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REPORT ON NAGANO PREFECTURE  
HEALTHY LONGEVITY PROJECT  
AND RESEARCH PROGRAM  
(Analysis of factors in healthy longevity)

Nagano Prefecture Healthy Longevity Project Study Team

March 2015

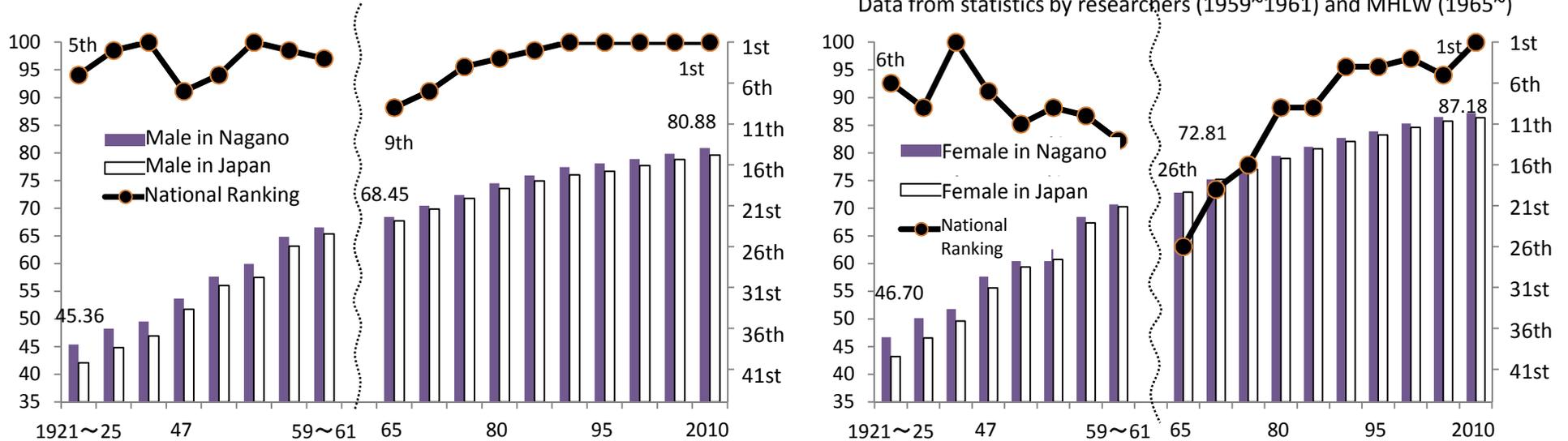


しあわせ信州

# 1. Current Situation of Healthy Longevity in Nagano

(1) Nagano has ranked high in life expectancy since before WWII.

Data from statistics by researchers (1959~1961) and MHLW (1965~)



(2) Nagano also ranks 1st in Japan in “Healthy Life Expectancy”

Category	Male (2010)			Female (2010)		
	Japan	Nagano	Rank	Japan	Nagano	Rank
Healthy Life Expectancy (Average duration with independent activities of daily living) 【Guidelines for Calculating Healthy Life Expectancy】	78.17	79.46	1st	83.16	84.04	1st
Average Life Expectancy 【Life Table by Prefecture】	79.59	80.88	1st	86.35	87.18	1st

(3) Many municipalities in Nagano rank high in average life expectancy

Male			Female		
National Rank	Municipality	Life Expectancy	National Rank	Municipality	Life Expectancy
1st	Matsukawa Village	82.2	19th	Saku City	88.0
4th	Shiojiri City	82.0	24th	Okuwa Village	87.9
7th	Ikeda Town	81.9	30th	Shimo Suwa Town	87.9

(Life Table by Municipality 2010)

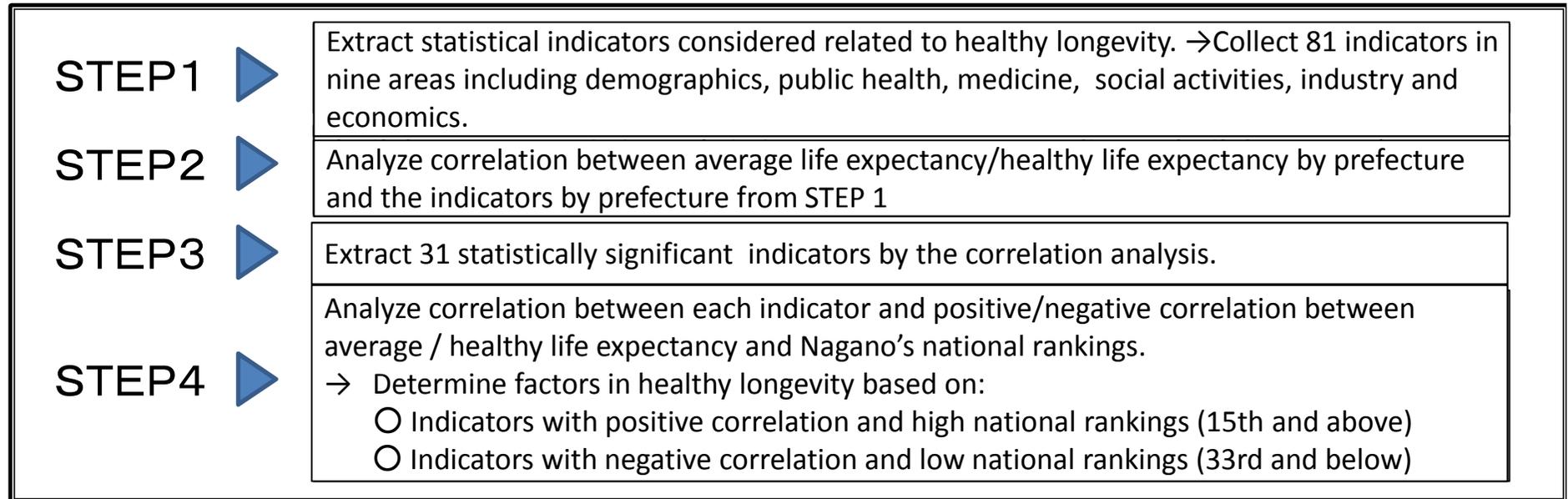
Men in Matsukawa Village have the longest expectancy in Japan.

## 2. Search for Factors in Healthy Longevity

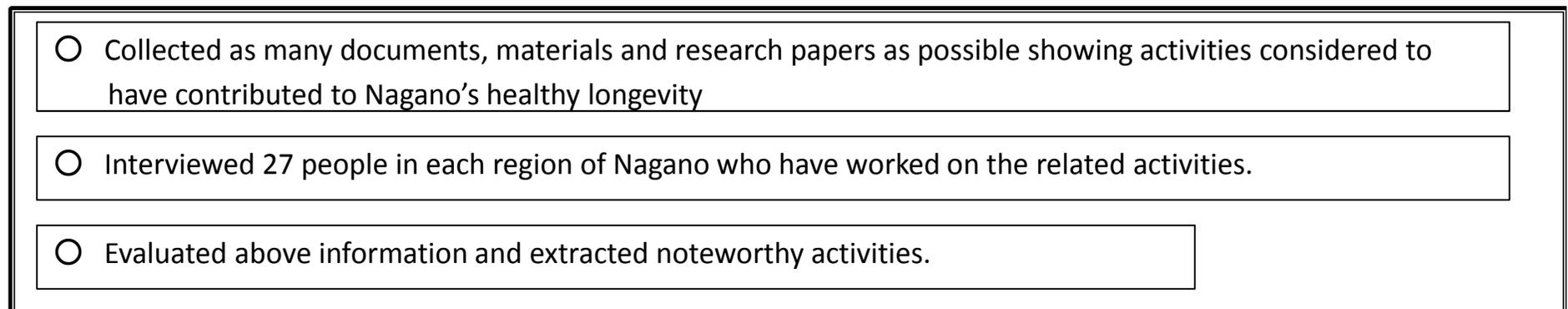
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◆ Research was conducted in the following way in 2013 and 2014.

### (1) Statistical Analysis (FY 2013)



### (2) Analysis Using Documents, Data and Interviews (mainly in FY2014)



### 3. Factors in Healthy Longevity Suggested by Statistical Analysis

EXTRACTED MAJOR INDICATORS	SUMMARY OF FACTORS FROM STATISTICAL ANALYSIS
<ul style="list-style-type: none"> <li>• Work Force Participation Rate Male: 5th, Female: 4th (2007)</li> </ul>	<p><b>Meaningful life with high motivation for work and active participation in social activities</b></p>
<ul style="list-style-type: none"> <li>• Elderly Work Force Participation Rate Male: 1st (2007)</li> </ul>	
<ul style="list-style-type: none"> <li>• Social/Volunteer Activities Participation Rate Female: 14th (2006)</li> </ul>	
<ul style="list-style-type: none"> <li>• Habitual Smoking Rate Male: 44th (2006~2010)</li> </ul>	<p><b>High health awareness and result of health-building activities</b></p>
<ul style="list-style-type: none"> <li>• Amount of Vegetable Intake Female: 1st (2006~2010)</li> </ul>	
<ul style="list-style-type: none"> <li>• Percentage of Patients and High-Risk individuals of Metabolic Syndrome Male: 45th (2010)</li> </ul>	
<ul style="list-style-type: none"> <li>• Number of Public Health Nurses 2nd (2010)</li> </ul>	<p><b>High public health standard and enriched perinatal medical service</b></p>
<ul style="list-style-type: none"> <li>• Perinatal Mortality Rate 40th (2010)</li> </ul>	

※The above indicators were analyzed using the data in 2010 or earlier because the average life expectancy and healthy life expectancy used for the analysis were from 2010.

## 4-1 Factors in Healthy Longevity Indicated by Documents, Materials and Interviews

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### (1) Active Medical Activities in Regions Close to the Needs of Residents

- Activities of the Nagano Koseiren Cooperatives\*<sup>1</sup> and NHI\*<sup>2</sup>-related medical facilities
- Healthcare activities conducted close to the needs of the residents** in each region (home healthcare, guidance for preventive activities, etc.)
- Doctors traveling to areas without doctors, Anan Hospital's traveling clinic

\*<sup>1</sup>Nagano Koseiren Cooperative: Nagano Agricultural Cooperatives for Health and Welfare

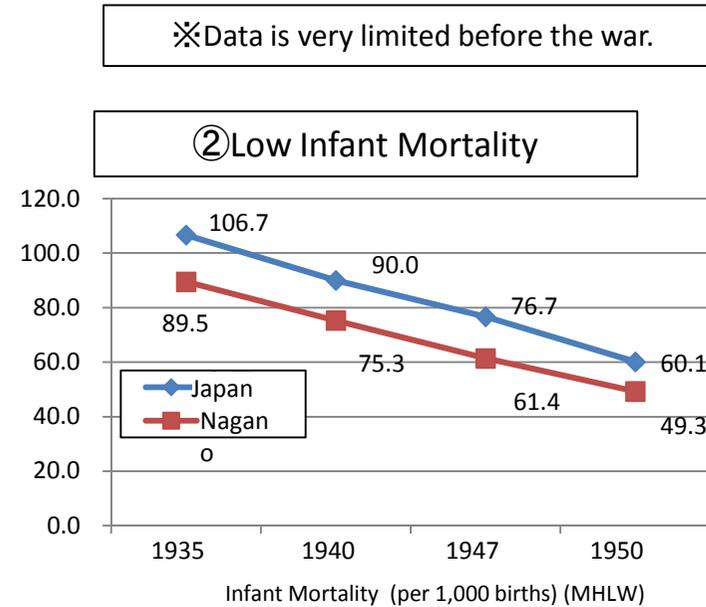
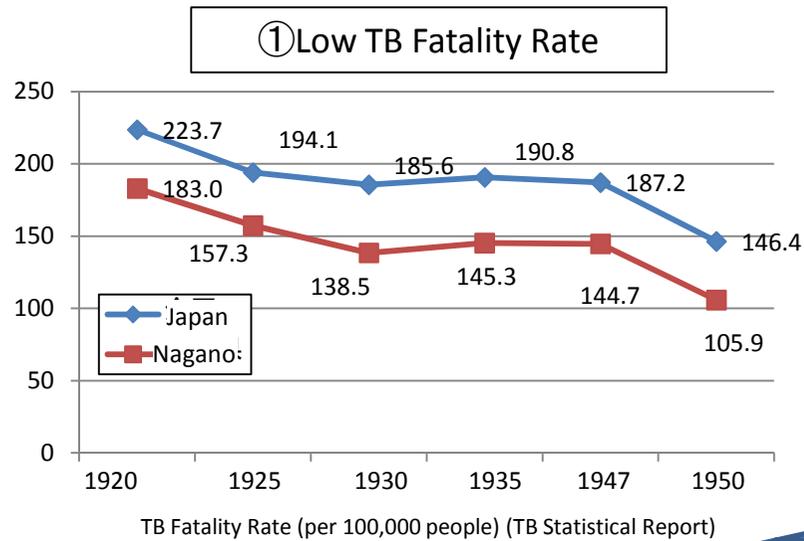
\*<sup>2</sup>NHI-related medical facilities: National Health insurance related medical facilities

### (2) Health-Building Activities in cooperation with the Administration (public health centers, municipalities, public health nurses, nutritionists, etc.) and Volunteer Healthcare Supporters (health supporters, promoters of improved eating habit, etc.)

- Related businesses and healthcare volunteers worked together to conduct health-building activities
  - Public health activities: physical exams to prevent lifestyle-related illnesses, promoting heating at least one room in the house, etc.
  - Health-building activities: **Whole Village Health Management** (at some municipalities), promoting exercises
  - Better nutrition activities: **Nutrition classes for housewives** at public health centers
- Nagano Prefectural **Citizen's Health and Nutrition Survey** was analyzed and used to implement Nutrition Policies
- Preventive/Health-building activities including Women's Association for TB Prevention, Nonsmoking Society, etc.

# 4-2 Period Before WWII (~1945)

- Main Health Issues: Limited nutrition resources and spreading tuberculosis
- Indicated Factors in Healthy and Long Life:



③ Knowledge and creativity about nutrition supposedly led to eating variety of foods, resulting in a low TB fatality rate and infant mortality.

High education penetration rate was the basis.  
 ○ In 1876, Nagano's school attendance rate was 63.23%, the highest in Japan (average was 38.31%).

Diet in Nagano in the 1920's

- Home-grown staple food and vegetables
- Animal protein including pupas, locusts, freshwater fish, carp, etc.
- Soybean protein including Miso, soy sauce, Tofu (frozen Tofu)
- Other Ingenuities of protein intake (They raised goats.)

## 4-3 Period of Restoration after WWII (1945~1955)

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○Main Health Issues: Limited Nutrition Resources and Spreading Tuberculosis (TB) and Other Infectious Diseases



○Main Projects Conducted in Nagano

Medical	<p>○By establishing prefectural, Koseiren, NHI, Red Cross hospitals, etc., the medical system in Nagano was promoted in each region.</p> <p>○<b>Saku Central Hospital</b> worked on <b>rural healthcare</b>, raising residents' awareness about health by holding theaters and festivals.</p>
Public Health	<p>○Suzaka City was the first to start "<b>HOKEN-HODOUIN (Health Supporter)</b>" activities (1945)</p> <ul style="list-style-type: none"><li>▪ Health supporters had been assigned in all municipalities in Nagano by early 1990's (10,929 counselors in 76 municipalities in 2014)</li><li>▪ No other prefectures have health supporters active in the whole area.</li></ul> <p>○<b>Public health nurses actively visited TB patients at home</b> because they used to be treated at home.</p> <p>○Nagano started pioneering scheme to prevent TB, which was a major health issue after the war (Women's Association for TB Prevention)</p>
Nutrition	<p>○Matsumoto Public Health Center started Nagano's first continuous nutrition classes, "<b>Nutrition Classes for Housewives</b>" (1952)</p> <p>Eventually, the attempt spread to all public health centers in Nagano.</p>

## 4-4 Period of Rapid Economic Growth (1955~1975)

### ○Main Health Issues: From Battling Infectious Diseases to Battling Lifestyle-Related Diseases

### ○Main Projects Conducted in Nagano



Medical	<ul style="list-style-type: none"><li>○NHI Asama General Hospital led and established <b>Nagano Prefecture NHI Community Healthcare Promotion Council</b> (1971).</li><li>○Koseiren hospitals including Koseiren Saku Central Hospital contributed to healthcare in Nagano.</li><li>○Local doctors traveled to areas without doctors. Hospitals including Anan Hospital sponsored traveling clinics in rural areas.</li><li>○Suwa Central Hospital and “promoters of improved eating habit” worked together for health education of the local residents.</li></ul>
Public Health	<ul style="list-style-type: none"><li>○Public health nurses and health supporters initiated a <b>grassroots movement</b> (residents started checking their blood pressure using a simple monitor) and stroke prevention by conducting <b>room temperature surveys during the winter</b> (55,899 households), “<b>Heat at least One Room</b>” <b>Movement</b> and <b>Measuring Salt Level</b></li><li>○Yachiho Village (1959) and Kijima Daira Village (1965) conducted <b>Whole Village Health Management Activities</b><ul style="list-style-type: none"><li>Doctors/Nurses/Public health nurses visited each community for health examinations.</li></ul></li><li>○Public Health Centers visited communities to conduct “Public Health Centers on Wheels” for health examinations and food education.</li><li>○Department of public health at the medical school of Shinshu University worked with the prefecture to conduct “Healthy Village Promotion Movement in Asahi Village” (1965).<ul style="list-style-type: none"><li>Shinshu University and local doctors conducted health examinations. Public health nurses visited every home in the village.</li></ul></li><li>○A “Non-Smoking Society” was established in Ina City (1955), promoting non-smoking activities.</li></ul>
Nutrition	<ul style="list-style-type: none"><li>○Active nutrition education was conducted using a “<b>Kitchen on Wheels</b>” (1960).<ul style="list-style-type: none"><li>A vehicle with cooking utilities visited areas in Nagano, holding nutrition classes.</li></ul></li><li>○<b>Nagano prefecture</b> Council for Promotion of Improved Eating Habit was established (1967).</li><li>○<b>Residents’ Nutrition Survey</b> started (1967). Health promotion activities also started based on the data.</li></ul>

## 4-5 Period of Social Maturity (1975~present time)

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○Main Health Issues: Aging Society and Diversified Health Issues

○Main Projects Conducted in Nagano



Medical	<ul style="list-style-type: none"><li>○Hospitals in each region and doctors in medical associations in each municipality started a medical care system to accept patients at night and on Sundays/holidays.</li><li>○Infant mortality has improved since Nagano Children's Hospital opened (1993).</li><li>○Iida Medical Association started promoting “Health Record Notebook” where children’s health conditions are recorded since birth (2007).</li></ul>
Public Health	<ul style="list-style-type: none"><li>○“Ikeda Town’s Tender Nurture Group Activities” bridged a gap between the administration/health supporters and residents (1975).</li><li>○Okuwa Village’s “<b>Golden Shoe Movement</b>” and “<b>Walk Walk Movement</b>” in Okaya and Nakano started to promote walking.</li><li>○“New Life Yamabiko Movement” started to improve health (1985). Each public health center leads collecting information and survey analysis for evaluation, and education of residents to integrally promote health.</li></ul>
Nutrition	<ul style="list-style-type: none"><li>○Nutritionists associations and Nagano Prefectural Council for Promotion of Improved Eating Habit worked with the media to promote “<b>Nagano Reduce Salt Movement</b>” (1981-1983) They checked the amount of sodium in the urine and the salt level of salted Nozawana greens.</li><li>○“Table Love” Movement (1984~1996) Nutrition education classes were held for young adults, families and elderly citizens.</li><li>○Nagano Prefecture was the first to formulate “Guidelines for Healthy Diet” in Japan (1985). Shinshu Food Education Promotion Projects started (2001).</li></ul>

## 5. Summary of Factors in Healthy Longevity

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### Summary of Factors in Healthy Longevity by This Study

- Each resident of Nagano Prefecture has had keen awareness of health, in the environment where he/she can lead meaningful life. Meaningful life has been important for residents of Nagano who have high motivation for work and active social activities.
- The research confirmed that in order to respond to health issues of the times, local medical and public health activities have been actively conducted throughout the prefecture by professionals including doctors, dentists, pharmacists, public health nurses, and nutritionists.
- Health volunteers such as public health supporter and promoters of improved eating habit supported the above activities as a bridge between the professionals and residents.

○ In Nagano, keen awareness of the residents and joint activities of the professionals have persistently continued to bear the fruit of healthy longevity today.



The product of such keen awareness and diversified activities is Nagano's precious property and strength, which need to be succeeded and developed.

## 6. Main Issues for the Future

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- Improving mortality rate from cerebrovascular diseases which is higher than the national average.
- Promoting residents' health based on the changing social circumstances, including decreasing number of local health volunteers including health supporters and promoters of improved eating habit.

## 7. Research Team

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### ◆ Nagano Prefecture Healthy Longevity Project Study Team

Name	Title	Note
Ryuichiro Sasaki	Director, Nagano Prefecture Iida Health and Welfare Office	Chairman
Tetsuo Nomiya	Professor, Department of Preventive Medicine and Public Health, Shinshu University School of Medicine	
Shuji Hashimoto	Professor, Department of Hygiene, Fujita Health University School of Medicine	
Tomofumi Sone	Chief Planner & Coordinator, National Institute of Public Health	
Shota Tsukada	Director, Health and Disease Control Division, Nagano Prefecture	
Akiko Nishigaki	Director, Nagano Prefecture Kiso Health and Welfare Office	
Kimihito Takeshige	Director of General Affairs, Nagano Medical Association	Observer

(as of March 24, 2015)

- ◆Trustee organization: General Incorporated Foundation, Nagano Economic Research Institute (FY2013), Specified Non-Profit Corporation, SCOP (FY2013-14)