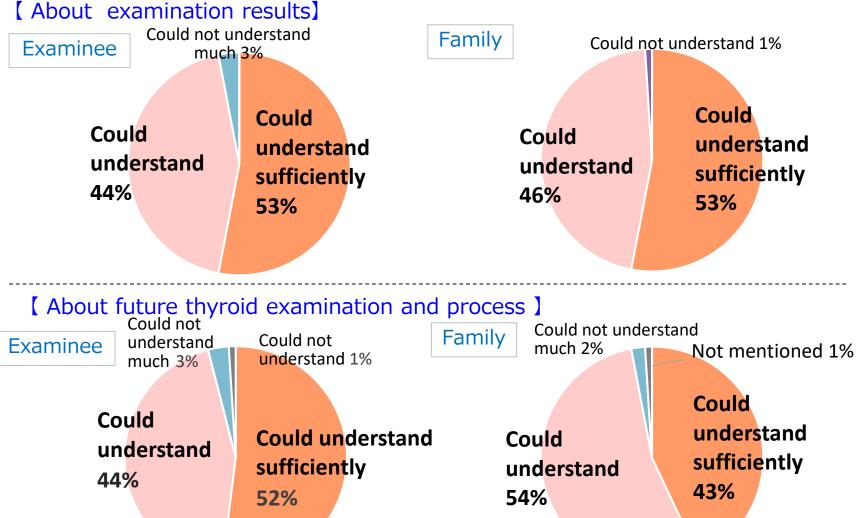
1. Changes in the proportion of "anxiety"



# Effect of support at the confirmatory examination

## Questionnaire of the examinees and their families

2. Degree of understanding after examination

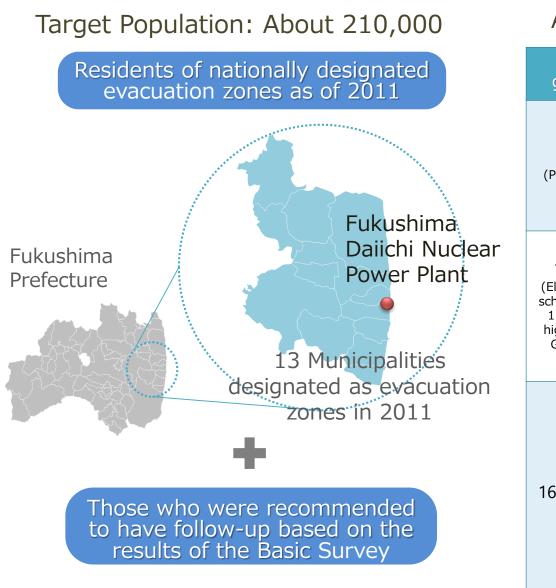


# Support by medical staff and peers

We endeavor to improve the well-being of those diagnosed with cancer



# **Comprehensive Health Check - Outline**



# Age Group and Check Items

Age group	Check items
0 — 6 (Preschool)	Height, weight [Additional items on request] CBC (Complete Blood Count: red cell count, differential white cell count, platelet count, hematocrit, hemoglobin)
7 - 15 (Elementary school Grade 1 - Junior high school Grade 3)	Height, weight, blood pressure, CBC [Additional items on request] Blood biochemistry (AST, ALT, γGT, TG, HDL-C, LDL-C, HbA1c, plasma glucose, serum creatinine, uric acid)
16 or over	Height, weight, abdominal circumference or BMI, blood pressure, <u>CBC</u> , urine protein, urine sugar, <u>urine occult blood</u> ), blood biochemistry (AST, ALT, yGT, TG, HDL-C, LDL-C, HbA1c, plasma glucose, <u>serum creatinine</u> , <u>estimated glomerular filtration</u> <u>rate [eGFR], uric acid</u> ) XThe underlined items are not usually performed in Specific Health Checkups.



# Comprehensive Health Check [Results]

41<sup>st</sup> Oversight Committee for the Fukushima Health Management Survey (May 17, 2021)

No findings indicating radiation effects were found in the results of the Comprehensive Health Check.

### Health status after the Great East Japan Earthquake (15 yo or younger)

• Obesity has improved, but dyslipidemia has been delaying.

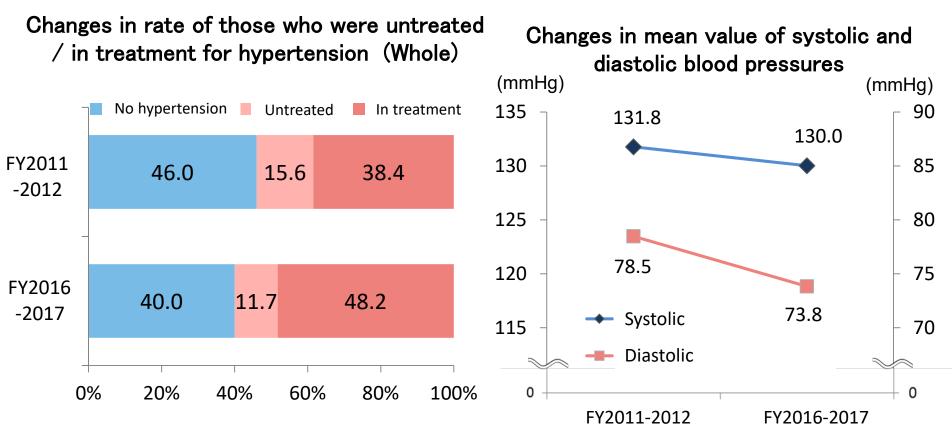
Diseases that are considered as being attributable to changes in lifestyle including evacuation due to the disaster (16 yo or over)

Obesity
Hypertension
Dyslipidemia (low HDL-C)
Diabetes
Risk factors for circulatory diseases are increasing.

Diseases that had increased after the disaster but reduced thereafter (16 yo or over)

- Blood pressure, LDL-C : Improved treatment rate
- Hepatobiliary system enzyme abnormality (hepatic dysfunction) : Daily exercise and eating of breakfast

7-year trends of Checkup results in the 13 municipalities (Whole version)



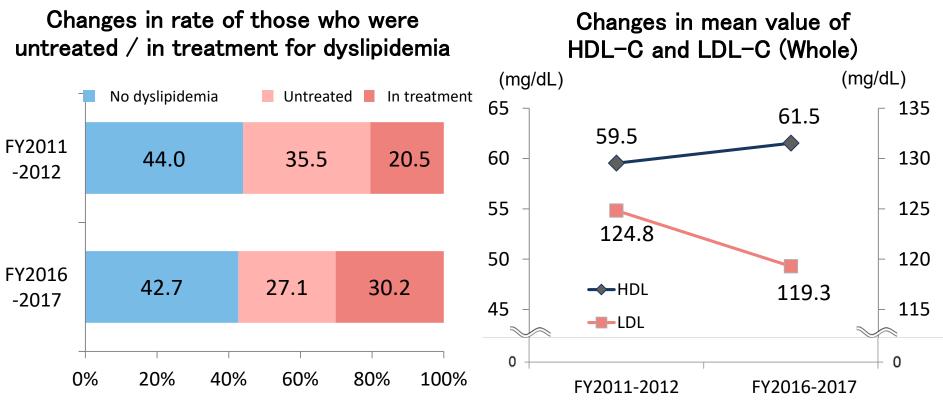
Both rates of those with hypertension<sup> $\times$ 1</sup> and in treatment P<0.001

%1 systolic blood pressure ≥ 140 mmHg, or diastolic blood pressure ≥ 90 mmHg, or taking antihypertensive medication

Both systolic and diastolic blood pressures P<0.001

7-year trends of Checkup results in the 13 municipalities (Whole version )

P<0.001



Both rates of those with dyslipidemia<sup> $\times3$ </sup> and under medication P<0.001  $\approx3$  HDL cholesterol level < 40 mg/dL, or LDL cholesterol level  $\geq$  140 mg/dL, or fasting triglyceride level  $\geq$  150 mg/dL, or in treatment for dyslipidemia

7-year trends of Checkup results in the 13 municipalities (Whole version )

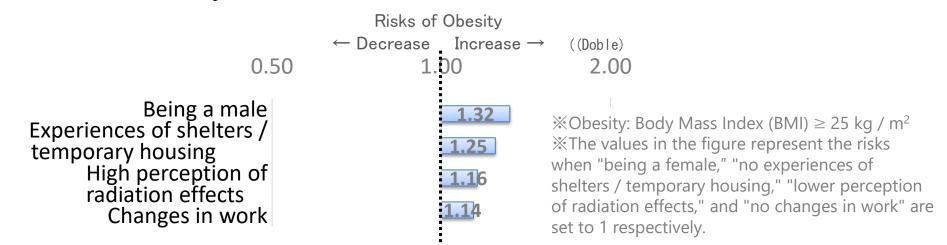
P<0.001

Changes in rate of those who were Changes in mean value of HbA1c untreated / in treatment for diabetes (whole) (%) Diabetic Untreated In treatment propensity 6.5 5.78 6.0 FY2011 4.26.7 89.1 -2012 5.5 5.0 5.50 4.5 FY2016 84.0 5.110.9 -2017 4.00.0 30% 50% 70% 90% 110% FY2011-2012 FY2016-2017

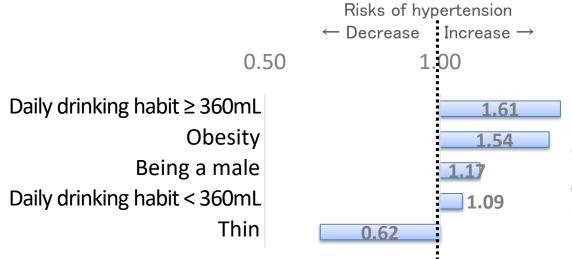
Both rates of those with suspected diabetes<sup>\*2</sup> and in treatment P < 0.001\*2 Fasting blood glucose level  $\geq$  126 mg/dL, or casual blood glucose level  $\geq$  200 mg/dL, or HbA1c  $\geq$  6.5%, or in treatment with hypoglycemic agents, etc.

**Comprehensive Health Check** [Results]

Factor analysis related to lifestyle-related diseases, etc. diseases (7-year results in the target municipalities) Factors of obesity after the disaster



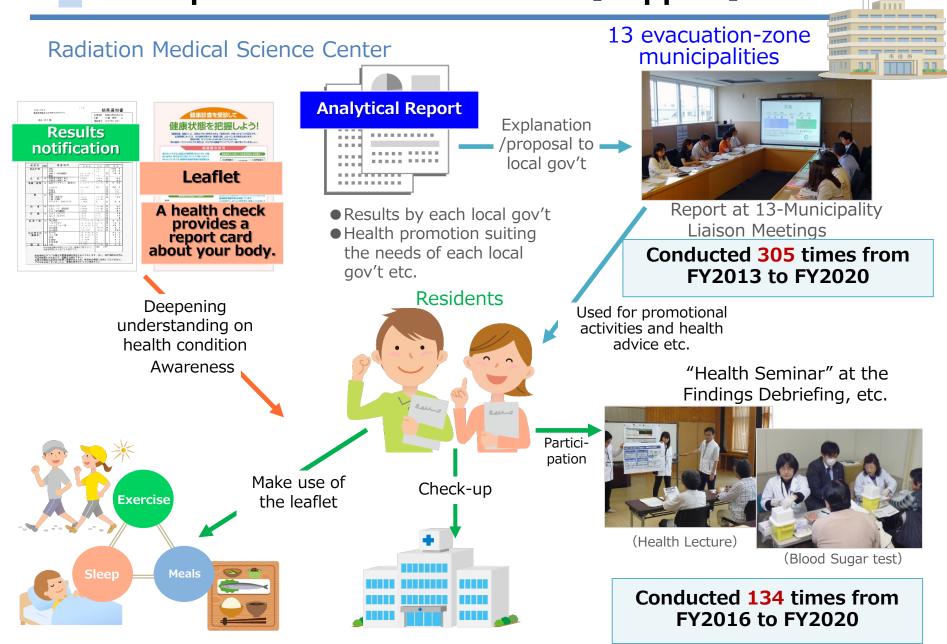
### Factors of hypertension after the disaster



(Double) **2.00** 

※Hypertension: Systolic blood pressure ≥ 140 mmHg, or diastolic blood pressure ≥ 90 mmHg, or taking antihypertensive medication.
※The values in the figure represent the risks when "no drinking habits so far," "standard body habitus (BMI 18.5-25kg / m<sup>2</sup>)," and "being a female" are set to 1 respectively.

# **Comprehensive Health Check [Support]**



# Contents of "Health Seminar"

#### [FY2019] Conducted 38 times

Municipality	Event name	Times	Contents
Iitate Vil.	General health checkup	7	Matters related to mental health Display of panels (CHC)
	Health improvement class	6	Health lecture by doctor ,Consultation by experts, Blood glucose measurement
Naraha Town	General health checkup	7	Consultation by experts Display of panels
	Health check results reporting MTG	4	Health lecture by doctor ,Consultation by experts,
Kawauchi Vil.	Health check results reporting MTG	5	Health lecture by doctor ,Consultation by experts, Blood glucose measurement
Futaba Town	Health class by pathology	1	Blood glucose measurement
FULADA TOWIT	Health check results reporting MTG	5	Health exercises
Tamura City	Health promotion lectures for citizen	1	Health lecture by doctor ,Consultation by experts, Blood pressure and blood glucose measurement
Hirono Town	Health check results reporting MT	2	Blood pressure and blood glucose measurement, Display of panels

#### [FY2020] Conducted 17 times

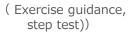
Municipality	Event name		Contents	1
Naraha Town	General health checkup		Consultation by experts, Display of panels	
	Face-to-face consultation on by experts	7	Consultation by experts, Display of panels	
Hirono Town	Health check results reporting MTG	1	Consultation by experts Blood pressure measurement	
Tamura City	Health promotion lectures for citizen	1	Health lecture by doctor ,Consultation by experts, Blood glucose measurement	



(Consultation by experts)



(Health exercises)







#### 「食の基本=バランスがとれた食生活」から 健康づくりをはじめよう

※医師の指導を受けている方や健康に不安のある方が実践する際には、事前に医師と相談してください。

食の基本=バランスがとれた食生活\*\*「主食・主菜・副菜」+「減塩」の実践

#### ~生活習慣病 ※9 の予防・改善が期待できます~

心身ともに健康を保つにはパランスがとれた食生活が大切ですが、ライフスタイルの多様化によりパランスの崩れや不規則 な食生活になりがちなケースも考えられ、生活習慣病の発症につながることが懸念されています。生活習慣病は、食生活と |密接に関係していることから、健康的な食牛活「食の基本=パランスがとれた食牛活」を実践して健康づくりをはじめましょう。

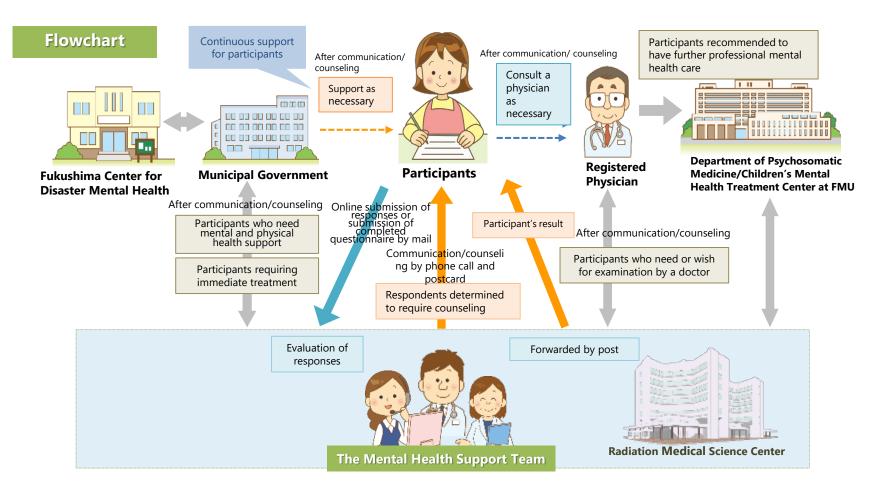






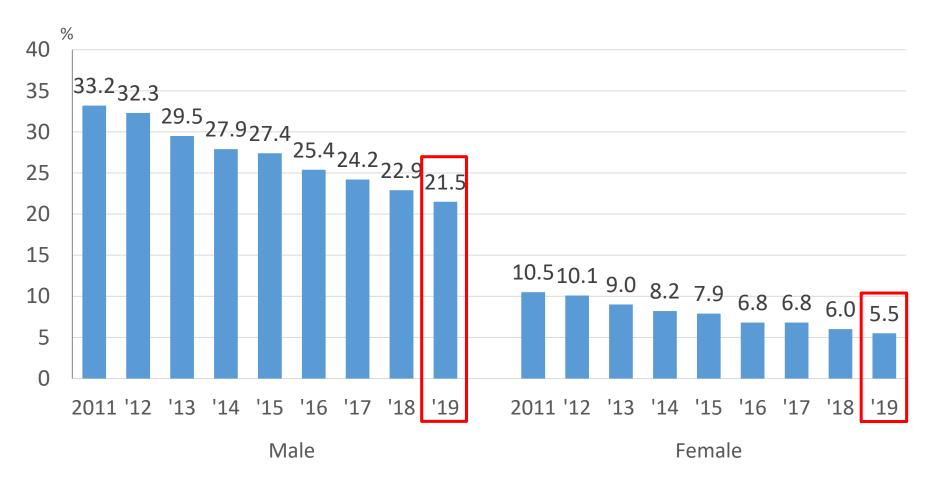
# **Target Population**

**<u>213,873</u>** residents who resided in 13 municipalities designated as Evacuation Zones by government order. The target population was divided into 5 age groups (ages 0-3, 4-6, 7-12, 13-15, 16+ years).



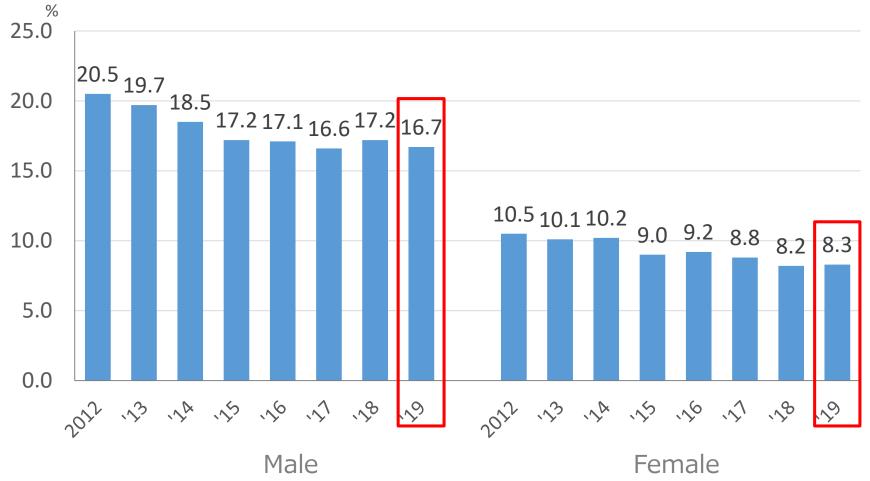


# Trends in smoking (Adults: 20 or older)





# **Trends in problematic drinking** (with CAGE score of 2 or higher) (Adults: 20 or older)





# Trends in sleep satisfaction (Adults: 16 or older)

FY2011	33.3		46.8		15.5	4.4
FY2012	37.	6	45	5.7	13.6	3.1
FY2013	39	.7	2	45.0	12.8	2.6
FY2014	38.	.3	4	6.3	12.8	2.6
FY2015	39	.5		45.9	12.3	2.3
FY2016	39	.3		46.1	12.0	2.6
FY2017	40	).7		45.4	11.6	2.3
FY2018	41	1.1		45.8	11.0	2.2
FY2019	4	1.9		45.6	10.5	5 2.0
0	% 20	)% 40	)% 60	)% 80	0%	100%
	Goo	od 🔳 Not so §	good Rathe	er Bad 🔳 Bac	ł	

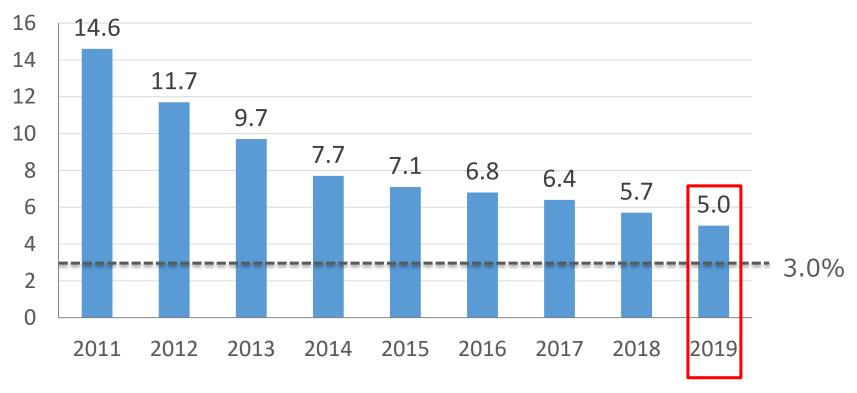


# Trends in exercise frequency (Adults: 16 or older)

FY2011	14.9	20.3	13.9	50.9		
FY2012	15.0	22.0	15.7	47.3		
FY2013	15.5	22.3	15.5	46.7		
FY2014	15.3	24.4	16.5	43.8	3	
FY2015	16.2	24.8	16.2	42.	7	
FY2016	15.9	24.9	17.0	42.		
FY2017	16.0	25.5	17.1	41		
FY2018	16.5	26.0	17.1	40		
FY2019	17.3	26.5	17.4		8.8	
112013	17.5	20.5	17.4	50	5.0	
0	%	20% 4	6	60% 80	0% 100%	
Almost everyday 2-4 days a week 1 day a week Almost none						



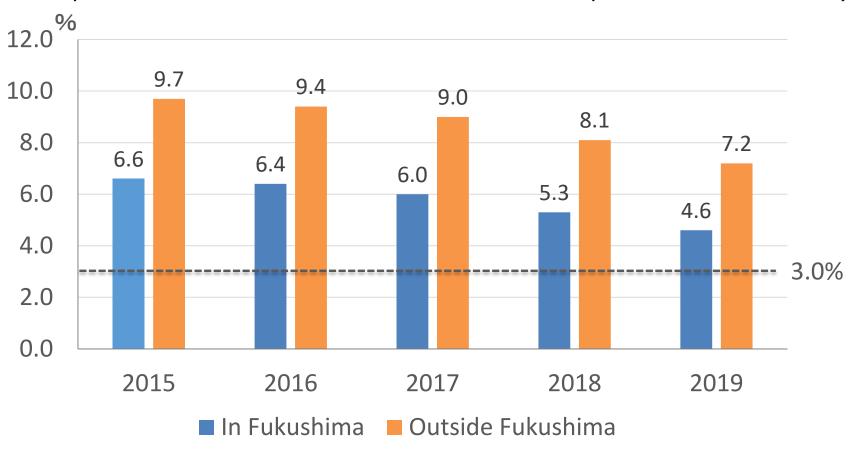
# General mental health conditions measured by K6 test Trends in percentage of residents with K6 score of 13 or higher (Adults: 16 or older)



%The ratio of those scoring 13 points or higher in Japan is 3.0% (Kawakami, 2007)

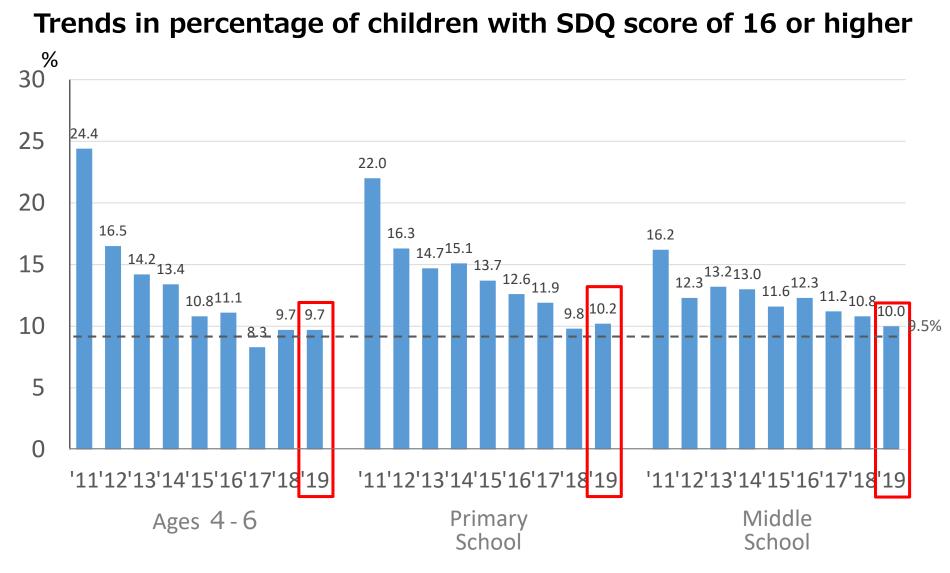
# General mental health conditions measured by K6 test Trends in percentage of residents with K6 score of 13 or higher

by location of residence at the time of the survey (Adults: 16 or older)



31<sup>st</sup>, 35<sup>th</sup>, 38<sup>th</sup>, 42<sup>nd</sup> Oversight Committee for the Fukushima Health Management Survey







# Change in radiation risk perception (on hereditary effects) (Adults: 16 or older)

FY2011	15.2	24.6	25.3		34.9
FY2012	23.9	28.0	)	23.2	24.9
FY2013	21.4	30.5		25.9	22.2
FY2014	29.2		32.7	22.1	15.9
FY2015	29.0		33.3	22.0	15.6
FY2016	31.0		32.9	20.9	15.2
FY2017	18.9	43	3.9	28	.9 8.3
FY2018	19.3	4	4.8	28	<b>3.3 7.7</b>
FY2019	22.1		47.5		24.4 6.0
0	% 20 Never lik				30% 100% likely

# Ministry of the Environment's "GuGuRu Project"

(project to disseminate information on radiation health effects)

#### **GuGuRu** Project

Launched: July 2021

TsumuGu: building knowledge TsunaGu: connecting with people, towns, and organizations TsutawaRu: transmitting knowledge

GuGuRu aims to help people make decisions without being deceived by misinformation.

Goal: Reduce the percentage of those who think "health effects are likely to occur among Fukushima residents due to current radiation exposure" from 40% in FY2020 to 20% by FY2025.

#### Main Contents



- Seminars were held nationwide at 49 colleges, with 1345 students participating. Seminars were followed by opportunities for students themselves to make presentations or write scripts based on what they had learned (51 students did so).
- > At FMU, 3 seminars were held and 5 FMU students participated in subsequent presentation and script writing activities. A total of 6 students, including one FMU student, received excellence awards.

#### Percentages of those who think **GuGuRu Project logo** that health effects are likely to occur among the next generation of Fukushima residents 40% つたわ Unlikely Likely 6.4% 34.8% 12.3% 46.5% プロジェクト Very unlikely Verv likelv Source: Ministry of the Environment. Questionnaire survey in the FY2020 project to disseminate information on radiation health effects (March 2021)

#### Nikkei Seminar x GuGuRu Project

A Rakugo storyteller, Katsura Sanshiro, performed an original Rakugo story entitled:

#### Be aware of discrimination and biases

The story aimed to make the audience think of discrimination they may be committing unknowingly.

A panel discussion aiming to eliminate discrimination and biases associated with radiation health was held. Facilitated by Mr. Katsura, 4 panelists discussed strategies to change people's perceptions and present things in more positive ways.



TOMINAGA Tomonobu ASANO Kenichiro



HIRAI Kei



Rakugo storvteller KATSURA Sanshiro



SAOTOMF Kosaku



# Mental Health & Lifestyle Survey [Support]



### Addressing the People with High Risk



## Approaching to Groups to Reduce Risk





- Health information
- Referring to a medical institution or a consultation center



- Physical and mental health check
- Identifying needs
- Professional advice



#### Visiting Local Gov't

- Report at 13-Municipality Liaison Meetings
- Advice based on the results (Health Workers, Health & Welfare Officials) Organizing Symposium
- Useful information for support activities (Specialists, teachers, students, etc.)

#### Exhibiting at health events

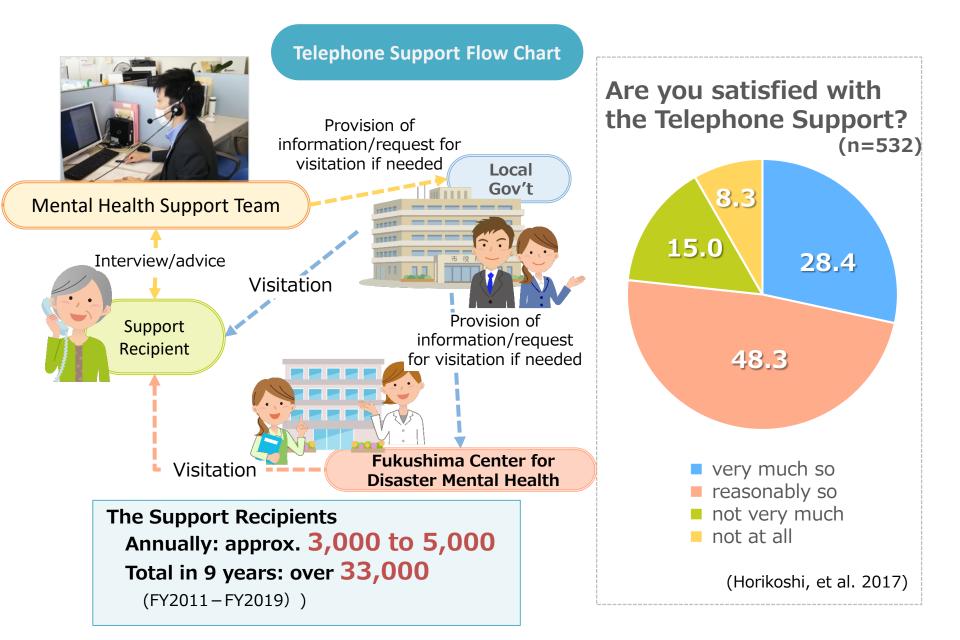
- Dialogue with residents •
- Information dissemination •



**Promotional** activities



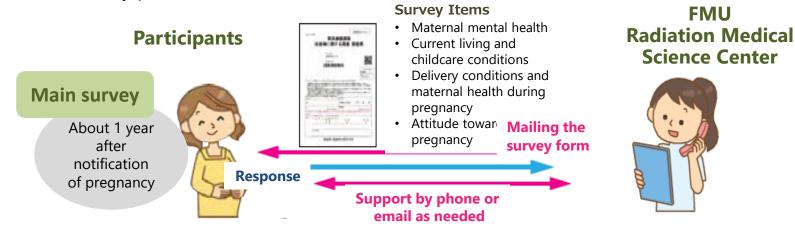
# Mental Health and Lifestyle Survey [Support]



Pregnancy and Birth Survey [Outline]

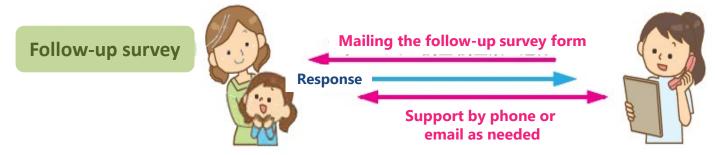
## Main survey Target : 12,000-16,000 Women

- Those who received a Maternal and Child Health Handbook from a municipal office in Fukushima Prefecture
- Those who received the Handbook from municipalities outside Fukushima during the same survey period and delivered in Fukushima



% The main survey was completed in FY2020 .

Follow-up survey Target : 5,200-7,300 Women

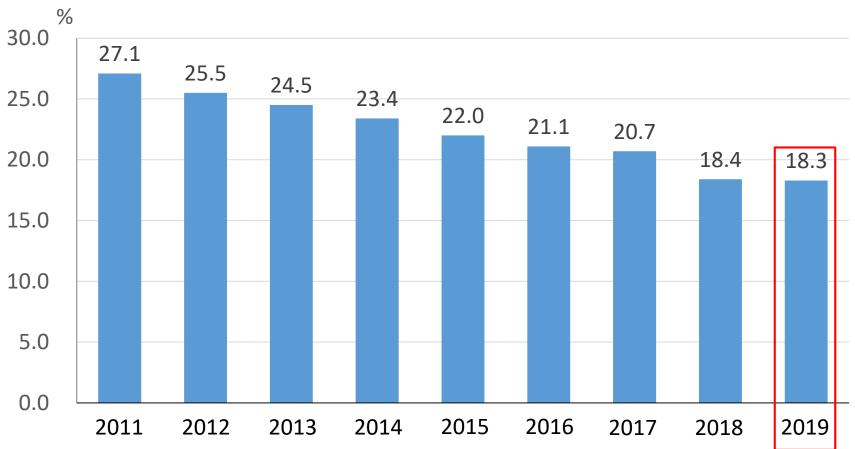




						(%)
	Rate of preterm deliveries				Rate of congenital anomalies	
	Fukushima	National*	Fukushima	National*	Fukushima	General standard
FY 2011	4.6	5.7	8.6	9.6	2.85	
FY 2012	5.6	5.7	9.2	9.6	2.39	
FY 2013	5.2	5.8	9.6	9.6	2.35	
FY 2014	5.3	5.7	9.8	9.5	2.30	
FY 2015	5.6	5.6	9.4	9.5	2.24	3~5 <b>**</b>
FY 2016	5.3	5.6	9.2	9.4	2.55	
FY 2017	5.3	5.7	9.2	9.4	2.38	
FY2018	5.2	5.6	9.0	9.4	2.19	
FY2019	5.1	5.6	9.1	9.4	2.71	

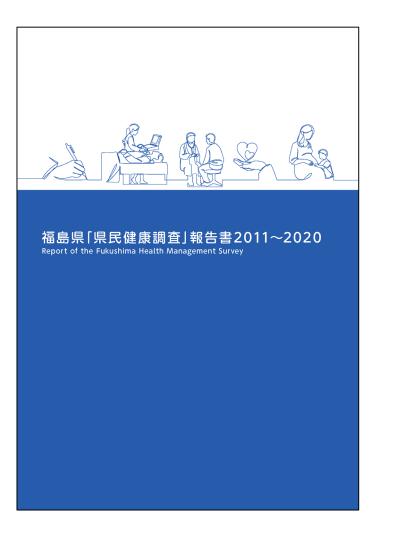
\* Vital Statistics (Ministry of Health, Labor and Welfare) \*\* Clinical Practice Guidelines for Obstetrics 2020

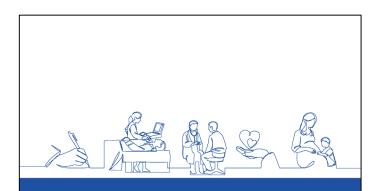
# **Trends in Depressive Symptoms**



As a result of the main survey, the tendency of depression has been improving year by year. The percentage of "Depressive Symptoms" in the 2019 survey was as same as that of suspected postpartum depression in the national survey.

# Fukushima Health Management Survey ~Summarizing a decade of results~





Report of the Fukushima Health Management Survey 2011-2020

Japanese edition

**English edition** 

2022 Fukushima Medical University International Symposium on the Fukushima Health Management Survey

# Science for Society: Advancing Fukushima's Well-Being

Fukushima Health Management Survey



# We look after your health!

Radiation Medical Science Center For The Fukushima Health Management Survey

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