

**Report for WHO**

**Disability-inclusive Disaster Risk Reduction  
Japanese Experiences**

**National Rehabilitation Center for Persons with Disabilities  
Japan**

**WHO Collaborating Centre**

**October, 2020**

## Table of Contents

<b>Preface</b>	Yoshiko Tobimatsu (Head of WHO Collaborating Centre, President of National Rehabilitation Center for Persons with Disabilities) . . . . .	1
<b>Chapter 1 Introduction</b>		
Section 1	Disability-inclusive Disaster Risk Reduction . . . . . Yayoi Kitamura (National Rehabilitation Center for Persons with Disabilities) Hiroshi Kawamura (NPO Assistive Technology Development Organization)	3
Section 2	The Contents and the Meaning of this Report . . . . . Yayoi Kitamura (National Rehabilitation Center for Persons with Disabilities)	9
<b>Chapter 2 Good Recovery Practices after Large-Scale Disasters</b>		
Section 1	From the Great East Japan Earthquake of 2011 and the Kumamoto Earthquake of 2016. Experiences on organizing welfare center . . . . . Yasutaka Saito (Ishinomaki Syoshinkai, Miyagi)	13
Section 2	Organizing an evacuation center in a university with reasonable accommodations after the Kumamoto Earthquake of 2016: What can we do to create a society with a reduced risk of disasters? Learning from Thailand, Tohoku and Kumamoto. . . . . Chie Yoshimura (former Kumamoto Gakuen Univ.)	39
Section 3	Supporting PWD and Community by One of Support Facilities for PWD next to Kumamoto City at the Kumamoto Earthquake of 2016: Live together beyond the earthquake . . . . .	73
	Takako Miura (Ailinkan, Kumamoto)	
Section 4	Recovery Experiences and Remaining Issues after the 2019 Hagibis Typhoon. A long-term evacuation of a residential facility for persons with severe autism . . . . .	85
	Tomohiro Uchiyama and Yoshiko Abe (Keyaki-no-Sato, Kawagoe)	

### **Chapter 3 Good practices on Disaster Preparedness for Persons with Disabilities**

- Section 1 An Example of Disaster Preparedness at a Special Education High School:  
Initiatives at Onagawa Special Education High School using the experience of the  
Great East Japan Earthquake . . . . . 111  
Hideyuki Mori, Koichi Sato (Miyagi Prefectural Onagawa Special Education High  
School)
- Section 2 A Good Cooperation Practice between the Local Government and the Community.  
Support for persons with disabilities in the community at the time of disasters:  
Disaster prevention with no one left behind in Beppu city, Oita Prefecture. . . 135  
Junko Murano (Beppu City, Oita)

#### **Collaborators**

Keiichi KIKUMOTO  
Counseling Support Specialist (Tsurugashima City Social Welfare Council)

Yasuhiko KURANO  
President ( Circle on Evacuation Center Operation Game)

Kiyoshi HARADA  
Planning Section Chief (Japanese Society for Rehabilitation of Persons with Disabilities)

Asami MAEKAWA  
Professor (Tokyo Women's University)



## **Preface**

Japan is a country prone to natural disasters. In addition to earthquakes, tsunamis, and volcanic eruptions, in recent years, there have been too many instances of large typhoons, heavy rains, etc., to count. For persons with disabilities, appropriate considerations and mechanisms are necessary with respect to advance evacuation, evacuation during a disaster, and life in evacuation shelters. In Japan, based on the experiences during the Hanshin-Awaji Great Earthquake in 1995 and the Great East Japan Earthquake in 2011, each local government established a disaster prevention plan, and business operators developed Business Continuity Plans (BCP). However, every time a disaster occurs, problems such as difficulties in co-living between persons with disabilities and those without occur repeatedly during evacuation and at the evacuation center. It is widely recognized that not only systems, but also practical approaches for evacuation and at the evacuation center are necessary, and that such training has been carried out.

We would appreciate it if you could consider a disaster prevention plan that includes persons with disabilities in each country, with reference to Japan's efforts.



# Chapter 1 Introduction

## Section 1 Disability-inclusive Disaster Risk Reduction

Yayoi Kitamura

Research Institute, National Rehabilitation Center for Persons with Disabilities

Hiroshi Kawamura

NPO Assistive Technology Development Organization

### 1. Inclusive Disaster Risk Reduction in United Nations

The Office for Disaster Risk Reduction, United Nations defines Disaster Risk Reduction as "The conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development<sup>1)</sup>. The Office for Disaster Risk Reduction is an organization that changed its name from International Strategy for Disaster Reduction in May 2019.



Fig.1 The opening ceremony at the 3<sup>rd</sup> UN World Conference on Disaster Risk Reduction (Source: Ministry of Foreign Affairs, The 3<sup>rd</sup> UN World Conference on Disaster Risk Reduction)

Looking at documents adopted for the 1<sup>st</sup> – 3<sup>rd</sup> UN World Conference on Disaster Risk Reduction, United Nations in order, the targets that require consideration from the DRR become clear and it is possible to understand the process of concretising measures. The targets were described as “the poor and socially disadvantaged groups” in Yokohama Strategy (1<sup>st</sup>, Yokohama, 1994). The Hyogo Framework (2<sup>nd</sup>, Kobe, 2005) clearly states disabled in “Strengthen the implementation of social safety-net mechanisms to assist the poor, the elderly and the disabled, and other populations affected by disasters.” In the Sendai Framework (3<sup>rd</sup>, Sendai, 2015), the word “disability” is used seven times in Chapter 6. For example, “Governments should engage with relevant stakeholders, including

women, children and youth, persons with disabilities, poor people, migrants, indigenous peoples, volunteers, the community of practitioners and older persons in the design and implementation of policies, plans and standards.”

(Yayoi Kitamura)

## **2. Disability-inclusive Disaster Risk Reduction**

In particular, when targeting disability, it is expressed as Disability-inclusive Disaster Risk Reduction (DiDRR). San Yuenwah, who worked for the “Asian and Pacific Decade of Disabled Persons”, began using Disability-inclusive Disaster Risk Reduction (DiDRR) not Disaster Inclusive Risk Reduction (DIRR). She talked with ESCAP’s public relations section in 2014 during the preparation meeting on DiDRR organized by Economic and Social Commission for Asia and the Pacific /Rehabilitation International/Nippon Foundation for the 3<sup>rd</sup> UN World Conference on DRR.

(Hiroshi Kawamura)

## **3. The inclusion process of persons with disabilities at the UN World Conference on Disaster Risk Reduction**

The process by which participants with disabilities obtained reasonable accommodations at the 3<sup>rd</sup> UN World Conference on Disaster Risk Reduction is presented here. Similar efforts are required to run DiDRR activities in communities. At the 3<sup>rd</sup> UN World Conference on Disaster Risk Reduction, the group of persons with disabilities was not included in the nine major groups authorized by the UN so, in the beginning, it did not have an opportunity to speak. Major groups are composed of women, children & youth, farmers, indigenous peoples, NGOs, workers & trade unions, local authorities, scientific & technological community and business & industry. Therefore, the DiDRR Network, the International Disability Alliance, Nippon Foundation, and Rehabilitation International sent a written request to International Strategy for Disaster Reduction and its chair person. The request was grouped by the Assistive Technology Development Organization (NPO) according to the official UN Commission Protocol. As a result, the group of persons with disabilities was nicknamed ‘the group that kicked the door down’ and was positioned as an ‘other important stakeholder’ conforming to the major groups with the four above-mentioned organizations summarizing the opinions of persons with disabilities across the world as managing organizations.

The 3<sup>rd</sup> UN World Conference on Disaster Risk Reduction held its 1<sup>st</sup> session on DRR and disability at the main conference thanks to the four organizations and Japanese government<sup>2)</sup>. At this session a group of persons with severe mental illness living in the community gave presentation on their experiences of continuous evacuation trainings and their achievement of not only securing their safety, but also leading an early evacuation for the other town residents. This result was obtained through the research project of National Rehabilitation Center for Persons with Disabilities at



Urakawa town, Hokkaido<sup>3</sup>). Additionally, the fact that a person with disability worked as the local disaster prevention leader was considered to be the foundational aspect of the document adopted for the conference.

Reasonable accommodations were offered for national representatives with disabilities who participated at official meetings, due to proposal to UN and financial support from the Nippon Foundation and technical support from Assistive Technology Development Organization. At the opening and closing ceremonies and the official session of DRR and disability, there were sign-language interpreters and the screens were subtitled. We should have offered wheelchairs for people who can usually walk with sticks to get around the vast conference venue. For persons with visual impairment, personal brail displays and DAISY (Digital Accessible Information System) players, and presentation materials were offered (Fig. 5). DAISY is an international digital talking book standard and DiDRR materials are recommended to distribute with DAISY format<sup>4</sup>). Travel expenditures were offered for presenters with disabilities, because they have to accompanied by personal assistants and interpreters.



Fig.2 Left: Although subtitles were displayed on the bottom of the screen at the opening ceremony, yellow characters were difficult to make out because there was no color on the background of the characters. Right: Members with mental illness from social welfare organization “Urakawa Bethel’s House” played a drama that shows their difficulties at the time of disasters during the official session on DRR and disabilities. A rehearsal was required the day before and we requested use of the venue out of the planned hours of use.



Fig.3 Two long ramps were combined to make access to the high main stage for wheelchair users.



Fig. 4 Panelist at the official session of DRR and disabilities. The Left Screen showed blind Montian Buntan (Senata, Thai) as a moderator and subtitles appeared with yellow characters on blue background. On the stage, from left, Satoko Akiyama (Bethel's House, Japan, mental illness), Hiroshi Kawamura (Coordinator, Japan), Montian Buntan, Sonnia Margarita (World federation of Deafblind, Ecuador), tactile sign language interpreter, Spanish interpreter, Paul George (Senata, Kenya). Left sign language interpreter is Carol Lee (UN) for American Sign Language, Right sign language interpreter is Noriko Miyazawa (National Rehabilitation Center for Persons with Disabilities) for Japanese sign language.



Fig. 5 Left: Portable Braille Display, Right : DAISY Player

(Hiroshi Kawamura)

## References

1. UNISDR. Living with Risk: A Global Review of Disaster Reduction Initiatives. pg. 17 , 2004.
2. Motoyama, Katsuhiro. Sendai Framework was adopted at “the most accessible” meeting of The World Conference on Disaster Risk Reduction, United Nations. Normalization, May: 44-45, 2015 (Japanese).
3. Inclusion builds resilience. 2015. (<https://www.undrr.org/news/inclusion-builds-resilience>)
4. Maekawa, Asami. DAISYver. For children on the Autism Spectrum and their Families – What is an appropriate attitude to take when new coronavirus is spreading? 2020. ([http://www.atdo.sakura.ne.jp/files/DAISY/covid/honbun\\_eng\\_CBE.zip](http://www.atdo.sakura.ne.jp/files/DAISY/covid/honbun_eng_CBE.zip))



## **Chapter 1 Introduction**

### **Section 2 The Contents and the Meaning of this Report**

Yayoi Kitamura

Research Institute, National Rehabilitation Center for Persons with Disabilities

#### **1. The contents of this report**

Although Northern European countries are known to be advanced in welfare, they do not have much experience in preparing for natural disasters such as earthquakes and floods. On the other hand, the Pacific Rim countries have a high frequency of earthquakes, tsunamis and wind and flood damage and are increasing their interest in disaster preparedness using the experience of previous disasters or inclusive disaster preparedness initiatives. In particular, since the 1995 Hanshin-Awaji Earthquake in Japan, it has been pointed out that there had not been enough disaster preparation for persons with disabilities and good examples of emergency measures have been accumulated. These good examples are listed in Chapters 2 of this report. Section 1 of Chapter 2 presents examples of the experience of a social welfare corporation operating a welfare evacuation centre in the 2011 Great East Japan Earthquake and operating a welfare evacuation centre opened in a public facility in the 2016 Kumamoto Earthquake. Section 2 shows the experience of evacuation centre operators, leading by University faculty members when considering social welfare at a university lecture hall at the time of the Kumamoto Earthquake. Section 3 presents the example of a social welfare corporation in a city adjoining a municipality that was affected by the Kumamoto Earthquake that relayed supporters and goods from all over the country. Section 4 reports on approximately six months of experience of a social welfare corporation (approx. 100 users with severe autism) whose 16 buildings were all flooded in Typhoon Hagibis in 2019.

From Chapter 3 onwards, we present good examples of how people with disabilities prepare for disasters. Chapter 3 Section 1 presents an evacuation centre operation drill held at a residential special education high school from the experience of the Great East Japan Earthquake. This drill was based on an evacuation centre operation game (HUG) that is well known in Japan. It was developed for persons with mild intellectual disabilities and put into practice in both Japan and Thailand. There is also an English version of HUG. Section 2 presents all the inclusive disaster preparedness activities implemented in Beppu City, Oita Prefecture.

#### **2. The meaning of this report: as an educational material to make a good relationship between community residents and persons with disabilities in the area.**

Chapters 2 onwards of this report are edited from past lecture recordings. Four of the six sections are edited and recorded on tape at a total of 13 lectures at a disaster preparedness study meeting by

three projects by Yayoi Kitamura (National Rehabilitation Center for Persons with Disabilities): ‘disaster preparedness measures and town planning for persons with disabilities (Health and Labor Sciences Research Grants from the Ministry of Health, Labour and Welfare, 2012 – 2014)’, ‘the nature of useful support for persons with disabilities during a disaster (National Rehabilitation Center for Persons with Disabilities special research, 2015 – 2017)’, and ‘community formation that is useful for supporting persons with disabilities at the time of a disaster (2018 – 2020)’. The details of the study meetings are shown in Table 1.

At these study meeting, with the theme of disaster preparedness for persons with disabilities, we gave lectures about the newest good practices in Japan, provided information and exchanged opinions with people from Tokorozawa City Crisis Management Section and National Rehabilitation Centre for Persons with Disabilities. We believe that this meeting functions as a platform to learn about advances and obtain a common understanding for persons with disabilities, their families, service providers and the administration in Tokorozawa City. From 2018, this study meeting was succeeded to trainings that is hosted by Tokorozawa City Crisis Management Section and Disability Welfare Section with the help of the researcher.

Table 1 Disaster Preparedness Study Meetings (National Rehabilitation Centre for Persons with Disabilities) Details of Implementation

	Presenter	Date	Chapter of this report	the number of participants
1	Hajime Kagiya (Director of Department of Risk Management and Disability Welfare, Itabashi Ward, Tokyo)	Jan. 27 <sup>th</sup> , 2012		25
2	Makoto Mizutani and Ryouhei Suganuma (AJU Independent House, Wadachi Computer House)	April 23 <sup>rd</sup> , 2012		34
3	Yayoi Kitamura (NRCD) “No one left behind” Held by Shin-Tokorozawa Community Welfare Activities Liaison Council	Oct. 1 <sup>st</sup> , 2012		55
4	Yayoi Kitamura (NRCD) “Support for Persons with Special Needs” Jointly held with Tokorozawa Volunteer Liaison Council	Jan 16 <sup>th</sup> , 2013		85
5	Yayoi Kitamura (NRCD)	March, 2014		85
6	Ryuuji Yahata (NPO Yumekaze Foundation)	June 21 <sup>st</sup> , 2014		60

7	Noriko Miyazawa (NRCD, sign language department)	Aug. 8 <sup>th</sup> , 2014		20
8	A group meeting among stakeholders at Shin Tokorozawa District.	March 23 <sup>rd</sup> , 2015		12
9	Masayuki Udagawa (Disaster Reduction and Human Renovation Institution)	July 3 <sup>rd</sup> , 2015		65
10	Chie Yoshimura (Kumamoto Gauken Univ.) Sunny Kamiya (Japan Disaster Preparedness Education and Training Centre)	Feb. 17 <sup>th</sup> , 2018	2-2	109
11	Yayoi Kitamura (NRCD) Jointed held by Tokorozawa City Independent Support Council	Aug. 4 <sup>th</sup> , 2018		65
12	Yasutaka Saito (Shoshinkai) Hideyuki Mori (Miyagi Prefectural Onagawa Special Senior High School)	Dec.20 <sup>th</sup> , 2018	2-1 3-1	12
13	Junko Murano (Department of Risk Management, Beppu City, Ohita Prefecture) Jointed held by Toshima Women's Network against Disaster	Dec. 21 <sup>st</sup> , 2018	3-2	36





## Chapter 2 Good Recovery Practices after Large-Scale Disasters

### Section 1 From the Great East Japan Earthquake of 2011 and the Kumamoto Earthquake of 2016. Experiences on organizing welfare centers

Yasutaka Saito

Ishinomaki Syoshinkai, Miyagi, Social Welfare Corporation

This lecture text is a re-composition of lecture records from 20<sup>th</sup> December 2018 (Disaster Prevention Study Meeting, Research Institute, National Rehabilitation Center for Persons with Disabilities) and 19<sup>th</sup> February 2019 (Workshop for Disability-inclusive Risk Reduction at Special Elementary Schools, Ministry of Education, Chiang Mai, Thailand).

#### 1. Outline of Ishinomaki City, Miyagi Prefecture and the damage it sustained



Figure 1 Yasutaka Saito, the author giving a speech in Thailand with an interpreter (Right)

I would like to talk about what I did at the time of the 2011 Tohoku Earthquake in a welfare evacuation center in Ishinomaki City in Miyagi Prefecture and how I used that experience at the Kumamoto Earthquake.

The Oyashio current and the Kuroshio current meet in the sea at Ishinomaki and this is why the city is one of Japan's leading marine product cities with one of the three largest fishing grounds in the world, Kinkasan-Sanriku Oki. Almost in the center of the city, the Kitakami River flows from west to east, the old Kitakami River flows from north to south and the eastern edge of the Sendai Plain supports plentiful agricultural production focusing on rice as well as livestock rearing.

In terms of population, Ishinomaki City is the second largest city in Miyagi Prefecture after

Sendai City. However, as of December 2017, the population of Ishinomaki had decreased by around 20,000 to just over 1.46 million compared to 2011. Neighbouring Onagawacho’s population decreased from 10,000 to just over 6,000.

There have been many earthquakes in the past in this area (Fig. 2). It is an area where many people can still remember the 1960 earthquake in Chili and the 1978 Miyagi Prefecture Offshore earthquake and know in their hearts that tsunamis come after earthquakes. However, the damage from the Great East Japan Earthquake on March 11<sup>th</sup>, 2011 was more than expected and Ishinomaki City had the highest death toll of all the disaster-struck villages, towns and cities. The extent of the disaster is shown in Figure 3. As of 7<sup>th</sup> December, 2017, there had been 3,552 deaths which was 2% of the population. That means that if you knew 50 people, one of them would have died. It is a city in which it is rare to find someone who doesn’t know anyone who died in the earthquake.

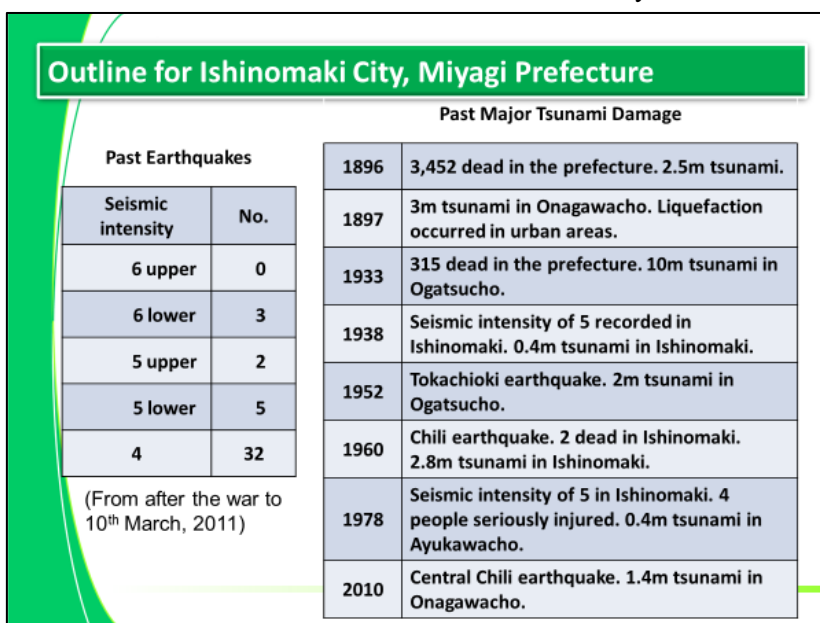


Figure 2 Outline of Ishinomaki City, Miyagi Prefecture

Just after the earthquake, all areas in the city (60,928 households and 162,822 people) were without power or water supply. It took more than 10 days after the earthquake to restore power and water to areas that were not flooded. As of 1<sup>st</sup> April, 2011, there were 20,074 evacuees (149 evacuation centers). The highest number of evacuees was 50,758 (17<sup>th</sup> March of the same year).

Figure 4 shows the numbers of persons with disabilities and victims. Before the earthquake struck, there were 8,140 disability passbook holders (10<sup>th</sup> March, 2011) and this had decreased to 7,766 two years later. Persons with disabilities who died were mostly those with physical disabilities (351); this was 5.5% of the 6,364 physical disability passbook holders. 2.5% of intellectual disability passbook holders and 3.0% of mental health welfare passbook holders died. 77% of the disability passbook holders who died were 65 years old or over.

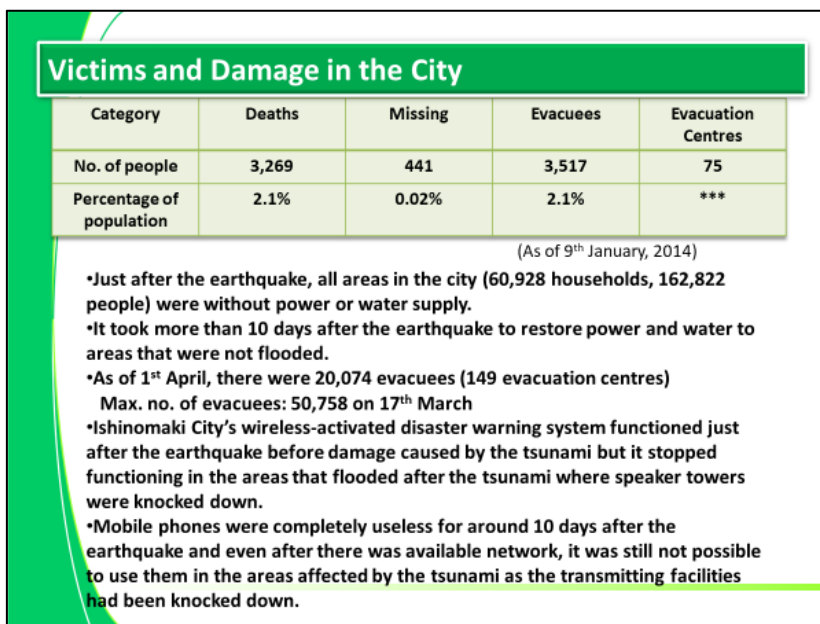


Figure 3 Victims and Damage in Ishinomaki City caused by the Great East Japan Earthquake

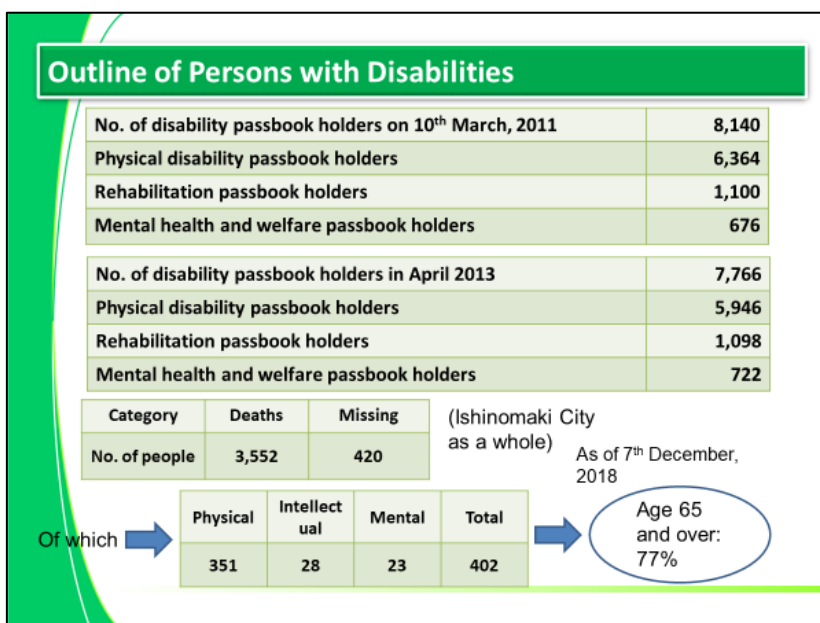


Figure 4 No. of persons with disabilities and no. of victims in Ishinomaki City

## 2. My experience of disasters

I was also affected by the disaster but I have no memory of hearing the wireless-activated disaster warning system that tells us that there is a tsunami coming. I really wondered if it had actually sounded. The pink area in the map in Figure 5 shows the area that was flooded. In the urban area where we worked, there were areas where the water took around a week to recede. It had snowed on the 11<sup>th</sup> of March so the next day, there was snow on the roofs but the other parts of the houses were flooded. The photo of Figure 6 is near my house. The road was not a road any more. It had been cleared by the Self-

Defence Force who had pushed everything to the sides all in one go with heavy machinery so that people and emergency vehicles could get through. You can see the sign for a convenience store in the back left. The store had collapsed in the tsunami and the products were free for the taking. I went there on the 3<sup>rd</sup> day after the earthquake and although there was hardly any food left, what do you think had been left behind? It was alcohol. I felt that it was proof that we were in a situation in which we could not be intoxicated.

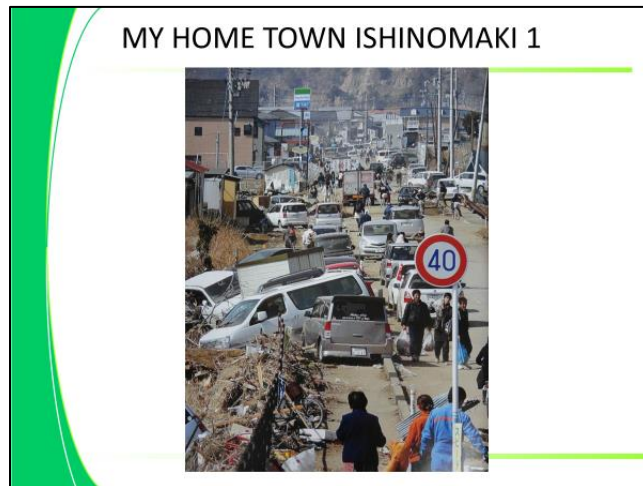
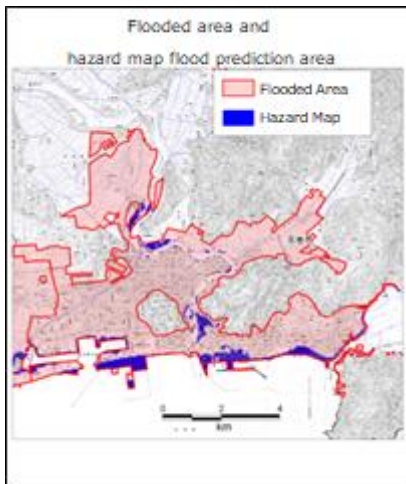


Figure 5 Flooded area (pink) and hazard map flood prediction area (blue) (Modified from a figure of Document 3-2 Outline of Damage caused by the Tsunami, Central Disaster Management Council Expert Examination Committee on Earthquake and Tsunami Measures learned from the Experience of the Great East Japan Earthquake, 1<sup>st</sup> meeting, <http://www.bousai.go.jp/kaigirep/chousakai/tohokukyokun/1/pdf/3-2.pdf>)

Figure 6 The road near the author's house

Figures 7 – 10 show the damage in Ishinomaki City. These photos were cited from The Great East Japan Earthquake Archives Miyagi (Ishinomaki), under the terms of use.

<https://kioku.library.pref.miyagi.jp/ishinomaki/>

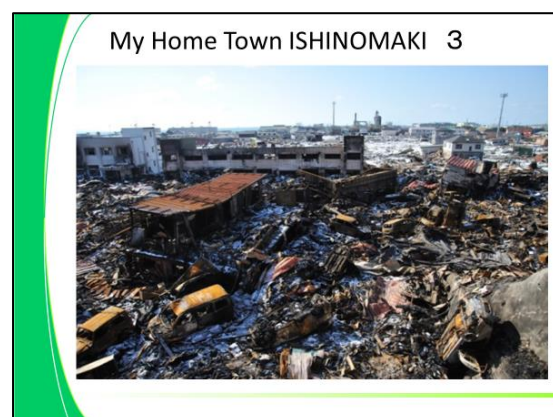


Figure 7 This road was closed because the tsunami brought a huge boat onto it.

Figure 8 Burnt area and the front of Kadonowaki Elementary School



Figure 9 The Self-Defence Force cleared roads with heavy machinery pushing cars and debris to the sides to allow access to emergency vehicles.



Figure 10 Ishinomaki Station

Figure 11 is a photo of my house on the 13<sup>th</sup> of March. I was living there with my wife and my daughter who was in 2<sup>nd</sup> grade at elementary school but at the time of the earthquake (14:46), no one was home and my wife and daughter safely evacuated to Hiyoriyama in the center of the city.

At that time, we had two cars that were swept away by the tsunami. The water was right up to the top of the windows on the first floor of the house. Three people who were washed away in their car managed to get themselves to safety by breaking the windows on the second floor. Visiting my house two days after the earthquake, there were traces of people I didn't know having stayed there. It seems that my house had become an evacuation center for a family.



Figure 11 The author's house

### 3. Damage to Ishinomaki Shoshinkai Social Welfare Corporation and Policy

Table 1 Services provided by Ishinomaki Shoshinkai Social Welfare Corporation

Service Name	No. of Offices	No. of Staff
Residential facility	1	40
Day Care Service	3	90
Continuous Employment Support (B-type)	4	130
Employment Transfer Support	1	10
Community Activities Support Centre	1	10
Care Home	14	70
Consulting Support Centre	2	***

The Social Welfare Corporation Ishinomaki Shoshinkai where I work was incorporated on 19<sup>th</sup> July, 1991 and has provided a wide range of support to people with disabilities. Fatalities in the earthquake were two of our six directors, one of our staff and one of our users. I don't think this was as bad as other branches.



Figure 12 Corporation building damage: group home



Figure 13 Flooding at Corporation consulting support center

Damage to buildings was complete destruction of two group homes and three vehicles that were washed away. For example, the two-storey group home pictured in Figure 12 upper right was washed away by the tsunami and the first floor collapsed. Inside the building was a complete mess as you can see from the bottom photo.

After the earthquake occurred, the Chairman of the Board of Directors said, 'The community has supported us for 20 years – now it's our turn to pay them back,' and 'In order to get new things, you have to let go of what you are holding onto now.' He also said, 'Do not close things off! Give the required items to the place that requires them! This was really easy for me to understand. When you are in an organization, it is easy for people to say that they can't give you an answer on something right now but it was great that he didn't do that. The culture was that if we were asked to do something, we said yes. Once we had said yes, we would talk to the 150 staff members and decide how to proceed. If someone told us they needed food, we gave them food. If someone told us they needed something to keep themselves warm, we gave it to them - we gave the local residents everything they asked for.

**Movements as a Corporation after the Earthquake**

**Links with the community**  
 ~What can we do as a corporation?

Our motto is:  
**The community has supported us for 20 years – now it's our turn to pay them back**

➔ **Intensive manpower**  
**Economy of scale as a corporation**

A message from the Chairman of the Board of Directors  
**In order to get new things, you have to let go of what you are holding onto now or you will not be able to grab them!**  
**Do not close things off!**  
**Give the required items to the place that requires them!**

Figure 14 Corporation policy after the disaster

**Community Support for Recovery**

- **What actually happened**

<b>Lack of food</b>	Distribution of bread, boiled eggs and amazake (rice drink)
<b>Lack of household goods</b>	Delivered from Self-Defence Force goods warehouses to evacuation centres
<b>Lack of fuel</b>	Supply of gas for emergency vehicles Lent vehicles to the city Secured fuel in partnership with the city
<b>Lack of bathing facilities</b>	Provided bathing facilities with mobile bathing vehicles
<b>Places to live</b>	Installation of welfare evacuation centres Construction of temporary welfare housing

Figure 15 Community support from Ishinomaki Shoshinkai at the time of a disaster

#### 4. Opening a welfare evacuation center

When the earthquake struck, we set up a disaster response headquarters and opened our facilities. We had a maximum of six evacuation centers and two welfare evacuation centers and we received 400 – 500 persons with disabilities and their parents as well as local residents (Fig. 15). One of the welfare evacuation centers, Hitakamien, a residential rehabilitation facility, was a building that housed 50 persons with intellectual disabilities. It is close to Matsushima Air Field, a base for the Air Self-Defense Force and because there were planes flying over the facility we were preparing to renovate with the aim of soundproofing. Temporary housing for 50 people was to be completed on 18<sup>th</sup> March, exactly one week after the earthquake. We had almost completed the move of the building in the top left of Figure 16 by the 11<sup>th</sup> of March. It had gradually become empty and was just waiting to be knocked down. At the time of the earthquake, as we had been told that a tsunami was coming, we

moved out 50 residents by bus to a building inland. The building was completely emptied.

At the bottom of the large garden in the top right is the sea. There is a canal that runs parallel between the buildings in the photo and the sea. The Self-Defence Force rescue team rescued the people who had evacuate to the roofs of buildings lower than the canal and went past the canal to put the people in our large garden.



Figure 16 Full picture of Hitakamien which became a welfare evacuation center

The tsunami water receded after two days and when we returned to Hitakamien two days later, around 150 people were living in the buildings. You can't tell evacuees to leave so we ended up opening as a welfare evacuation center.

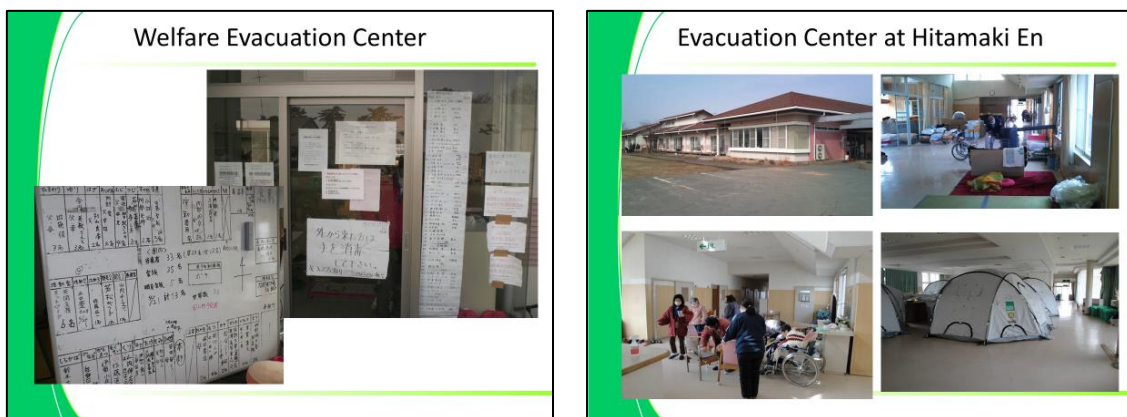


Figure 17 Room allocations and posters in the entrance hall at Hitakamien

Figure 18 (Top left) Hitakamien before the earthquake. (Bottom left/Top right) The inside of the building once it had been opened as an evacuation center. (Bottom right) Tents where volunteers stayed overnight.

We were designated as a welfare evacuation center, we got support from various people. The tents we were sent from the United States (Fig.18) were pretty good. We used them for changing rooms and



places to sleep for volunteers.

At the beginning, 150 members of the general public had evacuated. However, as we did disability welfare work, we switched to evacuation lifestyle support for persons with disabilities who were more likely to find evacuation difficult than the general public. From the 13<sup>th</sup> of March, we went round 1000-person evacuation centers in the city and talked to persons with disabilities and their families when we found them telling them that if they felt it was difficult to live in their current evacuation center, they could come to Hitakamien. There were 26 resident rooms at Hitakamien and, in the end 26 households including persons with disabilities (at maximum capacity it was 40 households and 80 people) continued to live there from then until June. After opening as an evacuation center, evacuees were allowed to come and go as they pleased day or night.

In April, we decided that we had to do something with these 26 households. This was a period when most people were starting to apply for temporary housing from evacuation centers. When we asked the prefectural administration to create temporary housing where households with persons with disabilities can live, they told us that it was not possible. We did not give up and when we said that we had these kinds of needs in the area and that we wanted something to be done about it, the Nippon Foundation gave us 180 million yen and we were able to build temporary housing for 44 households with persons with disabilities (14 single people and 40 households) and two group home buildings. The subsidy grant decision was made on 6<sup>th</sup> April, building started on 11<sup>th</sup> May and was completed on 20<sup>th</sup> June. We worked really hard on construction while operating an evacuation center. This became the Nippon Foundation Oguni no Sato with five members of full-time staff on duty (Fig. 19).



Figure 19 Temporary housing for persons with disabilities Oguni no Sato

## 5. A volunteer coordinator

After registering as a welfare evacuation center in Ishinomaki City, welfare experts came from all over the country. However, at the time, as someone who lived in the area, it was a real pain to have to answer calls from people who said they were coming to help. For example, ‘Where Hitakamien is

located?’ ‘Do you have enough food?’ ‘Do you have places for volunteers to sleep?’ and ‘Do you accept volunteers who come to help just for three days?’ It was really hard work to repeatedly answer questions. One of the people who came really was like Superman!

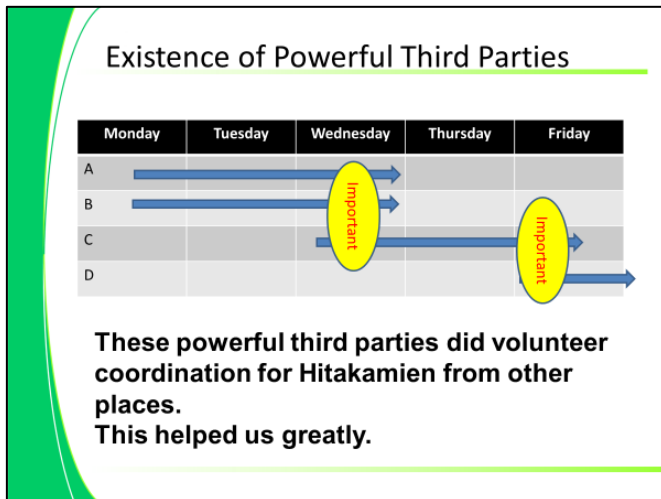


Figure 20 Volunteers shift – one week per person including a handover day

That was Kimihiko Katagiri (Chairman of the Board of Directors at the NPO Little Life at the time). He had experienced an earthquake in Niigata and understood how hard it was for our staff. He said that he knew we would probably be having trouble so he would take on organizing all the people who wanted to give us support and that’s what he did – he took charge of organizing all the volunteers and people who wanted to provide support. He relayed the information of how many nurses we needed on site each week and so on. He stopped all the people who could only come for three days and only let those who could manage a week come. All we had to do was give orders like, ‘We need a nurse for a week.’ He also made sure that on the 7<sup>th</sup> and last day, the people who would be working for the next week overlapped for one day (Fig. 20). The handover was done independently by the people involved. The quality of support did not decline even when the people changed. We spent four months with this kind of system. I think Mr. Katagiri probably had a lot of anxiety when dealing with this.

## 6. Support goods

### (1) Relationships when there is not a disaster

There are some kinds of support that only local people can provide in disaster-affected areas. When we went to pick up food at the Self-Defence Force warehouse, my personal network was really useful. Initially, it was City Hall staff who were in charge of managing support goods that were arriving from all over the country. Around the 2<sup>nd</sup> day, as I had had some contact with the City Hall, they let me take things from the warehouse because it was me so I was able to choose what I wanted (food, etc.) Towards the end, there were more and more people who took advantage and played cat and mouse

with the rules. When you got a pass to the warehouse, someone would copy it and use it for themselves to sell the goods. In order to regulate this, the passes had to get a new star mark on them. I remember that the passes had symbols added to them every day.

### **(2) Distributing goods to people who stayed at home during the evacuation period**

The Self-Defence Force warehouse had a lot of goods that had been sent from individual all across Japan and a lot of these were packed in cardboard boxes. They were meant for one family and had food, ramen noodles and heat packs, etc. in them. The Self-Defence Force had to open each box and manage each item by sorting them into categories such as food in Warehouse A, clothes in Warehouse B, other stuff in Warehouse C and so on. As I got to know the Self-Defence Force staff, they started just handing me the unsorted cardboard boxes. I delivered them to the households where people with disabilities were living. It was pretty much a win-win situation. I wanted those mixed boxes and the Self-Defence Force had to use a lot of their energy sorting and managing them. I delivered the boxes to households that were asking for them.

### **(3) Changes in needs**

Needs changed as time passed after the earthquake (Fig. 21). They changed from food and everyday goods, fuel and bathing facilities to housing. There is a time lag between relaying what is actually needed onsite and the time it takes to get there from all over the country and I remember this being one of the difficulties that we experienced.

Another thing is that we can't function just by receiving goods. For example, if we said that it was a problem because there were no bathing facilities, mobile bathing vehicles came from all over the country. However, this was the first time we had ever used these vehicles so we didn't know what to do. The need for bathing facilities was urgent so we took the vehicles to evacuation centers such as small community centers and told them how to use them. We also put up the tents that arrived from the United States in the car park and gradually put baths in them with signs saying, '○○baths'. When we did this, the evacuation center Self-Defence Force organization opened baths for us. In this way, we were able to tell the community centers that they could have the bathing vehicles that arrived with us. At the time, we were able to create around three Hitakami no Yu baths.

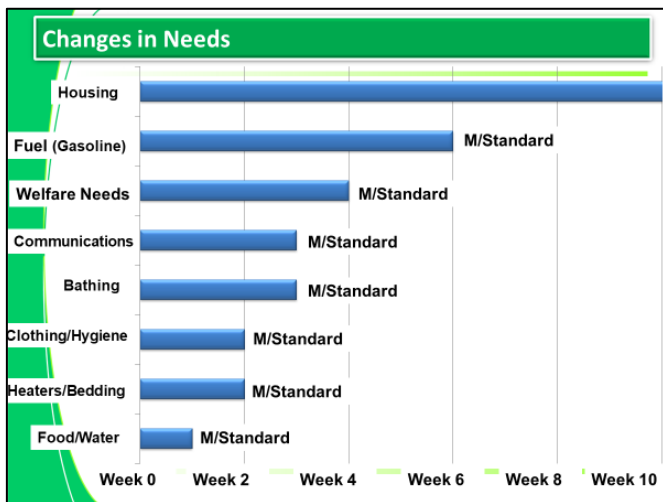


Figure 21 Transition of needs

Ishinomaki Shoshinkai originally worked on various welfare services and one of those was making fuel from rapeseed and waste oil. Buses and trucks can run on this fuel so we could have got as many of them going as necessary. These were the kinds of strengths our corporation had.

There were also some goods that were sent directly to us. It was hard-going because we ended up with so many second-hand clothes that we didn't have anywhere to keep them. We ended up having to pay for someone to take them away and dispose of them.

## 7. What we learned from the experience of the earthquake (Fig. 23)

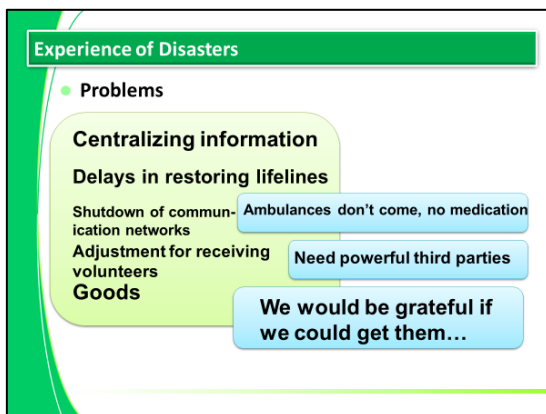


Figure 22 Difficulties during the earthquake

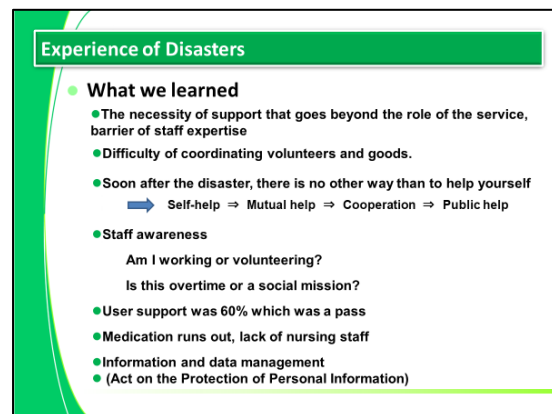


Figure 23 What we learned from the experience of the earthquake

There are two things that we learned from the experience of the earthquake (Fig.23). The first was the necessity of support that went beyond roles. As a member of local staff, for example, nothing gets done if you stick to your own job as carer or cook. As a person, you have to decide what you can do to help when faced with each situation and get on with it. I feel that this applies to everyone in the disaster-affected area.

Public help comes last. In the end, you have to help yourself first. Some people find this difficult and that is why we work on mutual help in ordinary times. Directly after the earthquake, staff, who worked as if they were on a social mission, also started to wonder whether they were working or volunteering and whether they were doing overtime or whether it was a social mission. There was probably an accumulation of fatigue. And they were probably worried about their families and relatives, too. They must also have had their own worries and difficulties related to being a victim of a disaster themselves. I felt that it was not possible to get through the huge amount of work after the earthquake occurred just as a social mission. I think it is essential to talk about emergencies on a regular basis and decide what to do.

We had these thoughts because we experienced a large-scale earthquake – issues and needs that occur according to staff, user support and the passage of time in the affected area. Those of us who experienced it are thinking about what could happen in the future and are preparing for it.

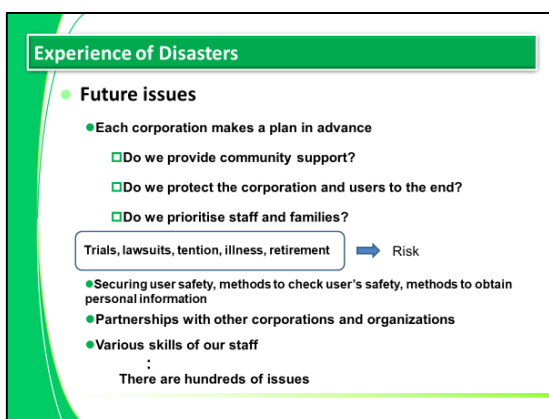


Figure 24 Future Issues

Figure 24 lists future issues concerning preparing for disasters. First of all, it is best to decide as a corporation what the action policy will be at the time of a disaster. There were times when we had to decide whether to prioritise community support, corporation work or staff and their families. In addition, there were mountains of issues including how to check if users were safe and well, the nature of partnerships with other corporations and the various skills of staff that were not included in their job description.

## 8. Repairing temporary housing

From 29<sup>th</sup> April, 2011, the move to emergency temporary housing began for people living in the evacuation center. Wheelchair users also moved to temporary housing. Figure 25 shows a ramp that was installed at the front door of temporary housing after it was built. When we asked the administration to install a ramp, they did it. We were reassured after having the ramp installed but it turned out that the door was too narrow for wheelchairs to get through (Fig. 26 right).

In the second round of works, we had a ramp installed at the entrance to the living room at the back (Fig. 27). This time, the ground on the way to the ramp was gravelly and the wheelchair would not move. There were so many things that we did not notice. It was really difficult. We had to get work redone like this on a number of occasions.



Figure 25 Ramp installed at the entrance to temporary housing after it was built

Figure 26 (Left) Wheelchair users living in temporary housing (Right) Open front door of temporary housing



Figure 27 Ramp installed at the entrance to a room at the back of temporary housing

## 9. How things are seven years after the earthquake at Ishinomaki

Seven years later...

- Are resident opinions of the recovery plan reflected in city administration?
- Public help, cooperation, mutual help, self-help
- Public help and cooperation not visible?  
Not being delivered?
- Mutual help  
(supporting each other in the community)
- Mutual help (supporting each other in a team)
- Self-help→Mutual help→Cooperation and Public help

Figure 28 Self-help, mutual help, cooperation, public help

Let me tell you a little about how things are seven years after the earthquake. In the end, I think it is our mission, as a provider of support to the community, to work out how to create frameworks for mutual help and mutual support between private organizations in the community. I think public help and cooperation are led by public institutions. I feel that it is important how local private organizations provide mutual help. There were four major specific things that changed compared to before the earthquake.

### **(1) Diversification of, and increase in, welfare needs and increase in consulting support staff**

The first is the diversification of, and the increase in disability welfare needs. After the earthquake, the scale of needs for service adjustments for persons with disabilities increased greatly. There were needs in order to protect the rights of the persons with disabilities. For example, huge amounts of monetary contributions and support arrived for victims of a disaster and persons with disabilities also suddenly became richer. However, they do not know how to best use this money. This is where various people who provide support come in and it seems that there were quite a few people who had their money stolen from them by looters and so on. They needed support to stand up for their rights including adult guardianship.

Procedures for reissue disability passbooks and public assistance needed to be started again from the beginning for some people. There were people who had lost their families and did not know their own identity. The government office in Onagawa town was damaged and data on residents was lost so data on disability passbooks had to be requested from the prefecture and temporarily inputted by the author at Onagawa Town Hall. Visits to all disability passbook holders's houses began in cooperation with other institutions based on this data.

There was a need for more consulting support specialists who would consult on various subjects including securing places for daytime activities and attending clinics as well as methods of transport. Consulting support specialist council members came to provide support saying that Ishinomaki needed consultants and people with special knowledge. As a result, a new consulting support center was established and that is where I am currently working.

## **(2) Housing needs**

### **① Needs when leaving mental health institution**

The second was housing needs. People who had lost the family members they had been living with and had to live alone needed complete support to start over again. The mental health hospital had been completely destroyed so patients there had been moved to the corridors of other local hospitals. They were over capacity on beds. These people had to be integrated back into the community. Support for people to leave the mental health hospital is still ongoing even now. According to the hospitals, inpatient rates are 115 – 120%. We have to provide support to transfer from other hospitals but they have nowhere to live. The new-build group home took until last year to complete at Ishinomaki

Shoshinkai.

I think this is a big issue. At the time, the prefecture built a temporary group home and asked Ishinomaki Shoshinkai to operate it. As recovery housing started to be organised, the period of residence in temporary housing came to an end. Therefore, the temporary group home also had to be knocked down. The prefectural administration asked us to move from the temporary housing. However, there was no group home for the users to move to. We had to build from scratch so the corporation bought land and built a group home. Subsidies for building this group home were the same as normal Treasury assistance and we didn't even know if we would qualify for them. For one group home, the upper limit for subsidies is 25 million yen. The rest of the costs were all covered by the corporation. It required so much capital that I have no idea how much it ended up costing.

A large construction company ended up knocking down and destroying the great temporary housing that it had made. After that, a lot of people thought that it was a waste and the national government proposed that Miyagi Prefecture re-used three temporary housing to make a group home with a cost of 25 million yen per building. However, the corporation had to pay one quarter of the total cost of the land to be constructed meaning that the standards had not changed.

## ② Evacuation building (Fig. 29, 30)



Figure 29 (Top left) Damaged group home,  
(Right) Temporary housing group (Nippon Foundation Home Oguni no Sato GH),  
(Bottom left) Newly built GH which also works as an evacuation building for local residents.

Figure 30 (Top left) Evacuation space as the evacuation building,  
(Bottom left) Space for evacuation on the building roof,  
(Top right) Stockpiles offered by the city,  
(Bottom center) 2<sup>nd</sup> floor dining room,  
(Bottom right) Multi-purpose toilet in the GH.

We added an evacuation space when we apply a subsidy for a group home. Although the upper limit of a subsidy for a group home is 25 million yen, that for a building with an evacuation space is 50 million yen. This group home is designed to work as an evacuation space for community residents, having a stock room for evacuees and outdoor stairs to come and go easily.



### (3) Rebuilding communities scattered by the earthquake

The third was the big issue of rebuilding communities scattered by the earthquake. There was an increased need for opportunities and platforms for local residents to get together and solve the diverse issues in their communities. We started working on these with independent support councils and project on bases for developmental support for persons with disabilities (Figures 31 and 32).

After the earthquake, independent support councils planned the event, Fun Summer, to combat the lack of places for children to play safely and the lack of chances for parents to talk to each other, because temporary housing had been built in children's play areas in parks and so on. It was an event at which professionals in psychology, etc. could talk to parents and guardians individually, while local welfare services cooperated had fun with the children.

In addition, as shown in Figure 31, we held an event on World Autism Awareness Day (2<sup>nd</sup> April). It was an event shaped by the hopes of families who wanted to send the message to supporters around the world who had come to help after the earthquake that Ishinomaki is doing OK. At the same time, it is rebuilding the community that had been scattered by the earthquake due to parents having to move house.



Figure 31 (Left) Autism Awareness Day (2<sup>nd</sup> April) Ishinomori Mangattan Museum was lit up, (Right) Lighting ceremony

### (4) The role of service providers

We are also taking another look ourselves, the people who are responsible for disability welfare services. After the disaster, we were made greatly aware of how strong the families of the people with disabilities. Rather than what someone can do to provide support, my way of thinking gradually changed to valuing the strength of the families and lending them just a little support. That is why we also started parent training. This is the work of 'our own, whole convivial society (Ministry of Health, Labour and Welfare)'. Monetary assistance for disaster support has been used up so now the municipality is working with a small budget to develop special activities that are required in the local community and to work out how to continue and develop.

New businesses started working in the disaster-affected area. After the earthquake, various

organizations arrived such as medical, education, welfare, fishery, agriculture and government organizations and opened branches according to the needs of local people. Now established services such as after-school day services were newly introduced through the work of external organizations. There are some business owners who are still in business with the projects they started at the time and there are also those who closed because of dwindling budgets but there has also been an increase in the number of commercial businesses that have opened up because 'operating welfare services makes money'. Some of these are services that are not required locally. Once their application has been accepted by the prefecture, they are suddenly up and running. It is a shame that there are some businesses that do not provide good quality services.

#### **10. The Kumamoto Earthquake disaster-affected area support: opening and operating a welfare evacuation center (welfare center for persons with physical disabilities in Kumamoto Prefecture)**

I would like to talk a little about the Kumamoto Earthquake. We did not go to the affected area directly after the earthquakes (tremors on 14<sup>th</sup> April, 2016, actual earthquake on 17<sup>th</sup> in the middle of the night). We knew that asking if people needed anything was quite annoying for the people in the area, we thought that it would be better to wait until we were asked to go. We started doing all the preparation we could from afar such as securing staff that would be able to go to the area as soon as they were asked. It was one week after the earthquake that a consulting support specialist council contacted us to ask to operate a welfare evacuation center in a Kumamoto Prefectural Center for Persons with Physical Disabilities using our know-how as staff. A few days later, three of us arrived by car from Ishinomaki on 28<sup>th</sup> April, 2016. A car was essential because would not have been able to provide support without it in the affected area. This is just an aside but, when we went back one month after we had finished providing support, we left the car there and told the relevant people that they could use it as they pleased for the next six months or so.

Consulting support specialists who came to provide support from all over Japan cooperated with the Japan Disability Forum (JDF) to visit homes of disability pass holders in some municipalities under the following conditions, (i) 18-64 years old, (ii) not provided services, (iii) severe disabilities. They need a space for affected persons with disabilities to recommend for evacuation, when they find affected persons with disabilities who need to evacuate. We provided support to help create a residence like this using the know-how we had gained from the Great East Japan earthquake. There is no way to proceed if there is not a two-pronged approach with finding out needs and being received at welfare evacuation centers. In addition, Center for Affected Persons with Disabilities operated by persons with disabilities themselves provided support to persons with disabilities who stayed at home. Some municipalities sent a leaflet of this center to disability pass holder.

When we arrived the designation of welfare evacuation center had not yet been authorized. Kumamoto Prefectural Welfare Center for Persons with Physical Disabilities was not designated as an

evacuation center because it is a prefectural facility and there was no welfare evacuation center agreement with Kumamoto City. Directly after the earthquake, all they could do was offer toilet facilities to the evacuees who had come to the car park and who were living in their cars. The facilities housed a braille library, an information centre for people with hearing impairments and overnight accommodation so several persons with disabilities who had lost their homes had started evacuating and the local staff supported them tirelessly. Even after it began to function as a welfare evacuation center, the municipality did not send supplies or people to help so we had to coordinate everything by ourselves.



Figure 32 Counseling Support Specialist Council visited all disability passbook holders



Figure 33 Welfare evacuation center coordination desk

We told the local staff to have a rest and organised shifts. Then we created a coordination desk (Fig. 33) to (i) create an evacuee list and assess them, (ii) procure supplies (contact with Self-Defence Force through administration), (iii) coordinate reception of volunteer groups and details of support, (iv) coordinate with consulting support specialist council which was seeking out those who required support and (v) provide consulting support to evacuees who have returned home. This is what people from Niigata did for us in the Great East Japan Earthquake.



Figure 34 Inside the welfare evacuation center – there are partitions but no beds. People were sleeping on the floor.



Figure 35 (Left) Volunteers who came from all over the country (Right) Support at the evacuation center  
 Figure 36 (Left) Support for the elderly (Right) Children playing in the hall



Figure 37 (Left) Preparation of cooking  
 (Right) Cleaning



Figure 38 (Left) Dividing out support goods  
 (Right) Exercising with evacuees

### One month after starting...

- After getting past the acute phase, we have to know this evacuation lifestyle could not continue for a long period of time
- Creation of systems that do not rely only on volunteers
- (For example, system to create employment)
- Think about each individual's life from now on and consult on rebuilding lives
- And to follow this up for every person we meet with.

Figure 39 Support situation one month after the opening of the welfare evacuation center

After overcoming the first month (the acute stage), it is necessary to (i) an awareness of evolving from the evacuation center lifestyle, (ii) create a system that creates employment locally rather than

just relying on volunteers and (iii) use local services and resources and discuss reconstruction according to the wishes of every last person.

We had another encounter in Kumamoto. Ayumi, a daily care service where we delivered goods, was doing the activities of a welfare evacuation center so we dispatched some Ishinomaki Shoshinkai staff.

## 11. Conclusion

It has been seven years and eleven months since the Great East Japan earthquake and, during that time, there have been several other natural disasters in Japan. Unfortunately, we will continue to have them in the future. We cannot stop natural disasters nor can we predict accurately what disaster will occur. However, we have accumulated quite a lot of knowledge. I feel that knowledge gained from experience can be used to prepare for and reduce the risk of disasters on an everyday basis and that emergency support has got a lot faster compared to seven years ago.

In conclusion, I would like to tell you something that someone once said to me. I have just recently remembered it. It was the head teacher of the elementary school my daughter was attending at the time. He said, “We can keep our bodies warm with the heaters and heated tables that people send us but our hearts are only warmed by other people’s hearts.”

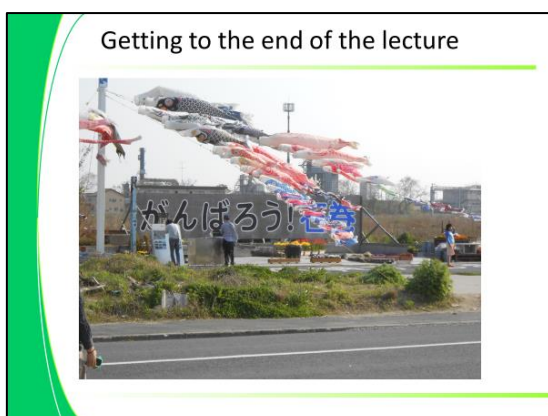


Figure 40 A sign saying Good Luck Ishinomaki at Ishinomaki City Hall

### 【Questions and answers】

#### **Making disaster support the mission of social welfare corporations**

MC (Yayoi Kitamura): Thank you. There are a few things I would like to know. I understand that disaster support is included in the mission of Ishinomaki Shoshinkai.

Saito: Yes. Since 2018, it has been compulsory for social welfare corporations to state their contribution to the community in their articles of association according to a revision in the law. For example, if you are a facility for children, you can state that you run a cafeteria for children from low

income families or such like. Ishinomaki Shoshinkai put its mission as a social welfare corporation in its articles as, “going to areas affected by disasters”. Creating teams that can go and provide support when a disaster occurs. Going where we are asked to go. If we are not asked to go, being on standby. As we are a social welfare corporation that flies the flag of responding at the time of a disaster, our disaster management headquarters is still open.

MC: Your normal activities include, for example, you coming here to this study group with your expenses paid by the corporation. This kind of education and knowledge-sharing can be regarded as a part of the corporation’s work.

Saito: We are stockpiling. We are also fund-raising for disaster contributions that will help us with the next disaster. As an example, if there is a disaster in the north of Japan, consulting support specialist council will go to support other branches in the north. If a disaster occurs in the south, they will be able to split their staff into two areas in the north and the south depending on what support the other branches in the south need. It really was quite a long way from Ishinomaki to Kumamoto!

MC : Did you receive compensation by the affected local government when you worked for the welfare center at Kumamoto? Did you also cover the cost of food and board by yourselves?

Saito: We did not accept any allowance from Kumamoto City. At Kumamoto, a consulting support specialist council offered us a container-car for housing. We bought lunch during working hours. Breakfast and supper were provided to us as volunteers.

MC : Do you know who covered the cost of travel and housing for volunteers with special skills, such as members of the consulting support specialist council?

Saito : Members of the consulting support specialist council helped visit and survey disability pass holders within the community, both in the case of the Great East Japan Earthquake or the Kumamoto Earthquake. Their travel and housing expenses were covered by Miyagi Prefecture at the time of the Great East Japan Earthquake, and by the Nippon Zaidan Foundation at the time of the Kumamoto Earthquake. Although the travel and housing expenses of persons with experience in medicine, engineering, building and transportation are covered by law, those in the welfare field are not. Some insist that welfare work should be included in the law. Volunteers with special skills who came to help our welfare centers at Ishinomaki covered their own travel expenses.

MC: At consulting support specialist council, disaster management is also a theme in training, right?

Mr. B. Is it difficult for the prefecture to come to an agreement with consulting support specialist council or social welfare corporations?

B (social welfare section staff member in a prefecture close to the metropolitan area): This is the first time I have heard stories like this so I am going to get in touch (with consulting support specialist council).

**Relationship between people who provide support in disaster-affected areas and administration: prefecture and city**

B: I have a question. How was the relationship with the administration during the Great East Japan earthquake?

Saito: Every time we had a problem we talked to the administration. At the time, the Disability Welfare Section Chief in Ishinomaki City cooperated with us. We didn't have anything to do with the prefecture.

MC: It is the prefecture that builds temporary housing so requests and complaints go to the prefecture, right?

Saito: That's right. They had no problem with saying that they had sent a reply by e-mail. Disaster-affected areas do not have electricity so it took me until about 10 days after the disaster to read my e-mail. I didn't have any access to it before that. Invoices and so on. Around two weeks after the earthquake, five of us went to petition the prefecture office in our wellies – we were really dirty. They must have wondered what we were doing.

MC: And did you make any progress?

Saito: No.

MC: Does it go better if you go through the city?

Saito: In the end, it is local. When we wanted gasoline, the city had some to use for its official cars so they gave it to us. They told us that we would be able to get it on the quiet if we took a certain certificate with us. And we did that. Slipped in and got what we needed.

MC: You need the trust that the person will keep the secret, don't you?

Saito: I think that is what made the difference. We did not have a strong relationship with the prefecture.

### **Dismantling temporary housing**

MC: The temporary housing built for persons with disabilities by Nippon Foundation that you mentioned. Were you able to build it without public building standard restrictions?

Saito: The Nippon Foundation temporary housing was procured from somewhere in Korea so it does not conform to Japanese standards. At the time, Japanese supplies did not meet demand. Around March 2017, temporary housing residents started rebuilding their lives and all the temporary housing was empty. But, returning the land where the temporary housing had been built to its original purpose as vacant land or fields would cost 70 million yen. We would have to pay for this ourselves – there was no public money for this.

MC: Did Nippon Foundation not pay for the dismantling?

Saito: Unfortunately, they cannot provide financial support. Ishinomaki Shoshinkai will be dismantling the 40 temporary housing buildings and two group homes. We put out a message saying that if anyone wanted the housing, they could come and get it but no one did.

D: At a school we support in Miyagi Prefecture, I heard that they reused three temporary housing buildings, joining them together as labs and took away the partitions to make a large space.

Saito: There was no reuse in Ishinomaki City. It is cheaper to build from new than it is to move temporary housing.

MC: The prefecture will pay for dismantling if it is public temporary housing.

Saito: Yes. We built it ourselves so the prefecture will not pay for it to be dismantled. It wasn't registered as temporary housing when we built it so we didn't get various goods. We did not get the Red Cross six-piece electrical items set (washing machine, fridge, TV, rice cooker, microwave and kettle) for temporary housing residents at first. We negotiated with the prefecture and eventually got it. We also got employment expenses for lifestyle support staff for the temporary housing in the end.

MC: So, what did you do for the temporary housing group for persons with disabilities only? Didn't it feel a bit strange as a community?



Saito: When I think about it now, there was something not right about gathering just persons with disabilities.

MC: How about setting aside 5 – 10% of normal temporary housing for specifications for persons with disabilities and the elderly?

Saito: It's true that it's like going back in time just gathering persons with disabilities in one place. That does not conform to the philosophy of everyone providing each other with support in the community. In the end, we had created a colony. But everyone goes back to their lives from temporary housing so it was OK to do that on a temporary basis. Parents and the people themselves were happy about it. They could mess about and be loud and nobody bothered. That's because they are all on the same wavelength. The mothers are all good friends, too.

In Kumamoto, there were separate rooms for persons with visual impairments (play room), persons with hearing impairments (training room) and those who have physical disabilities and so on (recreation room) so that everyone was separated by disability in the prefectural welfare center for persons with physical disabilities.

### **Organizing a Welfare Center after the Kumamoto Earthquake of 2016**

MC : Who assessed the evacuees on their eligibility to stay at the welfare evacuation center at the Kumamoto Prefecture Welfare Center for Persons with Physical Disabilities ?

Saito : Soon after the earthquake, persons with disabilities directly came to the center. Because the Kumamoto Prefecture Information Center for Persons with Hearing Difficulties and the Kumamoto Prefecture Braille Library are located within the center, some users and persons related to the Welfare Co-operative Association were evacuated to the center. After the center became registered as a welfare evacuation center, the Kumamoto prefecture social welfare corporation designated the administrator of the center and began managing the list of evacuees. We worked with Kumamoto City because the city officially registered the welfare evacuation center.

However, the Kumamoto City citizens with disabilities were not the only ones staying at the welfare evacuation center. The number of evacuees was 59 at the most, and less than 20 on the 20<sup>th</sup> of June. The welfare evacuation center closed in late June. After the welfare evacuation center became registered, we received three types of evacuees. First, the Department of Disability Welfare of Kumamoto City asked the designated administrator of the center to accept evacuees with special needs after they were assessed at the other evacuation centers and communities. Our team made an arrangement with volunteer groups to provide services for the newly arriving evacuees.

Second, disability organizations made arrangements independently for each space, although the list

of evacuees was managed by the designated administrator of the center. For example, the group of persons with hearing difficulties decided who would come to the space where the group managed without the assessment of the city. This group provided the listing of evacuees to the designated administrator of the center. The total number of evacuees was reported to Kumamoto City from the designated administrator of the center.

Third, as mentioned before, the consulting support specialist council sent us information when it found persons with disabilities who had difficulties at home, based on their survey visit. We arranged for them to be accepted and sent the list of new evacuees to the designated organization of the center.

MC : You mentioned that the city did not provide supplies. Did you have city staff or other staff for the welfare center?

Saito : When we came to the center, even the local staff had difficulties securing their own meals. I asked City Hall to put the center on the list of evacuation centers for Self-Defense Forces to deliver supplies. As far as I remember, the center did not have any staff from City Hall. City Hall made use of the employment program in the affected areas and employed the cook of an affected restaurant to serve us dinner on the 2<sup>nd</sup> of May, as well as students as center staff.

MC : Do you know of cases who began using welfare services after the earthquake, because they failed to adjust to their environment or were recommended new services by counseling support specialists ? I think it is quite difficult to encourage persons with disabilities who have not used such services. Do you have any experience in elaborating individual evacuation plans for persons with disabilities who have never used such services?

Saito : We have so many persons with disabilities who did not use welfare services. After the earthquake, the number of group home residents doubled in our corporation. Ishinomaki city asked us, consulting support specialists, to visit persons with disabilities who did not use welfare services, on their birthdays.

MC: Thank you. I'm afraid time is up so we are going to have to stop here.

## **Chapter 2 Good Recovery Practices after Large-Scale Disasters**

### **Section 2 Organizing an evacuation center in a university with reasonable accommodations after the Kumamoto Earthquake of 2016: What can we do to create a society with a reduced risk of disasters? Learning from Thailand, Tohoku and Kumamoto.**

Chie Yoshimura  
former Kumamoto Gakuen University

This lecture text is a re-composition of lecture records from 17<sup>th</sup> February 2017 (Disaster Prevention Study Meeting, Research Institute, National Rehabilitation Center for Persons with Disabilities). 13<sup>th</sup> November 2017 (Academic Workshop: Disaster & Crisis, IASSIDD 4<sup>th</sup> Asia Pacific Regional Congress, Bangkok, Thailand) and 16<sup>th</sup> November 2017 (Workshop for Disability-inclusive Risk Reduction at Special Elementary Schools, Ministry of Education, Thailand).



Fig.1 Chie Yoshimura, the author.

#### **1. Introduction**

First of all, let me introduce myself. From 2013 to 2016, four universities in Kumamoto Prefecture (Kumamoto University, Prefectural University of Kumamoto, Kumamoto Gakuen University and Kumamoto Health Science University) cooperated on a project to train leaders of a society with a reduced risk of disasters. I participated in this project as a lecturer at Kumamoto Gakuen University. In April 2016, just as I thought that this was the final year of the project, there was an earthquake. The earthquake caused me to check the results of this four-year project. However, we are not disaster experts.

I have been working on persons with disabilities at Thailand. Human Network Kumamoto, an independent living centre, was opened in 1991 and I first became involved with it as a personal assistant for persons with disabilities in 1995. I was a student at the time.

Just before the 2011 Great East Japan Earthquake, there were catastrophic floods in Thailand. The

worst affected areas were flooded underwater for around six months. You may not be able to imagine what being underwater for six months means. I just happened to be involved in a research project on persons with disabilities in Thailand and this was the catalyst for finding out about how persons with disabilities were coping with the floods. Since I believe that disability and disasters are deeply linked, this was adopted for the Kumamoto Gakuen University project as I was quite interested in it and had been studying the subject. Today I would like to tell you about what I think after having experienced the Kumamoto Earthquake.

**WHAT DID I DO? #1**  
**MET WITH PWDs, MET WITH PEOPLE IN THAILAND,**  
**AND FACED UP TO DISASTERS**

- 1995 Met with PWDs in Kumamoto
- 1995 Met with people in Thailand (homestay programme in a farm village in Northern Thailand)
- 1996 Visited the USA to study ADA and PWD movements at Berkley, CA
- 1999 Met with PWDs in Thailand




Fig.2 Left: Carrying a wheelchair to the platform of the BTS Sky-train before an elevator is installed. Middle: on the platform, Right: An elevator.

I first met a person with disability in 1995. I had always wanted to do volunteer work with persons with disabilities and I was finally able to do it when I went to university. Meanwhile, I went to a farming village in Thailand. This was what started me in research into persons with disabilities in Thailand. If I was to explain why Thailand, we would still be here tomorrow morning so I will miss out that part.

In 1996, I went to Berkeley in California, USA for six weeks with Toshihiro Higashi, a lawyer and wheelchair user, and studied advocacy for persons with disabilities using the law. When I met persons with disabilities in Thailand in 1999, I was surprised at how different it was in comparison to America and Japan. I had a strong image of persons with disabilities in Japan and America being people who fought to represent themselves. At that time, in Japan, there weren't even any support fund systems in place and persons with severe cerebral palsy seemed to be in an eternal struggle to work out a way to live in their environments. When I met with persons with disabilities in Thailand in 1999, there was almost no one who was fighting for their rights. They were all living quietly under raised floors in the farming village. They did not look like they were being hidden as in Japan but as if they were taking

it easy and they blended into their surroundings. It is when I questioned these differences that I became interested in persons with disabilities in Thailand.

I discovered that these persons with disabilities in Thailand had actually been patient with things as well. Those who have been to Bangkok may have used the BTS Sky-train. One day, they could be patient with it no longer and a movement to have elevators installed on the Sky-train began. I have been studying persons with disabilities in Thailand ever since.

## 2. 2011 Flooding in Thailand

**WHAT DID I DO? #2**

- 2000-2005 Secretary for attorney-at-law  
Ad hoc committee for CRPD  
(Convention on the Rights of Persons with Disabilities)
- 2007-2010 Field work at Thailand

2011 Met with PWDs involved in disasters

2013-1017, Lecturer at Kumamoto Gakuen University (Disasters and Welfare)

The slide features three photographs: the left one shows a group of people with disabilities in wheelchairs sitting on the ground outdoors; the middle one shows a person in a wheelchair being assisted by others in a home setting; the right one shows a person in a wheelchair being trained by others in a room with a table.

Fig.3 Interviews in Thailand.

These photos show persons with disabilities in Thailand participating in peer counselling, or rather, peer activities, as well as in home visits and the photo the furthest to the right shows training for personal assistants by persons with disabilities; they are training personal assistants by becoming practice models themselves. While they were engaged in such activities, the catastrophic floods arrived.

A statue of Buddha in Ayutthaya was flooded half of its lying body; many of you may have visited the city. Underneath it is actually a plinth. And below that, there are a number of steps so you can see that there is a lot of water. This province in Thailand is originally a low-lying area with much of its land at around 1m above sea level and a lot of water comes whenever there are floods. People lived together with the water and farmed in the dry season when the waters receded. That is why the monks lived thinking that alms came by boat but along with the steady progress in urbanisation, town planning gradually shut the water out more and more and this can be said to be one of the causes of the catastrophic floods.



Fig.4 Flooding in Thailand. A monk is rowing a boat.

Figure 4 does not show a beautiful lakeside resort with lodges on the left side, it is actually private houses that are underwater and where there used to be roads and fields, all that is left are roofs. One of airports was also underwater. Airports are built to resist rain and storms so you would think that even if it was underwater for a while, it would be fine but that is not the case at all. If an airport is covered with flood water, all the sensitive devices that are embedded in the ground and use electricity to light up the runway at night and so on are also underwater and can no longer be used.

However, as the floods dragged on, the people of Thailand began to have fun with them. For example, I saw a photo that a mother is dragging the child along behind her on her bike. Do you fancy having a go? Animals are also caught up in disasters. Crocodiles escape from crocodile parks – in this case around 100 escaped. However, these crocodiles are used to being fed so people say that they are unlikely to bite people and more likely to die.

### **3. Persons with disabilities during flooding**

#### **(1) Case a boy of O**

There are three groups of people who were particularly hard hit by the floods. The first is those in low income groups. They cannot escape and even if they could, they have nowhere to go. The second is the elderly and people with disabilities and the third is foreigners who do not know the area well.

So, what happened to persons with disabilities? This is the story of O with whom I was conducting research. He was 9 years old with cerebral palsy and lived in A Village in Pathum Thani Province which was affected by the floods. In Japan, he would be considered as a child with severe intellectual and physical disabilities. He lived with his parents, a younger sister, a younger brother, an aunt, and a cousin, the waters rose and he was evacuated to a nearby temple. In the case of the floods in Thailand, not only in Thailand but in South East Asia overall, the water does not just suddenly appear out of the blue one day. The water rises gradually. Therefore, it is possible to predict that the water will arrive at a certain place the next day or that one should evacuate because a place will be underwater in a week.

This area is the same and that is why O's mother and family sought refuge at a nearby temple. Their house was flooded.



Fig. 5. A boy O and his family in front of his house.

However, people like O, and I think this is the same in Japan and all over the world, who have intellectual and mental disabilities as well as the elderly or those with dementia are very susceptible to changes in their environment. At that time, O's mother said that he was mentally unstable. I wasn't able to go and see him.

He began crying in an unusual manner and when his instability was noticed by the family, the temple also became flooded and local people said that they should evacuate to another place. The left photo of figure 5 shows O's house before the floods. You may think that the building in the background is a shack but it is actually O's house. It was a house that would collapse as soon as the waters came but the family did not want to alter O's environment any more than they had already. In addition, the local people knew about O so things were still fine while they were evacuees at the local temple. However, his mother did not want to go somewhere that they had absolutely no relation to. They stayed at the temple because they did not know what would happen to O or how O would react to a new environment. And then, in October, he developed pneumonia and went to the hospital but, according to his mother, he was not properly looked after and he sadly died at the age of nine on the 1<sup>st</sup> of November. I don't think this was a disaster-related death as such but this is what happened.

## (2) Case of S

This is a different case of a female with disability. We'll call her S. She is the Secretary General of DPI-AP (Disabled People's International Asia-Pacific Region) and speaks English. She graduated from a large vocational training school. She has connections all over the world and during the floods,

she negotiated with the chairman of the board of directors of the vocational school and moved the whole office. The chairman also lent her spare rooms for staff accommodation and she evacuated all her staff and their families to a completely different province, leaving their apartments behind. Thanks to this action, none of the persons with disabilities, including staff with disabilities, were victims of the floods.

### (3) Case of N



Fig.6 Ms. N and her house.

This is a different person with disability, N. It is a different province and she has a physical disability. The photo on the right shows that the grass in the background is already a river. The chair at the front is a chair that we made to be used as a shower chair (Fig.6). The water was close but she did not evacuate. Rather than the water coming, she was more concerned about what bad things could happen to her where she ended up. She was able to go to the toilet and use the bath in a house to which she was accustomed but she would not be able to do so in a place she was not familiar with. This is why she did not want to go and ended up not going. In the end, not much water came so there were no victims.

### (4) Case of F

F is an artist. She is a fairly wealthy person and so are many of her friends. One of her friends has a holiday home in a tourist destination to the north of Chiang Mai. The friend suggested that they both evacuate there and they were able to do so without problem and stay safe.

What I want to say is that the same floods come to everyone but everything depends on the strengths,



networks, skills and past experiences of people, even if they have the same disabilities. People who had experienced harsh discrimination or who had had bad experiences were loath to evacuate. In contrast, people who were able to move around without anxiety in everyday life and who had a network of friends with whom they felt safe could evacuate with peace of mind. This is what we can see on the good and bad sides.

#### 4. 2011 the Great East Japan Earthquake



Fig. 7 Left: The place where Arahama elementary school is located. Right: names and ages of the affected persons are engraved into a memorial service monument

The same thing happened in Japan. At Arahama Elementary School in Miyagi Prefecture, one of the areas affected by the 2011 Great East Japan Earthquake, children had to evacuate to the roof to avoid the rising water. If we look at the ages of the victims engraved on the memorial monument for that area, we can see that they were almost all over 60 years old (right photo).

#### 5. My class on disaster preparedness: visiting survivors from disasters

##### (1) Activities at Aso area and affected area by the Great East Japan Earthquake

Due to all these experiences, I came to Kumamoto and was put in charge of a project to train leaders for a community with a reduced risk of disasters. Kumamoto is a prefecture that has had its own disaster. There was an earthquake in 2016. No one expected that there would be an earthquake but, in my classes, we expected that there would be landslides. In particular, the Aso region stratum was formed from volcanic ash from eruptions from craters and volcanoes. Not to mention the unique climate conditions with a number of incidences of what are called guerrilla rainstorms each year. So, if you pay attention to the news, you will see that there are always evacuation advisories for Aso during the rainy or typhoon seasons. Persons with disabilities and the elderly in particular are evacuated first by the city at the stage of preparatory information before evacuation advisories are issued. It is a Russian roulette situation in which mountains can collapse and directly fall on human settlements. Human habitations closely cluster near mountains. You never know when the mountain behind your

house will collapse – this is the situation in which the people of Aso live. I heard about this situation and went to see it with my students.

A blind woman told us many stories at Aso. We heard the same stories from her as I did from the persons with disabilities in Thailand. She didn't evacuate. Why? She walks near to the community centre that is the evacuation center every day. She walks in that area where her cane gets stuck in a too-large sewage pipe hole and where there are steps and the road is uneven. And her relationship with the people in the area – she has used the community centre before – but they are not familiar to her at all. It is a kind of somatic sensation – she doesn't feel comfortable when she goes there. She asserts that she would rather die in a place that she is used to than going there to have bad experiences and not be comfortable. These were the kinds of things she talked about. We also participated with the students in disaster prevention drills in a community in Kumamoto Prefecture.

## **(2) Listening experiences of the Great East Japan Earthquake**

We also visited Minami-Soma Peanuts, a workplace for persons with disabilities in Fukushima Prefecture – some of you may have seen it before – and this is where my students and I heard the story of Mr. Aota, its representative. We went all round East Japan listening to the stories of women and persons with disabilities.

## **(3) My class on disaster preparedness: operating a training to cook and distribute food to disaster victims**

Last year, six months before the earthquake, I did cooking and food distribution training with my students. I told them that they may be living quiet lives at the moment but that if something happened, people would probably rush to the university. Whether something happens or not, it is an evacuation center so we should at least do food distribution training and we practiced by having 4 students make enough food for 300 people. I wanted them to fail rather than succeed. Just as I had suspected, the students had no idea how much rice to cook for 300 people. Then, to be frank, when they saw the size of the pot, one of the students said that they would have no idea how much water to put in. Another student said it would be fine and that all they had to do was open it half-way through and if there wasn't enough water, they could put more in! I told them that would not do. You don't know how to do it until you try. How many ingredients do you need to feed 300 people? How long will it take to cut up the ingredients? How long will it take to cook them? That is what I wanted them to experience. And that was why I thought it would be OK if they failed but, just in case, I got some people from the Japan Red Cross to come and we learned various ways of cooking quick-cook rice. We sold what we cooked in front of the cafeteria (which was a bit mean) to students for 100 yen per package because we didn't want it to go to waste. There was enough for 600 people because we worked in two groups. I imagine that the cafeteria lost a lot of money that day. I forbade them to make curry and told them to

think of something different. It wasn't fair so the students made hashed beef instead!

We also had a simulation at that time to respond to the question of what to do with the elderly and persons with disabilities that came. This was really great practice for the actual earthquake. The students had many different opinions at the time. That we could use the mattresses in the gym, that there was the care training room in the Faculty of Social Welfare so we could use their portable toilets and so on. They came up with a number of things. There are two adapted baths made in Germany or maybe France and that cost tens of millions of yen. But they don't get used much. The students said that it would be good if we could use them for the persons with disabilities and the elderly that came. Unfortunately, we were not able to use them because the walls of the building collapsed and the windows shattered. However, the ways of using equipment that we discussed that day came in really useful later on. They came up with all sorts of things including using the plates from the cafeteria.

## **6. The 2016 Kumamoto Earthquake**

### **(1) Foreshock**

And now we get to the actual day of the earthquake, the 14<sup>th</sup> of April 2016. So, where was I during the foreshocks before launching the evacuation center? I was actually in the shower in the gym. I was taking a shower and almost completely covered in suds and then the earth shook. What crossed my mind at that point was the sight of roofs falling in during the Great East Japan Earthquake. I didn't want to run to safety naked so I waited in the cubicle until the shaking subsided, dried myself, tried hard to get my underwear on and then crept to the lab. There weren't as many files on the floor as I would have thought. Despite orders, I had boxes and so on, on top of the shelves. They had fallen down. I realise now that it's not a good idea to put things on top of shelves without any provision but it shows how strong the foreshocks were that they had fallen.

And then, around 200 people evacuated to the university. At that time, the university was appointed as an evacuation point but not as an evacuation center. An evacuation point is obliged to open its grounds to evacuees but not its buildings. But during this season, since it was so cold and people who came to the sports ground at night wanted to use the toilet. The staff had the good sense to open a room for them. This became an evacuation center later on.

At that point, we had absolutely no sense of crisis and the following morning, everyone went home and we were relieved that nothing more had happened than City Hall delivering us quick-cook rice and water as part of their support resources.



Fig.8 A room of the Kumamoto Gakuen University after the foreshock.

## **(2) The second and the bigger shock 2 days after the foreshock**

The real problems started the following day. It is 1am on the 16<sup>th</sup> of April. I was in the shower again. I was in the shower because the water had been cut off the day before and it had just come back on. At that time, a student evacuated to my apartment. Why? The student lived in a 5<sup>th</sup> floor apartment in a 7-floor building and had evacuated at the stage of the foreshocks because it was flooded. Do you know why?

The water supply pipe burst. This is why water fell from above. Are there any houses that have drains in the dining room or the living? There aren't, are there? The only places that have drains are bathrooms. And, of course, kitchen sinks. It is not that easy to remove water from human habitations. It's a good thing, too. That they are fairly airtight. However, in the student's house, water gradually dripped down from above. Then there were the aftershocks and the female student evacuated to my house as there was nothing she could do. She took a bath before I did. I am a nice teacher so I said she could take a bath first and then she went to sleep on the bed. Then, when I was taking a shower, the quake hit.

We are taught to get under a table when an earthquake hits but I wasn't able to do this. Even though I had been studying disaster prevention for four years. Where do you have a table in your house that people can get under? That's right. The kitchen. And what is in the kitchen? Glass wares. The pot of wheat tea that I had been making flew off the stove and the glass wares smashed so there was no way I could take cover under the table. So, that night, I came out of the bathroom and told the student not to move while we waited for the shaking to stop. The reason I told her not to move because the bed she was in was the safest place in the house. The bed did not have a light above it and was not near any windows or shelves. While I was shouting at her to please stay where she was, the electricity went off, there was no hot water and all we could hear in the darkness was the crash of glass wares breaking. Oh, and everything fell out of the fridge. Since then I have string round the handles of the plate cupboard where I keep the glass wares. Today, I tied an amulet on to it. Please let it not open while I am not there.

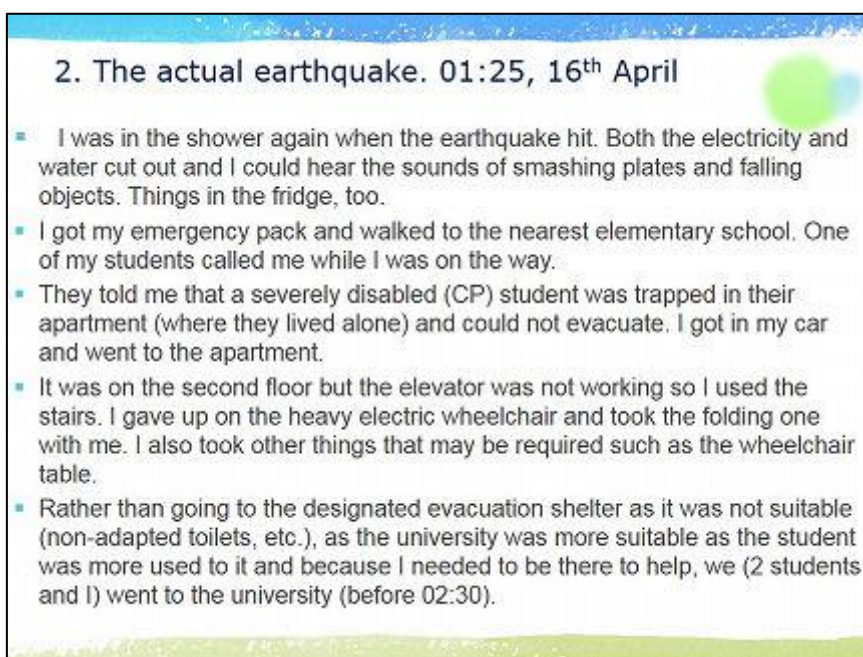


Fig. 9 What I was doing at the main shock of the Kumamoto Earthquake.

### **(3) Evacuation of myself and my student with a wheel chair**

I thought we might have aftershocks after the foreshocks we had had at the previous evening, so I had got an emergency pack together. Just one. So, I got hold of it and decided that we had better not stay in the house after all. Some people say that you shouldn't evacuate until the aftershocks have stopped but the higher you are in a building, the more severe the shaking is. Even at a seismic intensity of 3, you will feel more like it's a 4 or a 5. My friend lived in a 9<sup>th</sup> floor flat and she said it shook so much that she thought she was going to be thrown out of the window. So, even if buildings without particular seismic base isolation shake, it will be fairly scary because it will feel like a 5. Even living on the 3<sup>rd</sup> floor as I do, it feels scarier than someone who lives on the 1<sup>st</sup> floor. That's why it's not just really about the numbers, 3, 5 or 7. It will feel completely different depending on where you are and I think we should pay attention to that.

So, the evacuation. I thought about evacuating on foot to the nearest elementary school. I didn't want to get caught up in a traffic jam. But, on the way, I received a LINE message from one of students who has a disability. She started living independently after she graduated high school and as she has a severe disability that requires 24-hour care, she used helpers to attend school – a really admirable spirit. You could also call her rash. She was crying when she called me. It was a rare thing to hear her ask her teacher for help. We have a LINE group for all the teaching staff and students in the seminar group and other students said they would go and help but I was worried about secondary victims so I told them to go to the elementary school and I went to collect her. However, the elevator wasn't working. So, then I knew, of course, that the best thing would be an electric wheelchair but I wouldn't be able to get one down two flights of stairs by myself. So, I brought down a simple electric wheelchair and

then put the student into a manual chair knowing that I would just about be able to get someone down from the second floor in that, depending on their weight. So, I got her down. It was a desperate effort. She was holding onto a pile of things including blankets, a change of clothes and personal items. We talked about where we should evacuate to. The local elementary school was the assigned evacuation center but, as you all know, there are not many elementary or junior high schools that are accessible facilities or have disabled toilets. Maybe it is only in Kumamoto? Kumamoto is a rural prefecture and really is not accessible at all. So, I thought that we would not get on well if we went there. Another thing was that I felt that I should be doing things at the university. If we went there, the student would have her friends and I would be able to keep an eye on her. There were wheelchair toilets and many accessible facilities so that's what we decided. We would go to the university.

#### **(4) Opening an evacuation center at my University soon after the mainshock**

All the books had fallen at my lab just after the second quake. I had fixed all the shelves to the walls. If I hadn't done that, I probably would have had to give up trying to get into the office. At around 2:30 once I had got in the meeting room where evacuees come in, it was still empty. Here you can see in two photos of Figure 10 that the number of people increases as we approach dawn. What do you think happens? It is quite difficult to see but the room fills up. And then there are so many people that the wheelchair users at the back cannot get out. Everyone runs on instinct after all and they won't give up their space easily. Because of this, I spent the whole night from 2am to 8am being in charge of the toilets for the elderly and the persons with disabilities. No one hesitated to tell me that they needed to use the toilet. Rather than feeling hesitant and declining or not being able to say, everyone actively asked to be taken to the toilet and I thought that was really good. I thought that they were used telling others about their needs. However, I realized later that I seemed to have been mistaken for a helper and that is why no one was hesitant with me. It is a good thing but I was worried that they would feel bad later if they found out that I wasn't a helper so I did tell them sorry and that I was actually a member of the university teaching staff. I realized it because City Hall staff who rushed to help afterwards, called me a helper because I was wearing yellow clothing that stood out.

It was difficult for the evacuees to move from where they sat in the evacuation center. Even if I asked people to drink water, they refused because it would make them go to the toilet. The reason was because each time they had to go to the toilet, they would have to ask other people who were sitting down to move out of the way and say sorry all the time. 'Sorry. Can I just get past?' 'Sorry. Can I just get past?' 'Excuse me. Sorry.' 'Excuse me. Thank you.' And they had to repeat the same thing on the way back to their space from the toilet. 'Sorry. Sorry.' 'Excuse me. Thank you.' This is OK for persons with disabilities who advocate for their cause and strongly assert their rights. However, the elderly and persons with disabilities in general may not be able to do this every time. The human psyche is not that strong. And that is why people are hesitant.



Fig. 10 A classroom soon after the main shock of the Kumamoto Earthquake.

There was no use in telling people to lie down either. It is hard work to get down on the floor from a wheelchair. It is easier to get from a bed to a chair. But getting from a wheelchair to lying on the floor and then needing to get up to go to the toilet requires someone to lift and seat you and the repetition of apologies and thanks that I talked about before begins again. It makes your head spin just thinking about it. They were like this for 15 hours. We thought that things were getting bad and that we needed to do something. One of professors who are helping to coordinate the evacuation room went straight to the university chairman of the board and the president and said that we want to use an empty hall as a sleeping space for the elderly and persons with disabilities, explaining that we didn't want them to feel bad about needing to use the toilet and we managed to secure a separate space for them.

## 7. Setting the evacuation center

It may be a bit difficult but can you see the lights at the top of the photo on the top left (Fig. 11)? This is a hall so they are at this level at the moment but the lights are suspended above us. City Hall told us not to use this room. This was because it would be dangerous if there were aftershocks and the lights fell. However, there was no other space. That's when it suddenly occurred to me to have the lights lowered. We managed to get them down as low as possible.

The students that rushed to help were those who had studied with me for 4 years and had studied the Great East Japan disaster in great detail. They had heard from women who weren't happy about sleeping next to men they didn't know at evacuation centers. It was then that one of the female students proposed that we cover the lights with sheets to make a simple partition. That's why it wasn't completely separated. It was actually a space in which you could easily move from one side to the other. But, as we didn't want people to go under the lights, it became a light partition by hanging sheets over it. And we didn't exactly make it so that men were not allowed but we did end up with a space for women when it came to sleeping. If families or couples wanted to sleep together then they were

able to secure their preferred space on the male side if that was OK with them so they were free to do as they pleased.



Fig. 11 Installation of a space for the elderly and PWDs at an evacuation center.

### (1) Toilets and shower

We put a portable toilet in the furthest away space (Fig.11). This layout was all thought out by the students. And the students with disabilities thought about the layout conditions; being able to use wheelchairs. That's why there is space for two chairs with the mattresses in the middle. The toilet space was separated far away from the tables where everyone would eat. No objects were to be stored in the space where persons with disabilities use the toilet. The students worked hard from day one. At this point, half of the users were persons with disabilities and half were elderly.

The worst thing was, well, it was such a shame and it made me want to cry.... The person in the middle photo of Figure 11 had just come home from a rehabilitation centre for the elderly two days before the earthquake struck. She had had a stroke and had aphasia so she couldn't speak. So, it's scary but she is not able to say anything even if she wants to. One of the students was very patient and tried really hard to listen but she said 'yes, yes' to everything whether she meant yes or not. It looked like it was really difficult for her and when she asked if it was difficult for her that she couldn't get the words out, she sobbed and sobbed. She was unable to sit up alone so we rolled up a gym mattress and she was able to sit up against that. There was nothing else we could do for her.

The only bathing area nearby was a shower cubicle so persons with disabilities and the elderly who require care were not able to use it. So, we closed off the room and, although it was not a great situation, we put a mattress on the floor, had the people lay down and washed them as best we could within the range that the shower could reach. I have been caring for persons with disabilities for twenty years but



this is the first time I have ever seen this. It was good. Up to that point I thought it was usual to assist wearing a t-shirt and shorts but, in this case, we were naked together. When we were drinking tea afterwards, one of the ladies said that when I helped her naked, we developed a truthful relationship. From this point onwards, you could say there was less distance between us and a trusting relationship began. That is why I think truthful relationships are important.

## (2) Student volunteers



Fig. 12 Student volunteers helped cooking.

Various students helped (Fig. 12). The furthest away photo is when they were helping pick up litter. The students also helped with the cooking. These students had been leaders at a children's camp in Fukushima two weeks before. Six months prior they weren't even able to start a fire but they had done training in order to be camp leaders. Even though, just six months ago, they had struggled a lot, everything suddenly went well for them and they were quite proud of themselves, saying that the other students were no good at it. I wanted to say that they were exactly the same six months ago but I was grateful for their help.

I am grateful to the students for is the way they created a good atmosphere. For the first three days, there were no deliveries of commodities. Of course, that's natural. But at those times, how do we prevent norovirus or influenza or even colds and how do we prevent people with mental illness and the elderly from becoming depressed. The only way of preventing these is creating a good atmosphere. No matter how hard I tried, no matter how much I asked the elderly to drink water, they didn't but if a student asked them to go for a walk, they would go just a few meters outside, taking a bottle and some sweets with them, the student would say that they wouldn't get to go back in until the elderly

person had drunk the whole bottle – they soon came back in! Even though they wouldn't drink much when I asked them, if a student asked them and poured water into a cup for them, they would say, 'Fine.' and then gulp it down; it didn't even take half an hour.

Going to the toilet is also not as convenient as when you are at home. You have to pay attention to preventing falls. We couldn't just chat and enjoy ourselves. I told the students that they shouldn't do more than they were capable of. I told them that the more frantic they were, the more tense the atmosphere would become and that, rather than serving meals, it would be better to go with the person to get their meal and then eat with them. Rather than them just sitting in the same place all the time, going to get meals together and joking; talking about how the food is not good if it's not good and so on. You can say you don't want to eat something so awful as long as you don't leave anyone to eat alone. So, if there was an elderly person sitting on their own, I would tell one of the students that they were eating alone and they would go and sit with them. So, rather than having the students work really hard, I had them go and fetch meals with the evacuees and eat with them. Towards the end, some of the elderly people were also volunteering to do this.

### (3) Beds at the evacuation center



Fig. 13 Custom-height beds

The cardboard beds did not arrive either. It took them over a month. After around 10 days, we received support commodities. So, we used the support commodities boxes as beds. Water boxes and cracker boxes are different sizes. So, we matched knee height or body state to each person, asking them what height was good for them so we ended up with custom-made beds. It's quite difficult to see in the middle photo of Fig. 13 but there are high, normal and low beds. We were able to fit each bed to each person's body. We had those crackers right to the end and, even a year later, they were piled

in my office and students who were hungry were eating them.

#### **(4)Activities to relax evacuees**

A comic came to pay us a visit. And another thing that helped was that a local female volunteer group offered to do our washing. Washing clothes at an evacuation center is difficult. I was also a 'washing evacuee'. The water supply had stopped so I wasn't able to use my washing machine. Persons with disabilities and the elderly in particular cannot get back home so the volunteers came with plastic bags and took the washing home with them. They washed and dried it at home and then brought it back to us. It seems that they just thought about what they could do to help. It is nothing special but just putting on an extra load of washing at home and hanging it out, folding it and bringing it back to us was a great help.

I splurged on a cake when it was someone's birthday. It was not a cake from a convenience store but I went to buy it from a proper cake shop that had reopened. There are many people who are traumatised by an earthquake but there are also a fair number who are traumatised by the evacuee lifestyle that follows. People say that it was awful, hard or difficult. I heard the same thing about the Great East Japan Earthquake. We ate the birthday cake towards the end, to be honest, and the ladies said that they had thought that being at an evacuation center would have been difficult but that they had actually enjoyed themselves here and that when there was another earthquake, they would come back! I would like to thank them! That is the best thing they could say about it.

#### **(5) Personal Assistants**

However, there is a lot that is difficult about a care system. During the emergency, in particular for the first three days, we, of course, didn't go home. We were there 24hours a day, 7 day a week. And we couldn't sleep during the day. I didn't want the students to be caring for people at night and I made sure that they didn't do it. I didn't make the volunteers do it either. Letting someone assist just with brute force and not knowing the knack and then someone has a fall.... There is no way we can send someone home bedridden when they have come to the evacuation center for help. There is nothing that can be done if an elderly person breaks a bone. If, by chance, a student injured someone, it would leave a lasting mark on them.

So, who was going to do it? Persons with disabilities came with four personal assistants. These assistants said that they would not only take care of the persons with disabilities while they were there but also the elderly people as they were all in the same boat. If they had not been there, I would not have been able to do it all by myself. Particularly at night. I will talk about this later but persons with disabilities are used to being supported. They are familiar with how to use people. The elderly, for example, those with severe disabilities already live in care homes or are carefully attended to by their families. So, who comes to an evacuation center by themselves? People who are just below the level

of needing care but who need support levels 1 or 2 or people who have had their homes adapted but they are living alone for some reason or other and who have defiantly kept going. They have rails at home to get them from their bed to the toilet and because their house is adapted, they are used to the environment. But at night, since they have been put to sleep on the floor, getting up and going to the toilet is impossible at evacuation centers. As they are not used to being assisted, they are likely to fall if someone who is not trained to assist tries to help them. Going to the toilet; portable toilets are not attached so they are dangerous but if you try to use them thinking they are the same as at home and transfer all your weight onto them, the whole thing will fall over. I realise that people are sleepy but there are people who think they are at home and got to find the toilet paper where it usually is on the left but it is actually on the right and then they think there isn't any and spend ages looking for it and so on. They need someone to tell them where it is. There were also people with dementia and we couldn't let our guard down at night.

On the 4<sup>th</sup> day, certified care workers from Kagoshima and Kansai came from their facilities to help. Up until then, I thought that I couldn't ask ordinary people or volunteers to help but when I saw the way they worked, I was really grateful. They were professional and I was able to leave them to it at night and get some sleep. I felt really good that night. I will never forget how good it felt to sleep. Thank kind of external support is important, isn't it?

Human Network Kumamoto, which I mentioned above, did not just do things for themselves, they also helped us think about organizing the evacuation center. I have known of this facility since I was a student. It houses a maximum of 56 persons with disabilities and elderly people and I was resident there for a long time so I knew more than half of them. I knew their somatic sensations, their communication methods and their needs. It was really easy. However, I was at my limit as a carer so it was really at this evacuation center that I understood the importance of staff who support staff. Laterally, many people came from outside the prefecture and they were sleeping in between chairs. I was so grateful to them.

## **(6) The support of service providers**

Figure 14 shows a welfare facility in Aso. There is a gender bias in isolated facility staff. Staff who provide care at these facilities are almost exclusively female. These women are also evacuees of the earthquake. Some of them are sleeping in their cars or their homes have collapsed but even so, they come to work because they think they must help the people in their care. When there are not enough support commodities, these women give them first to the facility residents and make do without themselves. Therefore, I gathered together a 'Santa Claus' sack full of spare commodities that they would be able to use, including sweets and took it to them, saying it was for the staff. I asked the staff to take one thing each home with them. They all felt shy about taking big boxes of things home in front of everyone. However, no one would feel bad if each person took one thing from a big bag. That

is why I made it easier to take things by putting them in bags. And the students wrote comments like ‘keep up the good work!’ and so on, on paper cups. And then they went to deliver them one by one.



Fig.14 Support for staff at a welfare facility at Aso.

#### (7) Returning home

Another important thing is support for returning home (Fig. 15). It was the same for the Great East Japan Earthquake and the Great Hanshin-Awaji Earthquake, too. We have manuals for operating evacuation centers. However, I have never seen a manual that provides support for going home. Who do you think are the people who stayed right to the end at our evacuation center? Is it the people who have lost their homes? Or people who are sick? No. They have nothing to do with the people who are left right at the end. Those who remained right at the very end were those who had no communication or trusting relationships or people they could rely on; people who have none of these kinds of social networks. As a result, victim support is still being provided for the Great Hanshin-Awaji Earthquake twenty years on. This is because volunteers continued to be involved with the people who had nowhere to go after evacuation centers or temporary houses in order to maintain their community and they couldn't leave them alone.

## HOW CAN WE PROVIDE SUPPORT FOR GOING HOME?

Importance of having communication and trusting relationships

- Volunteers to clean up with a view to going home
- Help with finding a new place to live
- Tidying up, packing, organising, moving
- **Relieving the anxiety of moving (leaving the evacuation shelter)**
- Continued interaction such as ' coffee morning ' activities after the evacuation shelter has closed

Many aspect and levels of support are required

Fig. 15 Support for going home.

Hemiplegia,  
Visual impairment (blind)  
Cerebral palsy  
Right leg amputated (artificial leg)  
Diverse disabilities,  
diverse support needs

Fig. 16 Persons whom we helped to going home.

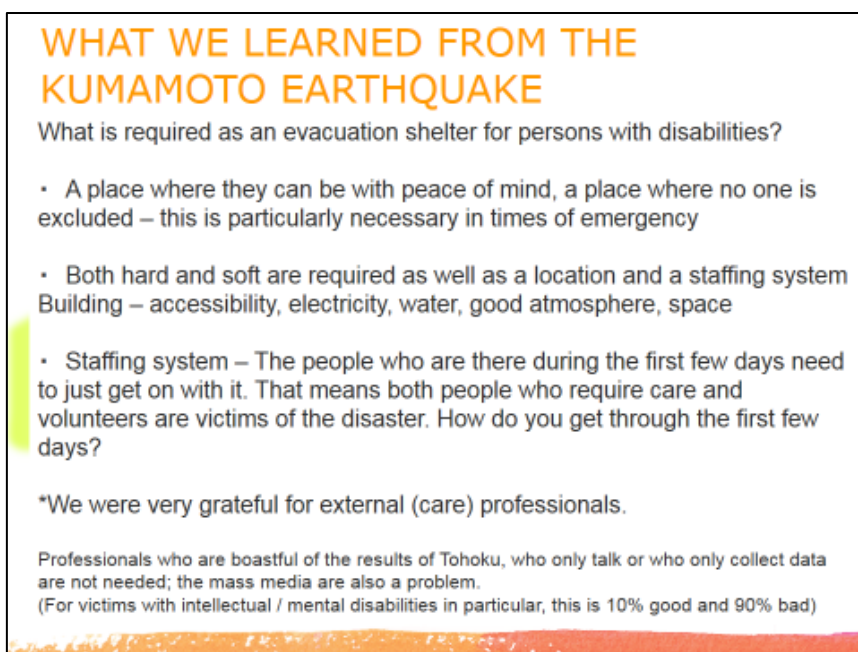
The other evacuation centers had the same concerns. It was the same in Mashiki. And the same in Kumamoto City. The people who stay to the very end are those who have some kind of dependence, those who came completely on their own and cannot clean up their homes alone or people who have no one to talk to (Fig. 16). People who have relatives or someone to talk to go quickly to their relatives' homes or their family helps them with money to rent a new apartment; people leave gradually as their families take charge of them. When those people have all left, I thought that how to support the people

who are left is actually an also message about creating a community to cope with the next disaster. The peoples who can't go home or have nowhere to go are a kind of silent SOS.

## 8. What we learned from the Kumamoto Earthquake

### (1) A place where no one is excluded, basic environment, and supply

I would like to summarize what we learned from the Kumamoto Earthquake (Fig. 17). What is essential for an evacuation center for persons with disabilities? I think that it is probably that people have a place where they have peace of mind. A place where they really feel like they will not be excluded. I think it must be really difficult if you get to an evacuation center and then find that people think you shouldn't be there. So, precisely because it is a time of emergency, we have to think about a place where you would have peace of mind and where you feel you belong. Of course, this is not limited to persons with disabilities. We need staff, supplies and accessible environment to establish an evacuation center that makes everybody feel at home.



**WHAT WE LEARNED FROM THE KUMAMOTO EARTHQUAKE**

What is required as an evacuation shelter for persons with disabilities?

- A place where they can be with peace of mind, a place where no one is excluded – this is particularly necessary in times of emergency
- Both hard and soft are required as well as a location and a staffing system  
Building – accessibility, electricity, water, good atmosphere, space
- Staffing system – The people who are there during the first few days need to just get on with it. That means both people who require care and volunteers are victims of the disaster. How do you get through the first few days?

\*We were very grateful for external (care) professionals.

Professionals who are boastful of the results of Tohoku, who only talk or who only collect data are not needed; the mass media are also a problem.  
(For victims with intellectual / mental disabilities in particular, this is 10% good and 90% bad)

Fig. 17 What we learned from the Kumamoto Earthquake.

So, if you think everything will be OK now that you have a location, that is not actually the case (Fig.18). You need a certain amount of staff, too. The building needs to be accessible and needs electricity, water, water supply – there's sometimes nothing that can be done if there are power cuts or the water supply is interrupted. Our university's water supply was interrupted but the flushing toilets worked for 3 days. This was a really good thing. If we hadn't had that running water, I think we would have had real problems. The reason why we had enough water was because we had taken rainwater tanks up to the roof and we also raised a groundwater point. It is a system that trickles the water downwards and the tanks were full the day before. So, we didn't go up there to have a look but we

were really worried about when it would run out. It ran out on the 4<sup>th</sup> day. Then we starting bringing water from the swimming pool for the toilets. Luckily, the water supply was restored on the 5<sup>th</sup> day so we only had to transport water for one day. We are so grateful that, just after the earthquake, water bureau trucks from all over the country, Yokohama and Hiroshima and so on, came to work on restoring water supply.

**WHAT DO I RECOMMEND AS EVACUATION SHELTERS?**

- The best thing is to evacuate to the closest evacuation shelter; all designated evacuation shelters should be accessible.
- However, it is important to think about the evacuation shelter realistically.
- Preparatory meetings and communication with places that are designated as evacuation shelters are indispensable.
- Toilets, spaces (spaciousness), other conveniences, range of flexibility, etc.
- Everyday relationships are extremely important.
- In the case of Kumamoto Gakuen University, there were people like me and Prof. Higashi who had over 20 years of relationships with local PWDs and government.
- A university is one candidate as it is easy to get students as volunteers. Hotels and inns are also a possibility?

Fig. 18 What do I recommend as evacuation centers?

## (2) Staffing system

The staffing system (Fig. 19). The people who are there have to get on with it. They have to keep going until support arrives. Support will definitely arrive. It will arrive but, and I will talk about this later, support does not just turn up unexpectedly. So, in the particular, at least for the first few days, the people who are present have to deal with everything. I think you can safely say that if you keep going for three days, after that you will be able to sleep. But you have to think about how you are going to do things for the first three days. You have to think about how you are going to encourage the people who are working hard. So, I said to the volunteers who came that I would come and help them the next time they had a problem.



## THINK ABOUT A STAFFING SYSTEM

**Creating a space for the elderly or PWDs means that they have care needs.**

- In addition to securing a space, it is essential to think about who will provide support for care needs (university (the evacuation shelter) and organizations for PWDs)
- Many of the elderly who come to evacuation shelters in particular are not used to receiving care. However, there is a high likelihood of falls, etc. Care needs that did not exist before come to the forefront.
- Even if PWDs come to an evacuation shelter with a helper who they are used to, helpers are also the victims of the disaster.
- Helpers will have to work non-stop over three or four days, until other support arrives. The physical and mental burden will be much more than normal.
- We would like people to think not only about protecting the safety and rights of PWDs but also how to protect the care staff.

Fig. 19 Think about a staffing system.

### (3) Who come to cause problems

However, there were a lot of people who came and caused us problems. Kumamoto Gakuen University had become famous so many experts and people from NPOs and NGOs came. Even people from DMAT came to gather information and said that we were great and what we were doing was great and then went home. Then they asked if we had any difficulties. ‘Finally!’ I thought. I explained to them what we were having difficulties with and they sympathised. I thought they would come back with something to help in a few days but nothing happened. There was no feedback. The only people that actually did anything was the Kumamoto City Dental Association. I told them we didn’t have anything to put false teeth in, so they came back the next day with around 100 blue false teeth containers. Until that point, the elderly had nothing put their false teeth in. They were using bowls or paper cups. We didn’t really need 100 of them, mind you! They became food containers at mealtimes after that.

Mass media is also a problem. At its worst, we had around 15 different mass media organisations in one day at the evacuation center. I complained about this to the university afterwards. We did kind of feel that we should cooperate with them when they turned up but they take close-ups of you without asking. To get good pictures. When that happens to you a number of times a day, I realised what it was like to have people just barging in on your life. The persons with intellectual disabilities or mental illness or people with dementia seemed to find this really stressful and the good atmosphere disappeared for a while. However, what was interesting was one of the people with a mental illness said that they would be happy to be filmed if the people filming introduced themselves. From that I

point onwards, I named the rule of introducing yourself before filming after that person and told the media that they could ask the evacuees their names but they had to introduce themselves as well. Before they started filming, they were to put their cameras down and say, "Hello. How are you?" and tell them their names and what company they were from. I also said that if they couldn't take the time to do that then they were not welcome. It only takes five minutes. It was OK if they filmed. We did gain some things from the coverage. We received a lot of support commodities. We were grateful but 90% was just difficult.

#### **(4) Evacuation center**

Next, proposals for evacuation centers. The best thing is to evacuate to the closest evacuation center to your house; a place where you can evacuate with peace of mind. I really want a condition of being made a designated evacuation center to be accessibility. I would like newly constructed elementary and junior high schools all to have accessible toilets in the gym and wheelchair ramps and so on installed. This is not just for disasters but with a view to universal design. It is important to think about evacuation centers realistically. It's completely different from just thinking about where you will evacuate to.

The reason why we accepted so many elderly people and people with disabilities at Kumamoto Gakuen University was because we have had a relationship with persons with disabilities for over twenty years. Some of the people involved with Human Network Kumamoto were originally students at Kumamoto Gakuen University. Why were they students at Kumamoto Gakuen University? The university has been working on accessibility for around 30 years and, when I was a student, each time there was a long holiday like the spring or summer breaks, there would be changes when I got back such as stairs being turned into ramps or an additional accessible toilet. As the university had created this environment, many students with disabilities were admitted. In addition, the office of Human Network Kumamoto is close by so if someone wanted to go to the toilet, they would come to the university for a break, use the toilet and then go on somewhere else to shop or similar. There was also a professor who was a wheelchair user, Toshihiro Higashi. This is why the persons with disabilities in the local area thought they would be OK if came to the university. The university did not give its permission. People just asked me if they could come and I said that it was first come, first served. Because the first people to come and stay have the advantage. Therefore, maybe, on the facility side of things, people think what will we do if they come but persons with disabilities should come. It is unlikely that they will be turned away if they do come and I think we will be able to innovate and get on together so I think people should go to a place that they think is good. I believe that this is one way to protect yourself.

It is easy to set up at a university because there are student volunteers but there are other places such as hotels and inns where, if they have large spaces, areas where people can lie down and are near to

public facilities where it is easy to use the toilets, they may be the best place for you to go. I really think that it is important to think about this as a part of everyday life. I also think it is important to create a relationship with the people there and use the flexibility to a certain extent so that they let you do as you please.

#### **(5) Carers**

Carers are also needed. Absolutely. If the staff mess up, the persons with disabilities mess up, too. You need to think about who you would take with you when you evacuate, what organisation you would call for help. Dr. Kitamura said something interesting earlier that if you can't cover everything by yourself then you should enter into a partnership with an NPO in advance. I think that is fine. That is why an elementary school is acceptable. If an elementary school has a lot of elderly people or persons with disabilities in their catchment area, the neighbourhood association, or people from City Hall, can match up with partners in advance, asking certain NPOs to work with them in those kinds of situations. I think they should get them to come to regular events like sports days and so on to build a relationship.

As carers have no choice but to put their lives on the line to protect their charges, they are likely to have to work non-stop. It would really be much better if this did not happen but there is nothing we can do about it. Therefore, it is better to understand the possibility of facing a large-scale disaster. I think the center should get some kind of bonus after the disaster. I have never received anything but, for example, being invited on a trip to a hot spring or something like that would be a good idea.

#### **(6) Individual evacuation plan**

Another important thing is to make an evacuation plan. Now we are making an evacuation plan in Aso. The students participated in a workshop to make and review evacuation plans. For example, this is a message that says, 'We are OK. We are in this place.' They are there so that people who come to help don't have to spend time looking for people thinking that it is strange that they are not there or that their grandfather is there but they cannot hear them reply. However, there was strong opposition when we did the same workshop in Kumamoto City. People said that we would just be inviting thieves into our homes. This depends on the area. I think it would be difficult in Tokyo. But I had a little confidence because I heard that they had done it Tokorozawa so I thought I would tell them that if a large city like Tokorozawa could manage it, then I didn't see why it would be a problem for Kumamoto.

In actual fact, the Cabinet Office says that we should be making evacuation plans before earthquakes hit in 2013. But Kumamoto Prefecture's achievement rate is not even 10%.

### **(7) Individual evacuation plan for students with disabilities**

When I was working with the students as I mentioned before, we did a class on making a concrete evacuation plan for how to get out from the 7<sup>th</sup> floor of the university (Fig. 20). We created groups of 1 person with disabilities and another 4 or 5 people. First of all, they had to understand the nature of the disabilities. We had a comment from a participant today about checking with the person in question about what they do and don't like but as each disability is different, it is important to first have an understanding of the condition of the person's body. This is not something that only the persons with disabilities or their volunteers should know. It is information that should be shared in advance.

I am surprised at the less of experience of students with disabilities recently. The students with disabilities have been picked up by their parents since they were kids and whenever they have gone anywhere, it has been fully accessible. They have been to support junior or senior high schools so they too were accessible. When they go shopping, they go to large shopping centres which are accessible. None of the students had ever had to be carried down stairs. When we tried to practicing lifting them, I asked the students with disabilities to give instructions to the other students but they didn't know how. It was supposed to be a training session for students who did not have disabilities but it turned into a lesson for the students with disabilities telling them that they know their own bodies so they have to be able to tell other people how to assist and care for them. Telling people to hold their legs when they remove the footrest and so on. Saying things like, 'Wait!' and 'Lift this up before we get to the stairs.' And as expected, a part of the wheelchair fell off and crashed to the ground. Asking what would happen if they had done that on the stairs. At first, when asked, the students with disabilities wanted to be carried down stairs in their electric wheelchairs. This was a no from the point of view of the university. I talked to the students once again. I asked them how much they weighed. How much their wheelchairs weighed. They didn't know. So, I told them that together they would be over 100 kilos. 0.1 tones. When there are strong aftershocks, even if there were ten male students helping you down those stairs and an aftershock came just when they were at a point where the stairs were uneven, you may end up falling. People can fall, break bones in their necks and die or their organs can rupture if an electric wheelchair falls on their stomach. Volunteer students could end up as persons with disabilities and students with disabilities could end up with even more severe disabilities. Because we didn't want anyone to take risks, we thought about what we should do. We talked about soft stretchers. They have handles and are very light. We practiced getting the students with disabilities on and off these stretchers and so on.

**THIS YEAR, STUDENTS WITH DISABILITIES FORMULATED EVACUATION PLANS (COLLABORATION WITH DISABLED STUDENTS SUPPORT OFFICE)**



The students with disabilities were allocated different groups where there were numerous discussions, tests and trial and error resulting in a plan that was satisfactory for the students with disabilities, the other students and the university.

(Each individual with disability needs to be handled and lifted in a different way, has different communication methods and has different points that need to be noted)

\*Make it possible to respond in an emergency with teachers following the plan and leading. Equipment should always be available.

Fig.20 Evacuation Plans for students with disabilities.


These are individual plans. I have removed the names from Figure 21 to 24. Each student has his/her own plan. When we say that we are looking for volunteers, nothing moves forward if there are suddenly 10 or 20 people milling around. That is why we have written how many people are required. The teacher looks at the plan and if, for example, they need 5 people, the teacher will tell 5 people to stay behind and tell everyone else to evacuate as quickly as possible. The remaining five people follow steps 1 – 10 for the person with disabilities to make sure they know how to carry them safely and then get them down the stairs. If you turn the evacuation plan sheet over, there will be instructions on where the student wishes to be taken once they get down the stairs and emergency contact details.

## 【Evacuation plan for A】

- Diagnosis: cerebral palsy
  - Functional disorder: Torso functional disorder. Involuntary movements. Strong muscle tone.
  - Evacuation support procedure:
    1. PWD or support students give this plan to the teacher.
    2. Teacher or PWD gathers three students (six if possible)
    3. Remove wheelchair control and table, lift A and move to a stretcher, making sure he is secured with a belt.
- \*Stretcher storage location
- \*Ask A if there is anything you do not understand
- (How to remove the control/table)
- Control: loosen the bottom screw, remove towards the front and place in the net under the wheelchair
- Table: Pull forwards once the control has been removed

Chie Yoshimura (Kumamoto)

Fig. 21 Evacuation plan for student A, a wheel chair user.



The diagram illustrates the lifting procedure for a student on a stretcher. Three individuals are positioned around the stretcher: one at the head (labeled '1st person'), one at the feet (labeled '2nd person'), and one on the side (labeled '3rd person'). A green arrow points to the right, indicating the direction of movement. The student is lying on the stretcher, which is being supported by the three people.

4. Three people lift. One at the head for support and one on each side. (Weight: X kilos)
5. Proceed feet first. (Especially when going down stairs.)
6. Count out loud 1, 2, 1, 2 so that everyone is in sync. (Be careful when lifting and setting down.)
7. If there are aftershocks while using the stairs, get to the nearest landing?
8. Once on the first floor, get outside to the sports ground. Once the shaking has stopped, move to B building.

The stairs beside the registrar's satellite office in C Building are not suitable for evacuation. Do not use them.

Chie Yoshimura (Kumamoto)

Fig.22 Evacuation plan for student A, support procedure.

## 【Evacuation plan for B】

- The student with disability or the supporters must give this plan to the teacher!!
- Diagnosis: cerebral palsy
- Functional disorder: Stiffening of limbs, involuntary movements.
- It takes time for limb stiffness to subside (around X minutes)
- B knows when stiffness subsides and can communicate this so please wait until then.
- \*The stretcher is located in XX.

Chie Yoshimura (Kumamoto)

Fig. 23 Evacuation plan for student B with cerebral palsy.

### Evacuation support procedure:

1. The teacher of the student with disability gathers at least three people.
  2. Prepare stretcher and a folding chair.
  3. Lay the stretcher over the chair and thread a belt through at the position of the bottom. (Belts are at the back of the wheelchair.)
  4. Hold the back of the student sitting in the wheelchair with two hands from the front. (Figures 1 and 2)
  5. Lift the person on to the stretcher. Make sure the body is stable by fixing the arms at chest height with the green belt. (Figure 3)
  6. Fix the belt at the bottom.
  7. Two people place the stretcher's yellow belts on their shoulders.
- Shoulder the part nearest B's head.
  - Hold the blue handles.
  - If there are three people, hold the handles at the feet.
- \* Do not use the stairs beside the registrar's satellite office in Building 11.  
\* Move the electric wheelchair to a place where it is not in the way.
- Take the evacuation wheelchair and folding chair on the floor with you.



Chie Yoshimura (Kumamoto)

Fig.24 Evacuation support procedure. Photos at the bottom are used with the permission of Belka corporation.

The reason we do this is because there are many students who have speech disorders. If one such student panics and the person listening panics too, it is difficult to understand what the student is saying. That is why everything is also written down on paper. The list on the back includes contact details for their personal tutor and where to call if their wheelchair breaks and so on. The list is different for each

student so they have a laminated A4 sheet in the pocket of their wheelchairs. I told the students that they can, for example, give it to the people they most trust or look like they can trust if something happens when they are upstairs at City Hall or in a department store or similar. Those people can read it and get them downstairs. We also consider various things such as needing people to carry essential items and so on. We went through a lot of trial and error.

**(8) The role of the government (Send helpers to evacuation centers, early re-start of day care center)**

With regard to the role of the government, we found two good examples (Fig. 25). Around a week after the earthquake, I asked Kumamoto City Hall if we could have helpers for those evacuees at our evacuation center who used helpers at home before the earthquake. This really helped us. As people from the same area were at the evacuation center, it was very likely that helpers from the same agency would come there and there was no lost time in travel so we had, for example, A from 1 to 2 o'clock and then B from 2 to 3 o'clock. The helpers were also really pleased about this. And you can see how they are when you work with them. That helps us as well. After all, no matter how hard you try, providing care alone is very difficult and if you have a helper who knows the person come to help even for one or two hours, you are really relieved just because they are taking care of that person.

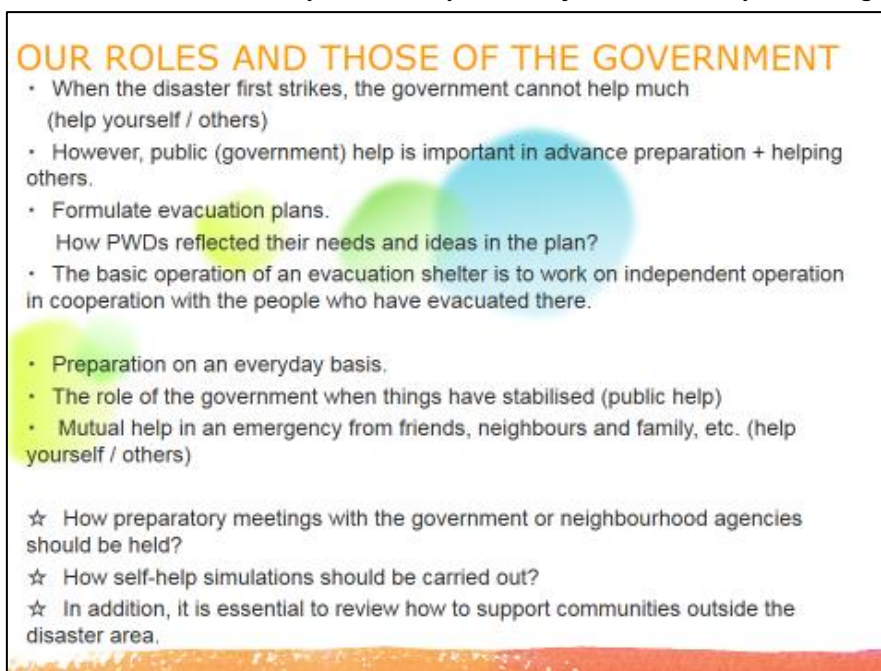


Fig. 25 Governmental interventions after things had stabilized.

The second thing was that the prompt resumption of day services helped. When day services resumed, people were picked up from the evacuation center and taken to there. There, they could bathe, get back to their routine and eat nice food – all things that are not possible at an evacuation center. If the government could state in advance that they will give points and remuneration for assistance at



evacuation centers and that they want day care to resume as soon as possible, it would be a great help.

Helping yourself in an emergency is the best thing. This means each individual needs to think about how to prepare on a daily basis. Meanwhile, what will be done once things have stabilised is where the government's role increases. Helping each other is very important in the period between the emergency and the period of stabilisation. There are disparities between the combination of self-help, mutual help and public help depending on the community and there are differences between individuals as well so it is extremely important for as many people as possible to think about this and to make plans.

### **(9) Reasonable accommodation at evacuation centers**

Reasonable accommodations include all these things listed in Fig. 26. At our evacuation center, we were scolded because only the elderly and persons with disabilities are eating good, hot meals. They were getting the 'luxuries'. In actual fact, in addition to from supplies from City Hall, we were procuring food ourselves and cooking hot meals. People who have difficulty swallowing or people with dementia don't keep very well if they are eating cold rice balls or miso soup. At the time, you may think it's unfair at a glance. Some people may say that it is reverse discrimination but I think that hot meals are a necessary consideration in order to save lives and protect the mind. Therefore, I feel that it might be necessary to leave detailed information about what reasonable accommodation is in evacuation centers. When you just say reasonable accommodation, people don't understand what it means. I think we need think specifically about this issue.

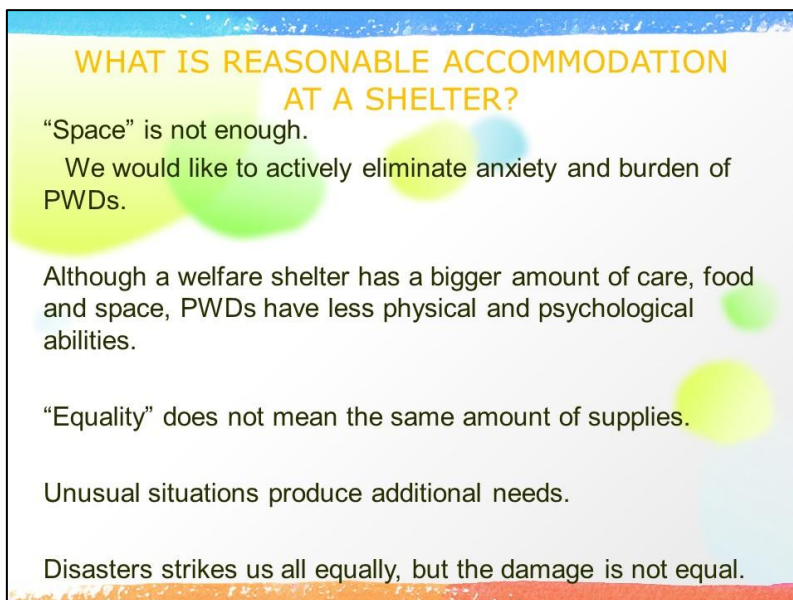


Fig.26 What is reasonable accommodation at an evacuation center

## 9. After closing evacuation centers (Fig.27)

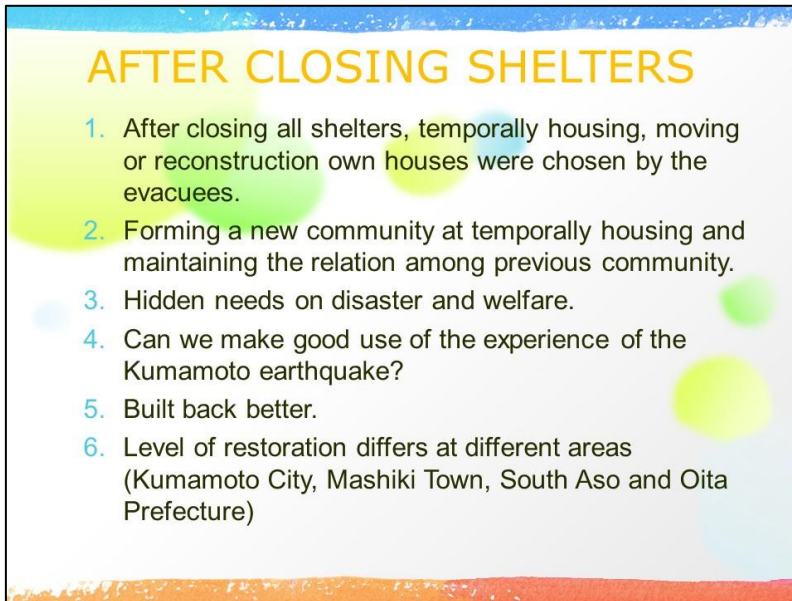


Fig.27 After closing evacuation centers.

At the end of November 2016, all the evacuation centers were closed and people transferred to temporary housing. Now (February 2017), we are in the process of creating a new community of residents in temporary housing. It is becoming difficult to restore original communities. As a volunteer, I had a conversation with a farmer. When I asked how she had been recently, she replied that recently, her daughter-in-law was fine. She had been living with her son's family for a while and the daughter-in-law did not like living with her mother-in-law. Then, after the earthquake, they had to move into temporary housing and the two-generation family was split up through drawing different straws for temporary accommodation. The grandmother and grandfather are looking forward to living together again and they want to see their grandchildren but the daughter-in-law is happier now that they are living apart. She doesn't want to go back to how it was before. She is really happy and enjoying life in the temporary accommodation. This is happening a fair often here and there. You hear a lot about how hard things were before. Festivals and events that communities have been maintaining up until now, even if they reconstruct and people return to the settlements, it is possible that elderly couples will return but that the younger generation will not. This is when communities do not go back to normal. There is no choice but to start again and create new communities. We have to think about how to create new communities. And I believe that we have no choice but to create these by thinking about what a local community including persons with disabilities and the elderly means.

## 10. Disparity of support

To make another point, there is a fair disparity in contributions and donations between organisations. This disparity is caused by disparity in media balance. I would like to ask people to please be fair in

their support donations to Kumamoto and Oita. At present (February 2017), it is only Aso that has not started reconstruction at all. Mashiki has been in the media a lot so they have been receiving a lot of contributions and they are making good progress with demolition. The dormitory where the Tokai University student died is still in Minami-Aso. Support allocations are also different. In Oita Prefecture, there are places which are close to being damaged due to misinformation.

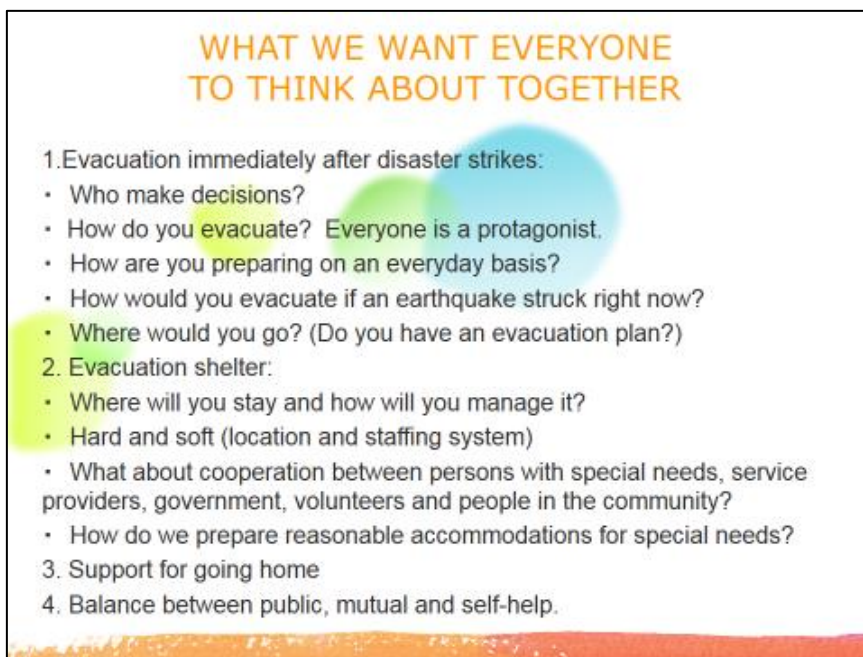


Fig.28 What we want everyone to think about together.

I really believe that you should be thinking about everything from preparation on an everyday basis to what you would do after leaving the evacuation center as well as the balance between helping yourself, helping others and public help as everyone is different (Fig. 28) . Thank you. (Applause)

### **【Question and Answers】**

MC (Yayoi Kitamura) : Thank you very much. I heard Ms. Yoshimura talk in the summer of 2016 at a meeting of the DIP. Her talk was very powerful and I think you will all have been able to get a concrete idea of what she was talking about. We are happy to take questions.

### **Evacuate outside of the prefecture**

A: Did any persons with disabilities evacuate outside of the prefecture?

Yoshimura: There were some people who evacuated out of the prefecture. In particular, a number of people who use ventilators left the prefecture as the electricity supply was unstable in some houses. I think evacuating out of the prefecture can be good. Rather than having a difficult time and putting up with everything in the disaster area, things will be stable and the person will have peace of mind. A lot of things happened to me immediately after the earthquake and I went to Tokyo a number of times. I

really feel relieved when I get away from it all. I would really like people who have close links between their mental state and the state of their body or people who require medical equipment in particular to leave as soon as they can if at all possible and I think it would be a good idea to discuss this in advance. Asking people from within their network to put them up if anything happens. I think knowing that you will be taking someone in if something happens is a form of preparation. I am all for this. There are lots of different thoughts on this and there are those who were able to come back and those who weren't but we can think about all that at a later date.

MC: Any more questions?

### **Financial support as an evacuation center from the government**

B: I work as a carer at C Rehabilitation Centre, a facility for children with severe disabilities. I had heard on the news that Kumamoto Gakuen University was not a welfare evacuation center on the news. Did you not have any financial support? For example, from designated financial support from municipalities. I think you had commodities but what about those kinds of things?

Yoshimura: That came afterwards. Thank goodness. But if we were to say if we were in the red or in the black, we were in the red. However, we did stick to the rules and got ourselves recognised as a designated evacuation center in retrospect and as we had been active from day one, we were treated the same as a designated evacuation center.

MC: As a designated evacuation center rather than a welfare one?

Yoshimura: Yes. We had no intention of being a welfare evacuation center so we applied with what we had used with the same treatment as a general evacuation center.

B: Thank you.

MC: I'm afraid that's all we have time for. I am sure you all have lots of questions. We are happy take questions and opinions by e-mail. Thank you for coming today. (Applause)

## **Chapter 2 Good Recovery Practices after Large-Scale Disasters**

### **Section 3 Supporting PWD and Community by One of Support Facilities for PWD next to Kumamoto City at the Kumamoto Earthquake of 2016: Live together beyond the earthquake**

Takako Miura

Director, Ailinkan: Support facilities for Persons with Disabilities  
Vice Chair of the Committee of Disability Policy, the Cabinet Office

This lecture text is a re-composition of lecture records from 27<sup>th</sup> January 2017 (A training for senior staff, National Rehabilitation Center for Persons with Disabilities), 13<sup>th</sup> November 2017 (Academic Workshop: Disability-inclusive Disaster & Crisis, IASSIDD 4<sup>th</sup> Asia Pacific Regional Congress, Bangkok, Thailand) and 16<sup>th</sup> November 2017 (Workshop for Disaster Risk Reduction at Special Elementary Schools, Ministry of Education, Thailand).



Fig.1 Takako Miura, the author.



Fig.2 Philosophy of Ailinkan

#### **1. Ailinkan**

Ailinkan is located at Yamaga City, which is next north of Kumamoto City, that is the most affected area at the Kumamoto Earthquake of 2016. The map on the first page of this manual shows Yamaga City. The population of Yamaga city is fifty-three thousand. Ailinkan, which was only slightly affected by the earthquakes, also served as the support base facility used to offer a welfare evacuation center, deliver goods, provide personal assistances, conduct refresh support services, and provide support activities for residents at temporally housing. I also show here the evacuation plan and trainings of Ailinkan.

Ailinkan started in 1988 as a support facility for persons with physical disabilities, however most of the users also have intellectual disabilities. We added services for children and for the elderly and accept trainees from all over the world, particularly from Asian countries. Now, we have residential care, short stay, day care, home help, group home, and transition support for employment. Based on our philosophy “Love your neighbor as yourself”, we have a foster home and elderly nursing homes.

Fig. 3 Philosophy and practical targets of Ailinkan

=====

Philosophy: Love your neighbor as yourself

Parallel establishments:

Foster home Ailinen (1950)

Moderate-fee home for the elderly (1984)

Special elderly nursing home Ailin no Ie (1993)

Practical targets:

1. never give up to provide support
2. never refuse to provide support
3. provide proper and stable individual support

=====

Fig.4 History of Ailinkan

=====

History of Ailinkan (Business overview)

1988 Support facilities for persons with disabilities (Residential care/care for daily life) (Life Service Department)  
Designated short-stay admission business office (Short-stay Department)

1990 Designated life care business office (Day-care Department)

1999 Multi-functional business office (Life care) (Ailin Club)

2003 Home help service business/Visiting care for persons with severe disabilities business/Activity support business (Home Help Department)  
Type 2 community activity support center (City exchange salon Pia Pia)

2006 Designated consultation support business (Planning consultation/Children with disabilities consultation/Regional transition/Regional retention)  
Temporary daytime support business (Short-stay Department)

2007 Multi-functional home (Group home with aid/Welfare home) (Pia House)

2011 Multi-functional business office (Transition support for employment) (Pia Work)

=====

Fig. 5 Service overview of Ailinkan

=====

Service overview (As of October 1, 2017)

Total number of employees is 112 , including 8 disabled and 7 cooking staff.

Type of services	capacity	numer of present users	Average age of users	number of employees
<b>Ailinkan (Facility admission support)</b>	70	71	60.5	Full-time: 57
<b>Short-stay service</b>	6	48	40.2	(Management/Clerical work/Nursing care/Care staff/etc.)
<b>Temporary daytime support business</b>		19	25.2	
<b>Multi-functional</b> Ailin Club Care for daily life	20	26	43.4	Full-time: 9
Pia Work (Transition support for employment)	6	1	40	Part-time: 3
<b>Day-care Department Care for daily life</b>	20	51	65.1	Full-time: 6 Lecturers: 3
<b>Community activity support center</b>	10	33	47.9	Full-time: 1 Part-time: 4
<b>Home Help Department</b>	—	39	57.1	Full-time: 6 Registered Helper: 15
<b>Multi-functional home</b>	15	15	58.8	Full-time: 1 Part-time: 6
<b>Consultation support business</b>	—	200*	—	Part-time: 4
<b>Transportation support service</b>	—	2	—	

=====

The table of figure 5 shows the number of users and employees of our services. Total number of employees is 112 including 8 disabled and 7 cooking staff, and total number of users is 305.

## 2. Welfare evacuation center

According to Wikipedia, the 2016 Kumamoto Earthquake is a series of earthquakes, including a magnitude 7.0 mainshock which struck at 01:25 JST on April 16, 2016 beneath Kumamoto City of Kumamoto Prefecture in Kyushu Region, Japan, and a foreshock earthquake with a magnitude 6.2 at 21:26 JST on April 14, 2016. The two earthquakes killed at least 50 people and injured about 3,000 others in total. More than 44,000 people were evacuated from their homes due to the disaster. Many houses were collapsed at Masiki town which is the most seriously affected site. Some facilities for persons with disabilities were damaged.



Fig.6 The welfare evacuation center at Ailinkan

In Ailinkan, after confirming the safety of staff and users soon after the foreshock on the 15th of April, we established a welfare evacuation center at a department of children with disabilities from April 16, the day of the mainshock, shown in Figure 6. A photo on Figure 7 shows a cardboard bed in a room of the Kumamoto Prefectural Welfare Center for Persons with Physical Disabilities. The left photo of Figure 8 shows a mattress provided by the Japan Disaster Rehabilitation Support Team (JRAT) and the right photo shows a cardboard table at a welfare evacuation center in Mashiki city, which we provided with supplies and personal assistants.



Fig. 7 A room for persons using wheelchairs at the Kumamoto Prefectural Welfare Center for Persons with Physical Disabilities.



Fig.8 The welfare evacuation center at Mashiki town, most affected area.

### 3. Supply Deliveries

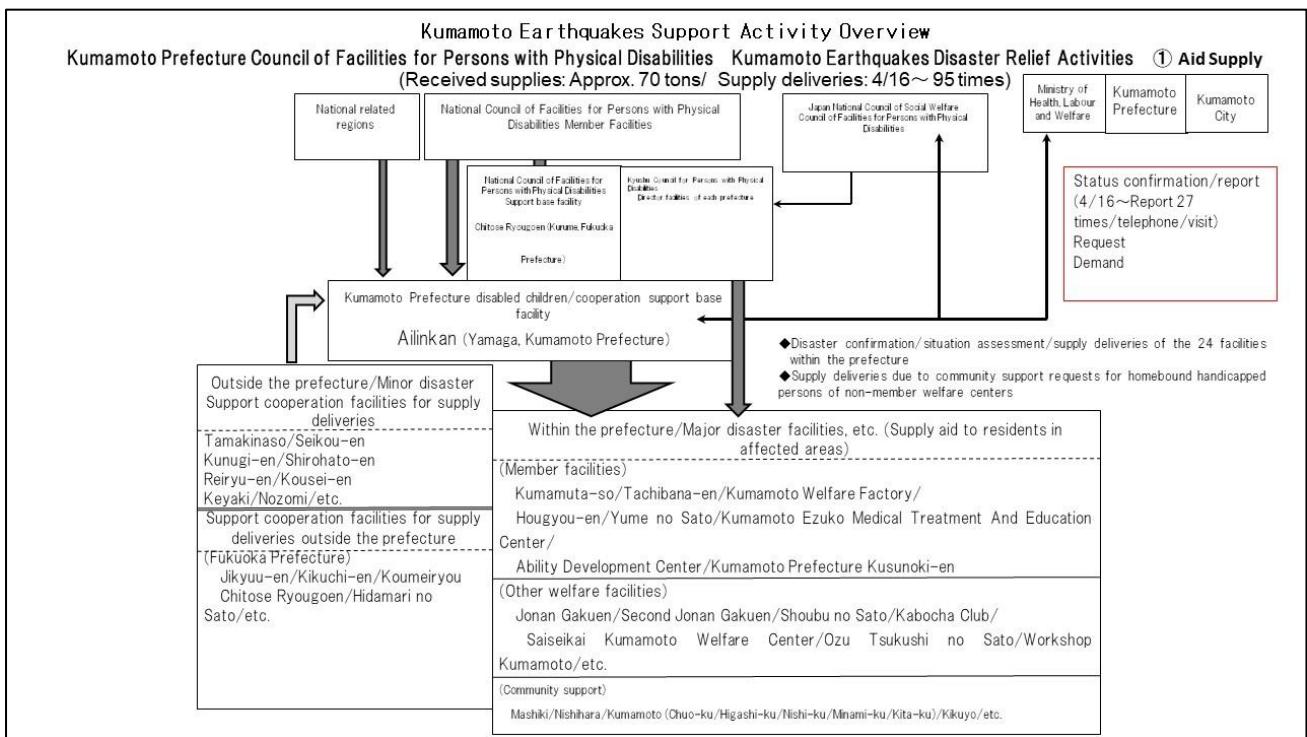


Fig.9 Supply deliveries by Kumamoto Prefecture Council of Facilities for Persons with Physical Disabilities at the Kumamoto Earthquake

Figure 9 shows the overview of our activities after the Kumamoto Earthquake. We delivered supplies to council member facilities and other heavily damaged welfare service centers and residents of affected areas. The goods were voluntarily sent from throughout the country. The management of delivery was cooperated among Ailinkan, other less affected facilities in Kumamoto, and facilities in Kyushu. Totally over 70 tons of goods were delivered 95 times in the span of three months beginning from April 16. We used our own 10ton trucks, shown in figure 10, which is used to carry oranges that our users cultivated.

From April 19, email report to share the status of affected areas and facilities for persons with disabilities began



being sent to the Ministry of Health, Labour, and Welfare, state government and city government, as well as the various facilities and disability persons' groups in Kumamoto Prefecture. Twenty-seven emails were sent out by August 12.



Fig.10 Supply deliveries

#### 4. Personal Assistance

We also coordinated to call personal assistants from outside Kumamoto city for three months to the facilities that was the most heavily damaged. Kyushu Council of Facilities for Persons with Physical Disabilities helped a lot for sending the staff of member. The right tick right down arrow on figure 11 shows the project of Ministry of Health, Labour and Welfare, which also asked welfare facilities all over Japan to send their staff to the affected facilities. One facility for persons with disabilities received this support.

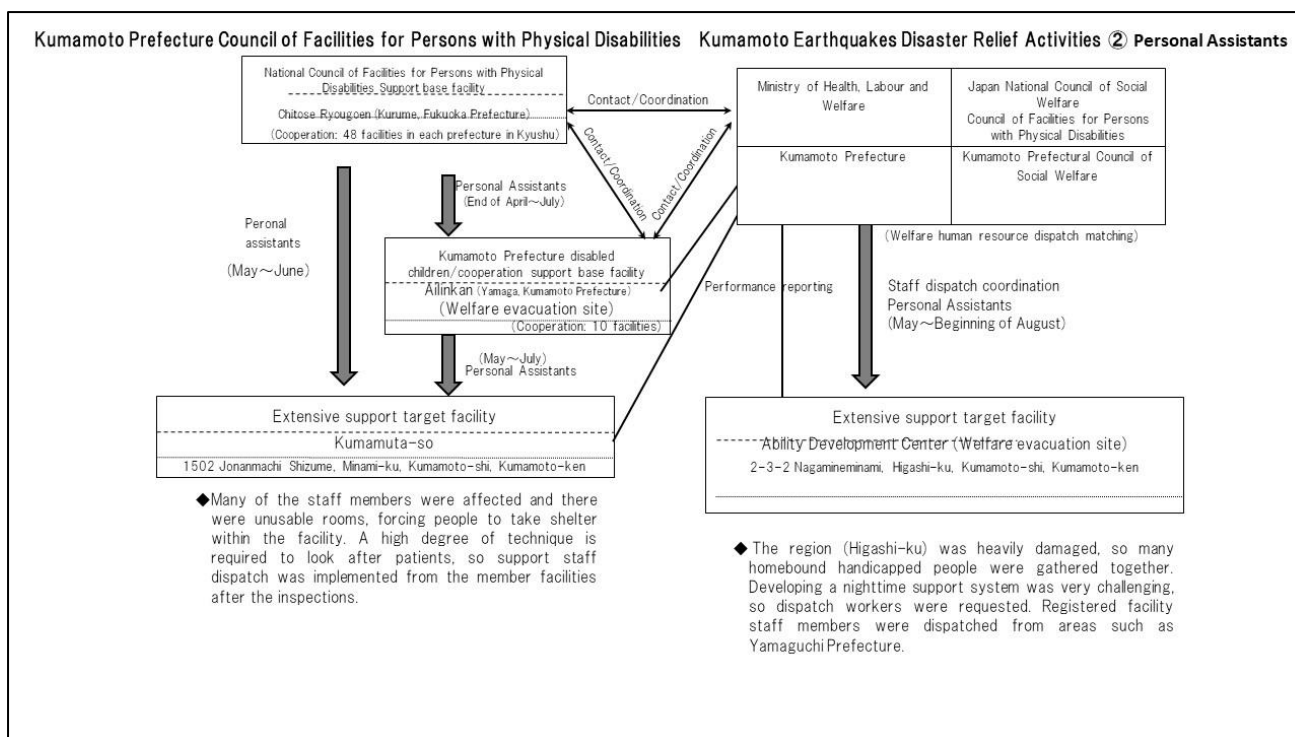


Fig.11 Personal assistance by Kumamoto Prefecture Council of Facilities for Persons with Physical Disabilities at the Kumamoto Earthquake

## 5. Refreshment support services: Bathing, laundry and lunch for evacuees at evacuation centers

Fig. 12 Bathing, lunch and laundry support for refreshment at “Yamaga Hot Spring” by Ailinkan

Bathing, lunch and laundry support for refreshment at “Yamaga Hot Spring”

- water outage made difficult to bathing and doing
- Target: Affected people (including the elderly, disabled and infants) and supporters at the affected areas
- Affiliated organizations: 1. Yamaga City Council Of Social Welfare (Yamaga Volunteer Liaison Council) 2. Yamaga Onsen Tourism Association 3. Yamaga Economic Development Committee 4. Yamaga Restaurant Union/Yamaga Cafeteria Union 5. Ailinkan Social Welfare Corporation and Ailinkan Support Facility for the Disabled (Kyushu Prefecture Council of Facilities for Persons with Physical Disabilities)
- Budget: 1.5 million yen (600,000 yen from the city council of social welfare (city grants), 300,000 yen donations gathered together from the Yamaga Onsen Tourism Association, Yamaga Economic Development Committee and Ailinkan Social Welfare Corporation)
- Implementation period: April 30~July 31, 2016, Every Wednesday/Saturday, 2 organizations with approximately 25 members each, implemented 50 times
- Users: Total of 2,400 people      Support cooperators: 213 corporate staff members      207 volunteers
- Implementation content
  1. Transport to evacuation centers (2 minibuses used to two areas each time)
  2. Lunch support (Restaurant catering)
  3. Hot spring bathing support (at the hotel)
  4. Laundry service
  5. Shopping and visitation support
  6. Conversational companions and recreation

On the fourth, we offered a bathing, lunch and laundry support not only for persons with disabilities but also for elderly and infant at evacuation centers. Due to the water outages, one week after the disaster occurred, the need for bathing and laundries at evacuation centers and affected group homes was urgent. There was no bathing service at evacuation centers and it was too hard to wait for elderly people and persons with disabilities by lining up a long row to take a bath at public bathing place. There were many distressed people because they were unable to do laundry,

too.



Fig.13 “Yamaga Hot Spring refresh support”

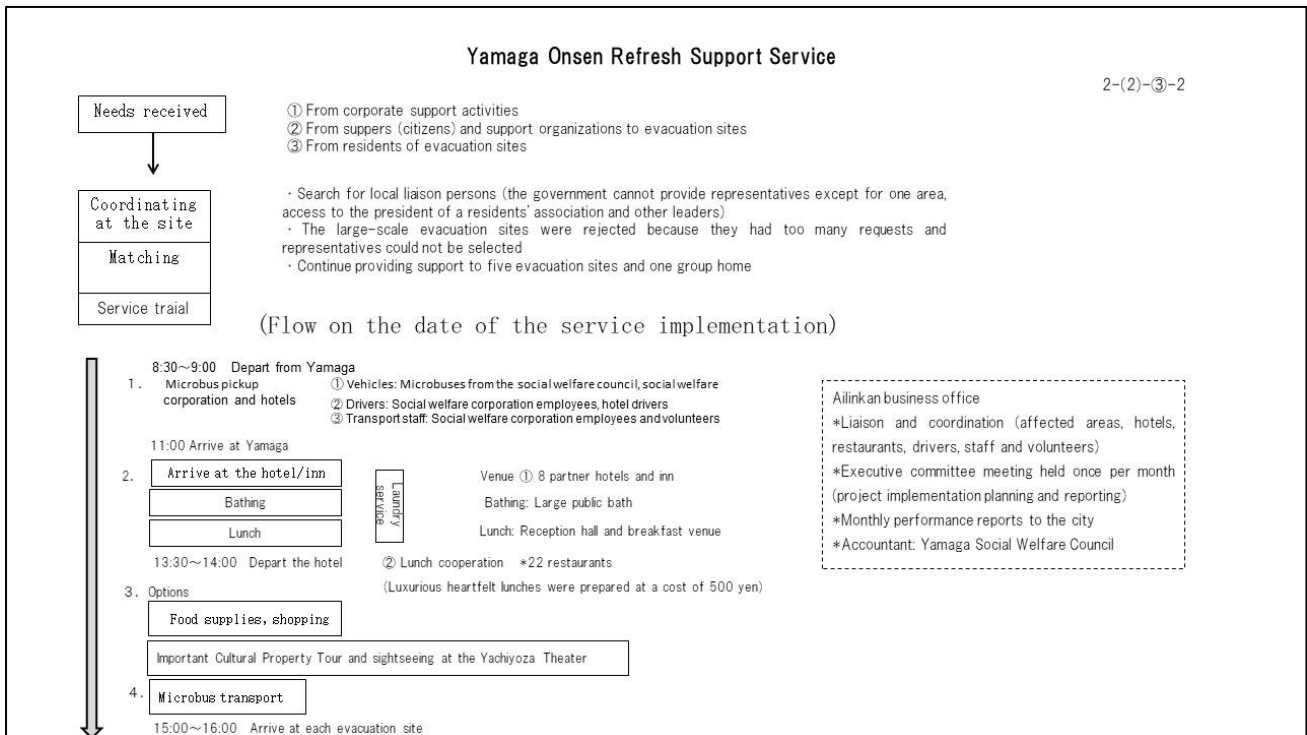


Fig.14 “Yamaga Hot Spring refresh support”

We, Ailinkan asked Yamaga economic development committee and city tourism associations (hotels, etc.) for transportation such as buses and drivers, restaurant unions for preparing lunch, city council of social welfare and the city government to find financial grant, send volunteers, and to announce about this project to evacuation centers. The Kyushu Prefecture Council of Facilities for Persons with Physical Disabilities also cooperated this project by sending their members. We were able to rent out the large public baths and meal venues of six inns and hotels within the city.

Between April 30 and July 31, every Wednesday and Saturday, 50 people were transported by two buses per trip from five evacuation centers (two or three evacuation centers for each day) and one group home for persons with intellectual disabilities, to a hot spring bathhouse at Yamaga. Not only the bathing service, but also lunch and laundry support services were implemented. Lunches were provided by various cooperative stores belonging to the Yamaga restaurant and cafeteria unions. A total of 2,400 people had utilized this service with the help of 213 staff

and 207 volunteers.

Participants enjoyed shopping, visitation and conversations, too. Wheelchair users were transported to the facilities where bathing support was conducted using machinery baths. Photographs of figure 13 show the transportation and lunch at this refreshment project. The upper part of figure 14 shows the background of this project and the lower part shows a flow on the date of service implementation. Kumamoto-nichinichi newspaper publisher wrote about this project on their newspaper.

## 6. Continuous support for residents at temporary housing



Fig.15 An itinerant art brut museum at a temporary housing



Fig.16 Guests to an itinerant art brut museum at a temporary housing

As the fifth project, we delivered support residents at temporary housings until spring of 2917. We opened an itinerant art brut museum displaying 50 artworks by 13 artists with disabilities in two Temporary Housing Complex (Kiyama and Mashiki) in 2016 December (fig. 15). Two hundred sets of Gyu-don, bowls of beef and rice, and Chestnut Zensai, soy beans sweets for visitors were sold out in fifteen minutes. We also treated pork cutlet for

residents at temporary housing. In the winter of 2017, we opened another roaming art brut museum at the other Temporary Housing Complex, Jonan.

The left photo of figure 16 shows a Kumamon as a special guest. The right photo of figure 16 and the left photo of figure 17 show Mr. Matsumoto, wearing red sweater, who is selected one of the 30 Japanese young distinguished artists, used the newspaper of the 17th of April that shows the main earthquake, as a sheet of his pencil drawings. The right photo of figure 17 is his drawing. These activities were broadcasted by TV (fig.18) and introduced by Kumamoto-nichinichi paper publishers. After August 2016, various types of workshops on our experiences and disaster risk reductions were implemented in order to make use of our unforgettable experiences.

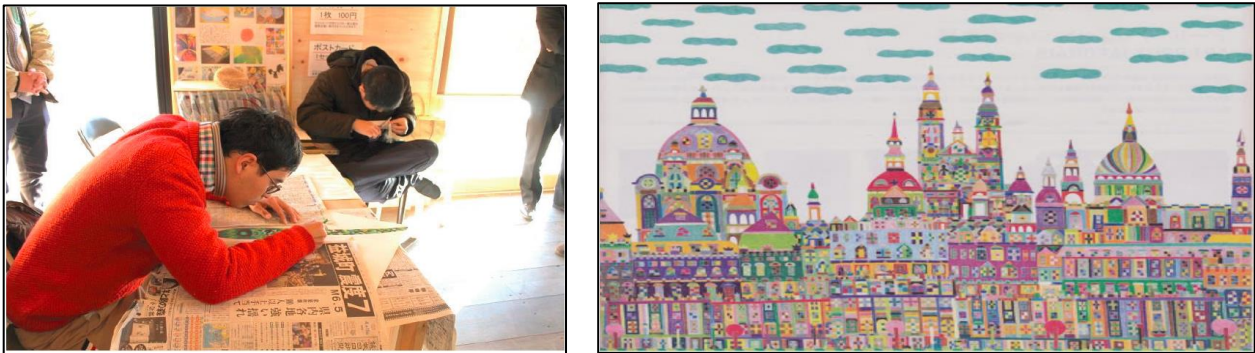


Fig.17 Hironobu Matsumoto and his drawing



Fig.18 An itinerant art brut museum was broadcasted by TV

## 7. Evacuation plan and drills at the disability facilities

### (1) A manual for Typhoon/Heavy rain/River flooding/Sediment disaster

At our facilities, the disaster management manuals have been revised based on the actual ongoing situation. We have two kinds of manuals. One is a manual for Typhoon/Heavy rain/River flooding/Sediment disaster which can be known by weather broadcasting. Figure 19 is the flow chart.

In order to conduct these revisions, we first held group discussions and group announcements at staff training

sessions. Based on the opinions obtained there, our staff leaders created a draft and after proofreading them, the administrators exchanged their opinions and summarized the results. We then provided explanations to the users and obtained consent to implement nighttime training.

On October 17, 2016, staff members were assembled together to conduct nighttime evacuation training in earthquake scenarios under the presence of fire department, local fire brigade and 9 chair persons from voluntary organization for disaster prevention. In approximately 30 minutes the staff members within the city were gathered together to evacuate all users to safe location based on the assumption of a power failure. However, the challenge of providing evacuation assistance to 70 people (of which 95% were wheelchair users) with only four night shift workers became apparent. We plan on incorporating our findings throughout the training sessions into the manual draft.

Fig. 19 Disaster management manuals at Ailinkan

- =====
- Revision of disaster management manuals at Ailinkan  
 Typhoon/Heavy rain/River flooding/Sediment disaster Ailinkan Manual
- ①Collect information of expected typhoon courses/heavy rain
- Gather information with TV/radio/mobile telephone/Disaster prevention wireless radio
  - Grasp situation of Iwano River and Kikuchi River (when necessary)
- ②Necessary precautions against typhoons inside and outside the facilities (advance preparations)
- (Indoors)
- Store water in the bathroom half a day before the typhoon approaches
  - Prepare buckets in each toilet and store water
  - Prepare two generators and three floodlights
  - Move bed away from the window in the living room
  - Shut the curtains in the living room
  - Check and secure preserved food and drinking water
- (Perimeter)
- Move objects that can blow away indoors
  - Secure objects that don't fit indoors with a rope
  - Place objects that can be moved flat on the ground to prevent them from blowing away
  - Prepare welfare evacuation centers
- ③Typhoon (during disaster)
- Do not go outdoors, do not open windows
  - Take refuge inside facility when necessary
- Power failure
- Give status report to facility director
  - Gather information with mobile telephone, radio, etc.
  - Shine floodlights on hallways of each building using generators
  - Carry out patrol every 20-30 minutes
- Building damage (glass windows, etc.)
- Give status report to facility director
  - Confirm safety of users
  - Guide evacuees from living rooms with broken glass
  - Temporary repairs of damaged areas
- ④Typhoon (after disaster)
- Take final roll call of users
  - Give final status report to facility director
  - Confirm damage inside living room and internal and external facilities
  - Clean up inside and outside of facilities
  - Regional victim support

=====

**(2) A manual for earthquakes, storms and flood damages**

Another is a manual for earthquakes, storms and flood damages which can not be forecast and are affected seriously. Figure 20 shows the flow chart of this manual.

Figure 20 Disaster prevention manual (earthquake, storm and flood damage) at Ailinkan

=====

Revision of the disaster prevention manual (Earthquake, storm and flood damage) : Ailinkan earthquake management manual

Large-scale earthquake (4-person system during the night)

☆Magnitude upper 5 (everyone but the sub-chief assembles together)

☆Magnitude 6 (all employees assemble together)

**①Stand-by until the earthquake settles down**

Ensure personal safety (helmet, shoes, flashlight, mobile telephone)

**②-1Grasp the situation/contact (1 person)**

- Secure information (carry around flashlight with radio)
- Call director (deputy director)→From the director to chief director
- Decision to transmit emergency contact network through LINE
- Open the entrance/exit doorway

**②-2Safety confirmation (3 people)**

- Urgently confirm the safety of users at each building
  - Protect and approach users
  - Confirm injuries of users
- Emergency first-aid treatment → Nursing care→ Transport decision

**③Evacuation preparation**

- Secure evacuation site (cafeteria/assembly room/front yard/courtyard)
- Wear helmet (disaster hood)
- Walking pedestrians should wear shoes
- Transfer wheelchair users with their wheelchairs
- Move to stretchers and beds

**④Evacuation**

- Staff confirmation
- Primary evacuation sites (cafeteria/assembly room, front yard/courtyard)  
 Secondary evacuation sites (north side parking lot)
- Emergency backpack
- (List of user and employee names, batteries, gloves, heat insulating aluminum sheet, list of stockpile supplies, etc.)

**⑤-1Safety confirmation (building/facilities) (2 people)**

- Lifeline (telephone/electricity/water supply/gas)
- Hallway, glass window, ceiling
- Malfunction support of sprinklers

**⑤ Evacuee care (2 people/support staff)**

- Ensure safety
- Physical and mental care
- Share information with users
- Emergency supplies (water/food supplies/diapers/blankets/etc.)

=====

**(3) A crime prevention manual**

The crime prevention manual is still in the drafting process. We established a checklist of the notifications to the Ministry of Health, Labour, and Welfare after the Sagamihara stabbings on 26<sup>th</sup> of July 2016, and held group discussions and announcements. Although we have thus far found it difficult to anticipate the various scenarios, we

wish to slim down the content of the manual and measure its practicality. We were able to hear from the participants of the training sessions regarding their thoughts on sharing the awareness of crime prevention and having the opportunity for staff members to better understand each other. As an organization, we hope to continue repeating training sessions to establish what kind of support should be provided in the case of an emergency while reducing the burden on the minds of night shift workers and carrying our original mission of protecting the lives of the facility users.

## **8. Connection between service providers**

During these experiences, I fully realized the importance of “stockpiling everyday connections.” I felt that maintaining regular connections with the national government, prefectural and city government, facility organizations and community leads to swift support, such as National Council of Social Welfare, Cabinet Office, and National Council of Facilities for PWD. In addition to the previous connection, we obtained new connections. “Connection” means the relationship with whom we exchange cell phone numbers, that enables people to make contact anytime we need. I felt like I should continue to cherish these connections not only with persons concerning the field of disability but also with persons and organizations a variety of filed at community.

Support activities continued not only for persons with disabilities, but for anybody who had moved from the evacuation centers to temporary housing during the year. We carved the design of the Shinto shrine of the most affected town, Mashiki, on a paper lantern for a traditional festival and dedicated it to the Shinto shrine. This story appeared in a local newspaper.

After being told by evacuees, “we never would have met if not for the earthquake” and “not everything about the earthquake was a bad thing,”

## References

1. Takako Miura . After 95 support goods deliveries and 50 hot spring refresh support services. Ailinkan Communication “Ai-mail” 2016 summer issue.
2. Takako Miura . Establishment and revision process of the disaster (fire, storm and flood and earthquake damage) and crime management manual. Ailinkan Communication “Ai-mail” 2016 fall issue.
3. Takako Miura. Temporally housing, roaming art museum and a variety of hospitality. Ailinkan Communication “Ai-mail” 2016 winter issue.
4. Takako Miura. Great appreciation in this 1 year. Ailinkan Communication “Ai-mail” 2017 spring issue.
5. One year after the Kumamoto Earthquake. “Ai-mail” 2017 spring issue.



## Chapter 2 Good Recovery Practices after Large-Scale Disasters

### Section 4 Recovery Experiences and Remaining Issues after the 2019 Hagibis Typhoon.

#### A long-term evacuation of a residential facility for persons with severe autism

Tomohiro Uchiyama  
General Affairs Manager  
Keyaki no Sato, Social Welfare Corporation

Yoshiko Abe  
President  
Keyaki no Sato, Social Welfare Corporation

This lecture text is a re-composition of lecture records from 22<sup>th</sup> December 2019 (Tomohiro Uchiyama, Meeting on Disaster Experiences, Keyaki no Sato) and 7<sup>th</sup> November 2019 (Yoshiko Abe, Symposium of Japanese Association of Autism Support).



Fig. 1 The area surrounding the group home (13<sup>th</sup> 8:00 taken with a drone by a member of Keyaki no Sato staff)

#### 1. Introduction

It was after the Great Hanshin-Awaji Earthquake that it became common knowledge that persons

with disabilities have many difficulties with evacuating and the evacuation lifestyle at the time of a disaster. After the Great East Japan Earthquake in 2011, the terms ‘people who require consideration during a disaster’ and ‘people who require evacuation support during a disaster’ were included in the Basic Act on Disaster Management. Guidelines concerning welfare rooms in evacuation centres, welfare evacuation centres and individual evacuation plans at the time of a disaster were created. However, residential facilities for persons with disabilities were not focused on evacuation. One of the factors was probably the fact that many residential facilities for persons with disabilities located on high ground were spared from tsunami damage in the Great East Japan Earthquake. The Law to partially revise the Flood Control Act, etc. (19<sup>th</sup> May, 2019) was enacted making it compulsory to create a plan to secure evacuation and to implement drills for owners and managers of facilities used by people who require consideration in potential flood areas that are designated in municipality local disaster plans. However, environment of stay at the evacuation center is not included in the plan.

This study documents the experiences of Keyaki no Sato (Social Welfare Corporation; Kawagoe City, Saitama Prefecture), a residential facility that was flooded above floor level during Typhoon Hagibis in 2019 in order to contribute to disaster-preparedness in facilities for persons with disabilities in the future (Fig.1). In recent years, there has been an increase in the frequency of natural disasters such as torrential rain due to global warming and it is considered that there are many facilities that urgently require responses.

The number of municipalities that had the Disaster Relief Act applied to them due to Typhoon Hagibis (2019 East Japan Typhoon) that made landfall on the 12<sup>th</sup> and 13<sup>th</sup> of October, 2019 from the Tokai Region to the Kanto-Koshin’etsu Region was 390 in 14 different prefectures and metropolitan areas (as of 1<sup>st</sup> November) and was the highest on record, surpassing even that of the Great East Japan Earthquake. In addition, the government applied Catastrophe, Disaster of Extreme Severity (1<sup>st</sup> time for a typhoon, October 18<sup>th</sup>) and emergency disaster in the Act on Reconstruction from Large-scale Disasters (2<sup>nd</sup> time, November 11<sup>th</sup>) to damage caused by this typhoon with Disaster Relief Act. This typhoon was named the 2019 East Japan Typhoon (Japan Meteorological Agency, 19<sup>th</sup> February, 2020).

In Kawagoe City, Saitama Prefecture, in addition to inundation in a levee, it caused the Ohyangawa River to break its banks and the collapse of an embankment on the Opegawa River into which the Ohyangawa River flows. In the city, 82 buildings were inundated above floor level and 262 below floor level (As of 14:00 on 23<sup>rd</sup> December, 2019, Saitama Prefecture Risk Management and Disaster Prevention Department). The peak number of evacuees was 4,960 (4,346 in 27 designated evacuation centres and 614 in 14 voluntary evacuation centers). When the disaster occurred, four designated evacuation centres were opened and by 25<sup>th</sup> October all of them were closed.

The overflow and collapse severely damaged Keyaki no Sato. Keyaki no Sato is in a triangular zone where the three tributaries of Irumagawa River (Ohyagawa River, Koazegawa River, Opegawa

River) converge. Four rivers merge near Ochiaibashi Bridge to form Irumagawa River. The collapsed embankment had been newly constructed to change the flow of the Ohyagawa River during the construction of a pumping station installed as a flood control response after the flood of 1999.

Of the 75 residents at the facility for persons with disabilities operated by Keyaki no Sato, 52 were evacuated in advance and 23 were evacuated vertically then with assistance from the fire service so we avoided any casualties. However, in the evacuation lifestyle of the following 6 months, the corporation had difficulties to continue the business and found the lack of a Business Continuity Plan.

Ten locations operated by Keyaki no Sato were swallowed up by muddy water and the water level exceeded three metres at its maximum. The 6 offices (16 buildings) were: (i) Hatsukari no Ie residential facility (5 buildings: 1 residential, 4 for work), (ii) three day care locations of type A, (iii) one day care location of multiple functions, (iv) five group home buildings, (v) one consulting support office, and (vi) prefectural support centre for persons with autistic disorders . Some of the buildings had been built on raised ground but they were all flooded above floor level and partially destroyed, with all equipment and facilities rendered unusable. The value of the damage to the facilities themselves was 400 million yen and was estimated at 960 million yen directly after the disaster. It took six months to restore the residential facilities so we are in extreme difficulty, although the duration of restoration was estimated 9 months directly after the disaster.

Here we give an overview of approximately 6 months from directly after the disaster, the circumstances of the typhoon, evacuation, evacuation lifestyle and restoration. We summarized what we learned. Some facilities for persons with disabilities have to be located in places that are vulnerable to disasters and expect other facilities to contribute to disaster-preparedness and responses at the time of a disaster.



Fig.2 Keyaki no Sato and its position in relation to the surrounding rivers (Adapted from Irumagawa River Basin Emergency Flood Control Project documents [https://www.ktr.mlit.go.jp/ktr\\_content/content/000767282.pdf](https://www.ktr.mlit.go.jp/ktr_content/content/000767282.pdf))

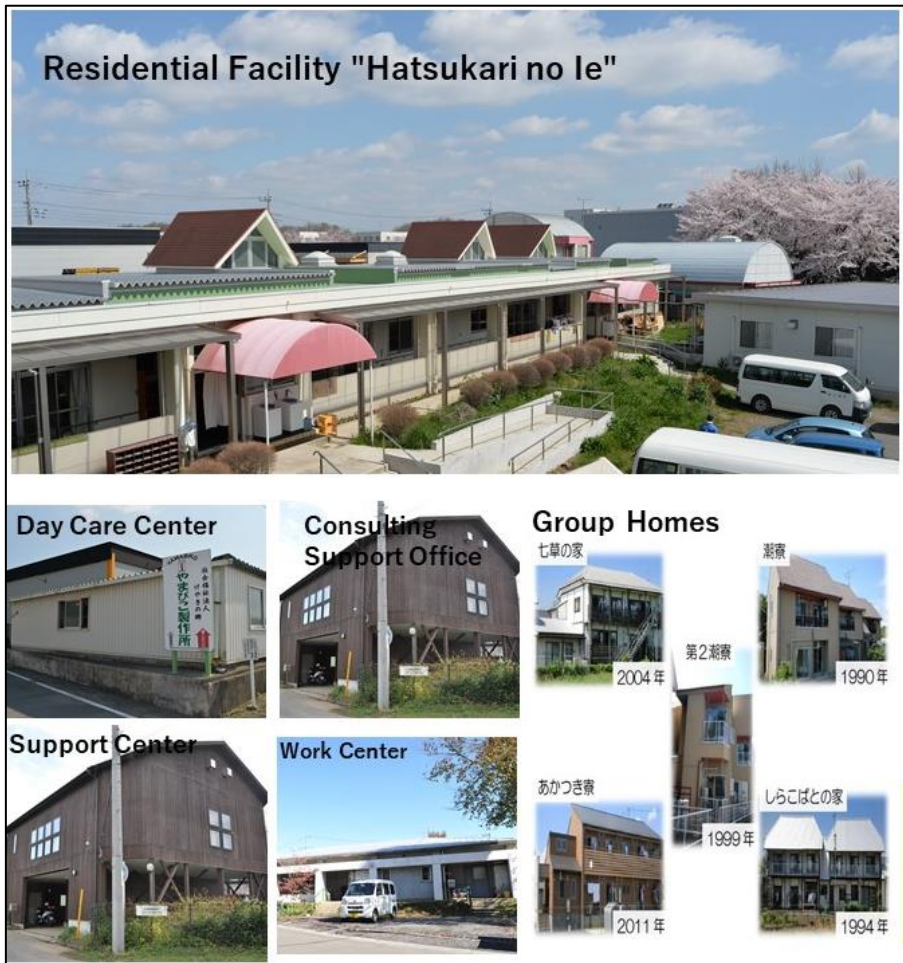


Fig. 3 Offices of Keyaki no Sato



Fig.4 Yoshiko Abe, at the entrance of prefectural support center which is built with a raised floor. The headquarter of the corporation is settled on the third floor of this building for 6 months after flooding. The line above her head shows the height the water reached.

## **2. The history of Social Welfare Corporation Keyaki no Sato**

### **～ Overcoming local campaigns opposing the construction of facilities for persons with disabilities facilities～**

In 1979, special needs education became compulsory in Japan and children with autism were allowed to go through compulsory education like everyone else. Up until then, there were children with disabilities who could not go through compulsory education because their entry to school was postponed. Even so, there was nowhere for these children to go after graduation from junior high school. Of these, many children with autism, which comes with serious intellectual disabilities, inevitably had to stay at home. For this reason, the parents of 21 children with autism formed the Keyaki no Sato Promotion Group (Promotion Group) in 1978 to work on constructing residential facilities for adults with autism. They were aiming for a residential facility for 50 people.

At that time, when building facilities for persons with disabilities, Saitama Prefecture required the founder to own land of approximately 4,000m<sup>2</sup> or more, and the consent of all residents who owned land within a radius of 300m. It was not easy to find land that corresponded to these conditions. In 1981, the Forestry Agency (former name) suggested a potential national forest site for construction of approximately 15,000m<sup>2</sup> in Hatoyama Village (former name) in the northwest of Saitama Prefecture. However, the residents of Hatoyama started a movement to oppose the construction of the facility and it became a social issue covered widely by the media. Saitama Prefecture acted as intermediary for the promotion group on numbers of places and they secured the present construction site which is surrounded by rivers. The flood hazard map was not offered at the time, but there was no other land available. It was shown in a potential flood area (3m and over) on the flood hazard map, later.

In 1985, the residential facility, Hatsukari no Ie, was opened. According to the information of flooding by local residents, Hatsukari no Ie was constructed on raised ground of 1.5m but during typhoons, the garden and car park, which were not on raised ground, flooded frequently. In 1999 August, 14 years after opening, Hatsukari no Ie was flooded for the first time when the Ohayagawa River burst its banks because of typhoon (total amount of rain fall was 330mm in Kawagoe City). The residential facilities were flooded 70cm above floor level and it took approximately 90 days to restore them. The group homes and the bakery were flooded 50cm above floor level and it took 10 days and 4 months each to restore. Trucks, machines and materials of one of the workplaces were washed away by the flood. During that time, the residents were evacuated to the gymnasium of Chichibu Gakuen (Tokorozawa City) for three weeks. Based on this experience, the two group home buildings, power supply facilities and the consulting support office that were subsequently constructed were built on raised ground of 1.5m to prevent flooding. In addition, in 2001, a pumping station was installed in order to prevent counter-current from downstream on the Ohayagawa River. Since then, there had been no flooding above floor level at Hatsukari no Ie.

### **3. 2019 Typhoon Hagibis and the evacuation of residents with severe autism**

#### **(1) Initial response (up to typhoon landfall, 12<sup>th</sup> ~13 : 00)**

The huge typhoon was forecast to make landfall at 16:00 on the 12<sup>th</sup> (Saturday). Railways in the Tokyo area announced that they would suspend services from 10:00 on the 12<sup>th</sup>. At Keyaki no Sato, families of residents who were able to evacuate them to their homes were requested to do so on the 11<sup>th</sup> (Friday). Some residents usually went home at the weekends so this went smoothly. As of 9:00 on the 12<sup>th</sup>, the number of residents remaining in Hatsukari no Ie was 18 out of 40 and at the group home, it was 18 out of 35.

At 13:00 on the 12<sup>th</sup>, the Disaster Response Headquarters was established in front of the 1<sup>st</sup> floor front entrance of Hatsukari no Ie where the corporation headquarters office is located. The Head of the Disaster Response Headquarters was Yoshiko Abe, Chairman of the Board and four members of staff were assigned as Disaster Response Management Night-Watch Staff: Tsutomu Mizuno (Staff Management, Head of Consultation Support Centre), Takumi Chida (Headquarters Administrative Chief), Makoto Wada (Head of Disaster Response Committee) and Tomohiro Uchiyama (Headquarters General Affairs Manager). At Keyaki no Sato, in conjunction with forecasts of approaching large typhoons, the Disaster Response Headquarters was formed with two Management Night-Watch Staff around twice a year. For Typhoon Hagibis in 2019, a four-person system was implemented, due to the scale of the typhoon, the tremendous amount of rainfall predicted and past experience.

In order to share information quickly with Response Headquarters Staff (5 people) and managers from each office (9 people), SLACK (free app) was adopted. Up until then, they had been using e-mail and LINE on mobile phones to maintain contact with staff but there was the issue of not being able to send to all facilities simultaneously. By using SLACK, it was possible to send simultaneously and to spread not only information about the typhoon but also image data of the rising water levels of the rivers. In addition, managers of the offices that are dotted around were able to share information with each other in real time by sending their responses to each other. Furthermore, they shared information about support provided by various companies with staff using SLACK. It was also significant that it was possible to have a record of the experience of the disaster.

#### **(2) Flooding of the buildings at residential facility Hatsukari and group homes**

As forecast, an emergency heavy rain warning was issued in the Kanto Koshin'etsu Region which includes Saitama Prefecture at 15:30 on October 12<sup>th</sup> and the warning levels was 3 – 4. Ohayagawa River, which flows close to Hatsukari no Ie, started to burst its banks at 15:10 on the 12<sup>th</sup>. Following this, the car park at Hatsukari no Ie started to flood gradually. The rain got heavier at around 18:00 on the 12<sup>th</sup> and turned into a rainstorm that rattled the windows. Response Headquarters Staff put tatami mats, etc. on top of tables in work areas that were not on raised ground and susceptible to flooding in

order to minimize flood damage. At 19:00 on the same day, when going from the Response Headquarters Office to the work areas, the water level was up to the knees. Staff felt strong water pressure and it was difficult to walk. On SLACK, there was a report from Chida at 21:58 on the 12<sup>th</sup> saying, 'It has suddenly become a really fierce rainstorm'.



Fig. 5 A view around the Ohyagawa River from the 2<sup>nd</sup> floor of Hatsukari no Ie (Upper: 13:30, Bottom: 15:30 on October 12.)

The rainstorm went on until 0:00 on the 13<sup>th</sup> but at 1:13, the special heavy rainfall warning,

equivalent to warning level 5, was lifted. As the rainstorm has stopped, the Disaster Response Headquarters judged that the danger had passed and one Management Night-Watch Staff member went into another room to take a nap. However, around 1:00 in the morning, the buildings of Hatsukari no Ie started to flood. The buildings continued to flood and counter-current in the Ohayagawa River was confirmed visually. It was a sight that we had never seen before. The flooding continued after that.

The Response Headquarters, which was on the 1<sup>st</sup> floor, was moved to the 2<sup>nd</sup> floor along with computers, cash and documents from the safe. The flooding got right up to the first step of staircase. At around the same time, there was a message on SLACK from staff at the group home ( 5 staff members were there) saying that the group home had started flooding inside and that they were worried for their safety. The Response Headquarters gave instructions to the group home staff for vertical evacuation of residents to the highest position possible.

At 1:30 am, there was a sound like a huge explosion outside and the electricity went off. Almost simultaneously, along with the explosive sound, there was the sound of the generator motor but it flooded several minutes later and stopped working. It was confirmed that there was no electricity or water supply inside the buildings. Furthermore, the 1<sup>st</sup> floor fire alarm was flooded and broke so the siren would not stop. After that, flooding above floor level continued for a long time and stopped at the 3<sup>rd</sup> step on the staircase at the residential building (90cm). The counselling support office was flooded up to 3m.

The Response Headquarter made a request for assistance from the Kawagoe City Disaster Prevention Section at 4:00. As it was reported in the newspaper that Opegawa River had collapsed at dawn on the 13th, it was expected that the flooding of Hatsukari no Ie would increase as there was not only flooding from the burst banks of the Ohayagawa River but also higher water levels due to the subsequent embankment collapse on the Opegawa River .

### **(3) Evacuation conduct (from disaster to one week afterwards)**

It took three locations and five days to find long-term accommodation for residents of the residential facilities Hatsukari no Ie and Ushioryo Group Home. The details of the evacuation are reported below. On October 12<sup>th</sup> (Saturday), the day the disaster occurred, 18 of the 40 residents at Hatsukari no Ie and 18 of 35 residents at group home were still at the facilities. At 11:00 on the morning of the 12<sup>th</sup> before the typhoon made landfall, 13 of the 18 residents including 3 wheel chair users took early lunch and began self-evacuation to Naguwashi Civic Centre with 3 of staff members in cars. Staff brought blankets and towels as futons. The remaining five with severe behavioral disorders were evacuated to the 2<sup>nd</sup> floor of the group home as it was considered that it would be difficult for them to stay calm with the other local residents at an the Civic Centre. As the group home is on slightly higher ground than Hatsukari no Ie, it had never flooded before. At 11:14, Kawagoe City issued a warning recommendation (warning level 4).





Fig. 6 Residents evacuated at the hall of Naguwashi City Center



Fig.7 A meeting room on the ground floor of the Community City Center (Oct. 14<sup>th</sup>)

Kawagoe City opened the nearby former Naguwashi Community Centre in the grounds of Naguwashi Junior High School as an evacuation centre (at 8:30 on the 12<sup>th</sup>) but the space was on the 4<sup>th</sup> floor with no elevator. Elderly people with back and leg problems were assigned the 1<sup>st</sup> floor but there was not enough space left for 13 people. Because we heard this information from a member of staff just before evacuation and because we wanted to evacuate the all residents as a group, when we talked to Kawagoe City Welfare Section for People with Disabilities, we were allowed to take over the multi-purpose hall at Naguwashi Civic Centre, which was not a designated evacuation centre Fig. 6). There was a total of 133 evacuees at the centre but there were no other evacuees in the hall. Even so, there were some users who couldn't sleep in an unfamiliar space. At 18:00, the order to evacuate (emergency, level 5) was issued.

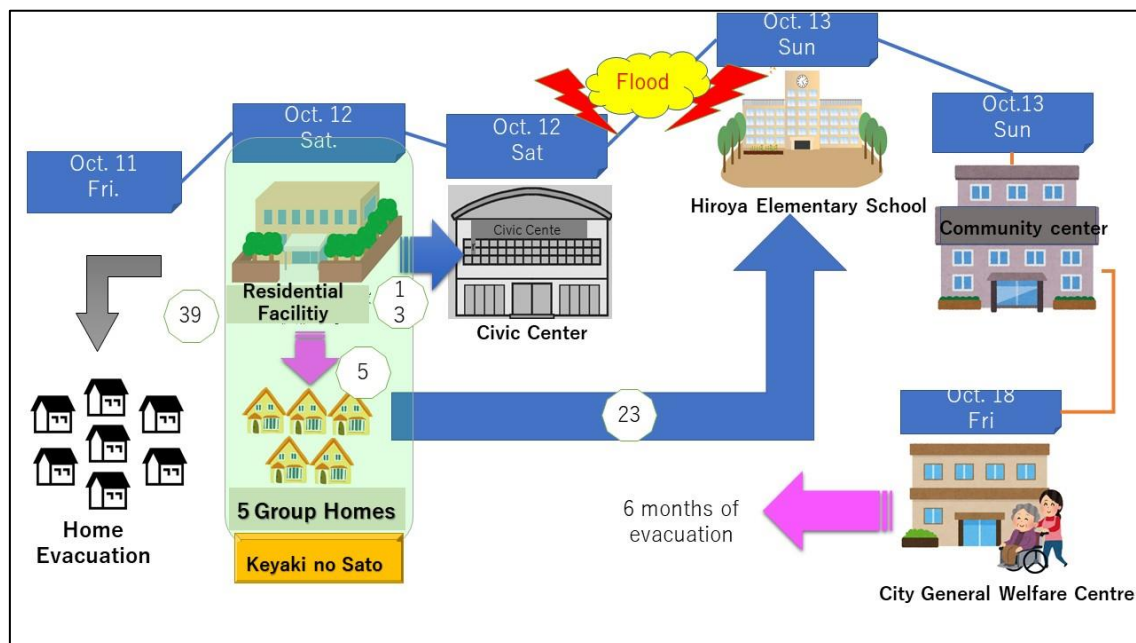


Fig.8 Keyaki no Sato Victim Evacuation Destination. Numbers in a circle show the number of evacuees.

Totally 32 people, 5 of residential users who stayed the group home, 18 group home residents and 9 staff members were rescued by fire department staff at 6:00 on the 13<sup>th</sup>, the following day and were transported to Hiroya Elementary School which was an evacuation centre. At 11:39 on the 13<sup>th</sup>, it was announced that evacuees would all be gathered in three evacuation centres in Kawagoe City and that the other centres would be closed. The evacuees at the Civic Centre were asked to move because we knew that the multi-purpose room that the residents stayed had been reserved for use by local residents on the afternoon of the 13<sup>th</sup>. However, there were no instructions concerning the next destination for evacuation. The fact that group home evacuees had been transported to the gymnasium of Hiroya Elementary School was shared with staff who had accompanied the residents to Naguwashi Civic Centre and they moved to Hiroya Elementary School at 10:00 on the 13<sup>th</sup>. However, as classes were due to start at the school on the 14<sup>th</sup> Monday, it was necessary to look for the next evacuation destination. As a result of discussions with Kawagoe City, 36 evacuees and accompanying staff members were moved to a 1<sup>st</sup> floor space in the former Naguwashi Community Centre (in the grounds of Naguwashi Junior High School) at 13:00 on the 13<sup>th</sup>. There was an inspection of the Community Centre by a public health nurse from the Japan Red Cross Society at 17:00 on the 15<sup>th</sup> and a report was made to Kawagoe City that sanitary conditions were not good (Fig. 7). As a result, 12 residents of Hatsukari no Ie was transferred to their 4<sup>th</sup> evacuation site in the gymnasium of Kawagoe City General Welfare Centre at 13:00 on the 18<sup>th</sup> (Friday). The gym was on the 2<sup>nd</sup> floor but there was an elevator and it was also possible to use the gym lobby and the male and female changing rooms. There were bathing facilities and a kitchen on the same floor. Following that, during the approximately six months up to March 25<sup>th</sup>, they ended up living in this Centre. When the heating was turned on in December,

humidity in the gym became 30% and member of staff suffered from sore throat. Figures 9 to 14 show facilities at the Centre.

It was quite difficult to predict how many days it takes to restore the facilities. It was predicted three months soon after the flooding and then nine months in late October and again six months in December. As the time taken for restoration was shortened, it was not complete restoration and it was defined as temporary restoration until we could move to a safe place so only the bare minimum of organization was done. We used what we could repair and kept the purchase of new items to a minimum. We could not predict what was going to happen with the period for the loan of the gymnasium being extended to the end of November, the end of December and then the end of March.

Twelve of the 35 group home users were able to use for free the building where Azemichi, a day service for the elderly held in the centre of the city, after it was abolished and from 17<sup>th</sup> October to 22<sup>nd</sup> March, two full-time staff were always on duty there. This was offered because it was an organization operated by former city council member, Mr Kurashima, a Keyaki no Sato trustee. we had to get additional fire insurance for Azemichi, because the installation of sprinklers is compulsory in group homes where people with severe disabilities live but the day service space did not meet these standards.

#### **(4) Securing long-term evacuation destinations**

Each facility of Keyaki no Sato has created an evacuation secure plan according to the government format to protect life and has implemented evacuation drills but planning for long-term evacuation once the building had flooded was not sufficient. Evacuation drills were implemented around twice a year at the first evacuation destination, the city-designated evacuation centre, former Naguwashi Community Centre (Naguwashi Junior High School). After the flooding in 1999, when the garden was submerged during a summer typhoon, we lifted the tatami mats in the living space, moved everyone to the former Naguwashi Community Centre, stayed one night and then came back the next day. We have to leave there in the morning because there were reservations for the conference room where we stayed.

There were two issues at the evacuation destination. The first issue was that the designated evacuation destination was moved to the 4<sup>th</sup> floor of the former Naguwashi Community Centre. Of the Hatsukari no Ie residents, three were wheelchair users but as there was no elevator at the community centre, it was not possible for them to get to the 4<sup>th</sup> floor. Evacuation drills included going to the building but no one had stayed there recently. We did not evacuate there even in typhoons and we did not have an understanding of the changes in circumstances inside the evacuation centre.

The second issue was that they had to move after evacuation because the centre was designated as having bad sanitary conditions according to a Japan Red Cross Society inspection. Because there was no elevator, we were offered the 1<sup>st</sup> floor of the former Naguwashi Community Centre which was

usually used for cleaning historical remains, such as earthenware, but as it was dusty, it was predicted that it would be judged as having bad sanitary conditions. The Community Centre didn't have any bathing facilities either so it was not suitable as a long-term evacuation centre.

One point that requires reflection is that long-term evacuation did not feature in the evacuation plan. As a result, we had to look for a place where 40 residents of the residential facility and 35 residents of group homes could live as well as a place to do their daily activities for additionally 20 day users after the disaster. It is well-known that it is often difficult for people with autism to use ordinary evacuation centres or temporary housing. It is necessary to evacuate with people with whom they have built a trusting relationship. We learned from the experience of the disaster that residential facilities have to secure evacuation destinations that can stand up to long-term evacuation on an everyday basis. We started to investigate long-term evacuation destinations immediately after the disaster happened and we hoped to build a temporary welfare facility or renovate a disused school as a temporary welfare facility but neither of these came to fruition.



Fig.9 Left: Beddings, Right: Partitions at the gymnasium.



Fig.10 We gradually organised rest space and work space in the gym. There was no TV antenna, so we showed recordings of programmes instead.



Fig.11 We did not just sleep in the gym. We also did our daily exercise there. Left: We hung Christmas decorations where evacuees with autism couldn't be reached and then strolled around looking at them. Right: Balance balls.



Fig.12 Bathrooms: entrance for men and women (left), and inside of the bathroom.



Fig.13 Left: A kitchen, Right: Using the gym lobby as a dining room (Christmas lunch)



Fig.14 Left: The locker room was used as a staffroom and storeroom. Right: Collecting laundry

#### 4. External support

There was an extremely high number of decisions and responses that had to be made by the corporation and we regret that we did not think about long-term evacuation in advance. On the other hand, we had a lot of external support for restoration.

##### (1) Public support

First of all, we had public support. When there was something we needed, our first port of call was Kawagoe City Disability Welfare Section. When the disaster occurred, the Disability Welfare Section of the city arranged an evacuation center and send a rescue with a coordination of Risk Management Section. In the early morning of the 13<sup>th</sup>, 23 residents and 9 staff were rescued in a fire service boat and were transported to the evacuation center in city hall cars. We went from place to place four times but, at the gym of Kawagoe City General Welfare Centre, we gained additional two building management night-shift workers during our stay.

At the gym, we received bedding from the Japan Red Cross as well as cardboard beds from Kawagoe City. However, as we had a resident with pica who ate cardboard, we could not use the cardboard beds. Someone provided use with camp beds with covers but as we had residents who broke them, these were used for night-shift staff to take naps in the staff room. As wheelchair users developed pressure sores three days after the disaster, the city provided us with one wooden bed that the residents could not move themselves.

In addition, we received support with organising equipment, goods and human support during our stay at the gym from the Kawagoe City Social Welfare Centre and Saitama Social Welfare Council. Kawagoe City Social Welfare Council operates the Welfare Centre and the Saitama Social Welfare Council runs the Saitama Prefectural DWAT (Disaster Welfare Assistance Team).

However, as life in the gym was regarded as a temporary facility move rather than evacuation, the corporation had to supply basic necessities such as meals. At the time, we were buying lunch boxes and bread but, from the end of December, we were able to use the kitchen on the same floor and, on

the last day of January, the corporation bought a freezer.

When staff who were providing support at the gymnasium worried about the employment continuity and stable payment, a public health nurse was dispatched. There was a total of 8 visits for groupwork and individual sessions from the 11th November to the end of March.

On 1<sup>st</sup> February, partitions (Alpha panel, W900xH2100) were installed in the gym according to our wishes. Boards were stuck together with strong magnets and each section was large enough to lay down three futons. At the beginning, they made around six sections for two futons but we requested expansion and this was increased to 10 sections for three futons on 16<sup>th</sup> February. This secured sleeping space for 20 people with two people per section and it was possible to accommodate some evacuees who had stayed home and those who had been moved to other facilities.

There was public support for the corporation but there was no system of public support for individual residents who had lost all their possessions. However, contributions were distributed through the City Hall, each resident received 780,000 yen in four payments from March to August, 2020.

For disaster restoration of facility buildings, we received also support from the City Hall with our application for the Social Welfare Facilities Disaster Restoration Costs government subsidy. Although it was possible to use Treasury subsidies or five sixths of the costs for facilities, Treasury subsidies for equipment had the limit. After the Hokkaido Eastern Iburi Earthquake of 2018, each facility is allowed to use the limit. From the supplementary budget, we proposed additional support in March 2020.



Fig 15 Left: The first author the day after the typhoon. The white building on the right is the residential facility and the brown building on the left is the consulting support office. Right: Bulldozer removing the straw.

Before the Disaster Volunteer Centre began services, the Saitama Prefecture Developmental Disorder Welfare Association recruited recovery volunteers from the staff of facilities for persons with disabilities. From October 17 to 23, we received support from almost 219 volunteers including students from Saitama Prefectural University, Japan College of Social Work and Nippon Institute of Technology. After that, staff worked on the clean-up and by one month and half after the disaster at the end of November, the work of getting rid of all the rubbish was completed through human effort. Compared to 1999 when we were inundated above floor level and it took three days to get rid of all the rubbish, the damage this time was much greater.

In addition, through Kawagoe City Hall, Kaercher Japan washed the mud from the walls of the facilities that had been flooded with a high-powered hose. Fast Retailing provided clothes and Food Bank provided meals to those who were staying in the gym.

Just as we returned to the restored Hatsukari no Ie in April, the state of emergency for COVID-19 was announced and volunteers from outside were not allowed to enter and day users had to stay at home until the 16<sup>th</sup> of June. From the 17<sup>th</sup> of June, cleaning of important documents that had been water damaged began through the Kawagoe City Volunteer Centre and with the cooperation of the Recovery Volunteer Team ReVA (Ageo City) and Tenrikyo Disaster Relief Hinokishin Corps.





Fig.16 Disaster volunteers bringing water damaged household items out into the Hatsukari no Ie car park.



Fig.17 Cleaning documents

## (2) Supplys

Thirdly, we got support in the shape of goods from many organizations and individuals. We received clothing from Uniqlo in one week after the disaster. There wasn't enough for everyone but parents and other related people gave us underwear so we managed, more or less, to clothe everyone. As we had evacuated without taking changes of clothes, staff members purchased clothes for evacuees on the next day of typhoon. We also needed to wash clothes immediately and we used washing machines

at a facility for disabled persons in the city. From the middle of December onwards, we were able to ask staff from a facility for the elderly which had also been affected to do the washing.

Due to changes of environment, sanitary products, underwear and non-essential grocery items that were even more essential than before were donated by individuals who visited as support workers through the Saitama Prefectural Social Workers' Association, etc. We were introduced to Amazon Support Goods Matching and Smart Supply (<http://smart-supply.com>) with the information from NPO Peace Boat in November through an acquaintance who had heard about our lack of clothing. However, it had registered the Smart Supply system at the beginning of March because staff members did not have the time to research how to do it so volunteers helped.

Association for Aid and Relief Japan provided us with a total of five sixths of the financial support we needed, because the government did not cover for household items such as special-order desks that users cannot move. For five sixths of the costs of restoration of facilities and equipment, it was possible to use Treasury subsidies but Treasury subsidies for equipment had an upper limit and the assistance did not cover the total cost of the damage. We had to give up on restoring the bakery and equipment and supplies with the high costs that would be used in the work building because the governmental assistance did not cover the total cost of the damage.

The five vehicles we had moved to a nearby car park that had never flooded had sustained flood damage or had been stolen. Orix Miyauchi Zaidan (Public Interest Incorporated Foundation) provided us with one vehicle.

#### **(4) Support from auxiliary personnel**

Fourthly, we received support from auxiliary personnel for the residents who were evacuated to the Kawagoe City General Welfare Centre. From 19<sup>th</sup> October to 20<sup>th</sup> November, around 3 team members a day (total 206 team members) were dispatched from Saitama Prefectural DWAT (Disaster Welfare Assistance Team). In addition, we received support with organising equipment, goods and human support during our stay at the gym from the Kawagoe City Social Welfare Centre which operates the Comprehensive Welfare Centre and the Saitama Social Welfare Council which runs the Saitama Prefectural DWAT.

On the weekends from 30<sup>th</sup> November to 29<sup>th</sup> December, we received support workers from Arakawa Council of Social Welfare. Furthermore, the Japan Organization of Clinical Development Psychologists provided relaxation with balance balls and recreation with residents every Tuesday. At the end of the year, the staff greatly appreciated the sessions they had with a chiropractor, Mr. Takehide Hanada (Sports chiropractic, Felio).

The Japan Consulting Support Specialist Council and its Saitama branch helped to conduct home visit surveys to ask about the needs of residents who evacuated home. The association also coordinated to use community welfare services during the period of their home stay.



Fig. 18 left: Opportunity for recreation with the help of volunteers, Right: Provision of chiropractic therapy to staff

##### **(5) Supports by experienced persons**

Fifthly, assistance from people with experience of disasters was really valuable depending on timing. We asked Keiichi Kikumoto from the Social Welfare Council of Tsurugashima City, next to Kawagoe City, and Yayoi Kitamura, a researcher at National Rehabilitation Center for Persons with Disabilities to help with the overall direction of organising. This was because we knew they have experience of supporting people with disabilities since the Great East Japan Earthquake. Dr. Kitamura gave us a variety of information. Mr. Kikumoto taught us that if there were goods that we required, we should immediately tell Kawagoe City and that we should use the Disaster Relief Law to purchase them. Even so, we were hesitant about what it was best to ask for. On the third day after the disaster, when one of our residents with a wheel chair developed the early symptoms of pressure sores, Mr. Kikumoto proposed asking for beds to be supplied and accompanied us when we went to City Hall.

We held a gathering for discussion for managerial staff as psychological support with a professor of psychology, Asami Maekawa who has experience of support for disaster in the second half of December. Up until then, some staff members had totally four minor traffic accidents during work duties and staff had subjective symptoms such as impaired vision. In January, several managerial staff members took time off with colds. The professor of psychology heard about the situation from managerial staff and provided the following information: 1) there is no need to rest for a long time so take short breaks during the day, 2) use a closed-off place where other people cannot see you for breaks, 3) it is good to spend time for themselves such as reading or listening to music, 4) the number of people who left their support jobs due to exhaustion a year after the Great East Japan Earthquake increased, and 5) experiences that work together among staff are also important. At the beginning of December, the executive staff organised a thank you party for all the staff and their families. In January, several executive staff members took time off with colds.



Fig.19 Meeting between managerial staff and official psychologist

Information from damaged social welfare corporations by previous disasters was helpful when we were planning restoration. Through an introduction from an acquaintance, the corporation received information by e-mail and phone about the public support that damaged facilities had and had not received from Shoshinkai in Ishinomaki City which was damaged by the Great East Japan Earthquake and information about equipment and items that are provided to temporary welfare housing from Atsuma Welfare Council that was damaged in the Hokkaido Eastern Iburi Earthquake.

#### **(6) Donations and contributions**

We received contributions and donations totalling around 30 million yen from the Autism Society Japan, the Japanese Association of Autism Support, the Japan Association on Intellectual Disabilities, the Nippon Signal Co., Ltd. as well as from individuals and other groups.

### **5. Restoration / recovery policy: moving and temporary emergency welfare facilities**

Policy decisions on restoration and recovery continued to worry corporation executive staff until the end of December. Thinking about the recent increase in scale of typhoons and the two experiences of large-scale flooding at the residential facility, it was clear that restoring the residential facility on the same site did not guarantee the safety of residents. However, it was difficult to decide whether restoring the facility on-site, moving to a new site, building temporary welfare housing or renovating an unused facility until the move. We have many regrets regarding our lack of Business Continuity Plan and Recovery Plan.

#### **(1) Procedures of governmental fund for recovery**

Considering restoration and moving at the same time is extremely difficult funds-wise. There was no time to hesitate in examining whether to restore or move; we had to get on with the procedures for

restoration even though we wanted to move to higher ground. The reason for this was that the deadline for the application for government restoration funds was the second week after the disaster. The application deadline to national government for equipment and furniture was 23<sup>rd</sup> October and that for facility restoration works was 31<sup>st</sup> October (extended to 15<sup>th</sup> November). The quote for costs and time schedule for restoration of the affected facilities was ready on 29<sup>th</sup> October; the schedule was 9 months, total costs for construction and repairs was 960 million yen and equipment restoration costs were 150 million yen. The Disaster Relief Act enforces grants (Treasury or City) as social welfare facility disaster recovery costs to cover three quarters of total recovery works costs while the remaining quarter is to be covered by the corporation. The corporation was responsible for one sixth of the costs as it was later designated as an extreme disaster according to the Large-scale Disaster Recovery Law.

## **(2) Difficulties on moving**

We decided as a corporation that it was difficult to achieve the obligation of securing a safe and secure life for residents on the same land. However, there were several issues that could not be resolved with respect to moving such as a site, capital, living base until moving and continuing operations. Because we require funds of between 700 million to a billion yen for moving, we need Treasury. In order to receive Treasury aid, we need to apply in the May of the year following the disaster. Moreover, when obtaining Treasury aid for moving, a disaster is not a special reason and there was no guarantee that supply would be determined in the applicable financial year. At the end of November 2019, there was some light at the end of the tunnel with a leased land in the city. However, we were not able to manage the fund for moving and for restoring at the same time.

## **(3) A temporary welfare housing**

As a method of making moving possible, we made request to build a temporary welfare housing to the City, totally 7 times from October 15<sup>th</sup> to November 21<sup>th</sup>. Because we did not get a positive answer from the city, we visited Cabinet Office in early November. After asking Cabinet Office at the middle of November, Kawagoe city, Saitama Prefecture and the Cabinet Office began working together on this issue. With the reason of ‘the City cannot make the decision alone so discussions are in progress with the Prefecture and the national government’, the answer from the relevant departments at the City was always, ‘the only possible way of achieving the request is 50-50.’ Two temporary welfare housings were constructed for the first time in Atsumacho after the 2018 Hokkaido Eastern Iburi Earthquake. In general, emergency temporary housing was built by the Prefecture on land provided by the City. These were standard one- and two-bedroom apartments for households, however severely autistic people are not able to stay alone in apartments, but require a similar style of housing for with assistance by provided support workers. They did not only need a living space but also a place to do their daily activities.

At the end of November, while the City and the Prefecture were making enquiries with Hokkaido, the construction of emergency temporary welfare housing as the first model in Saitama prefecture was made possible. However, this came with difficult conditions. The first condition was to prepare land by the affected corporation for the facilities where residents move from temporary welfare housing. The second condition was to submit a pledge to organize a moving destination by the end of the two years and three months usage limit for temporary housing. The third condition was that the 19 people who evacuated home before the disaster were not eligible for emergency housing. As mentioned above, there was no guarantee that Treasury aid would be determined in the following year to achieve the second condition. As there was a time limit, we had to give up on moving into the temporary welfare facilities. The third condition was withdrawn on December 5<sup>th</sup> by Cabinet Office, but we heard it from the city on December 13<sup>th</sup>. We judged that it would be difficult to fulfil the 2<sup>nd</sup> and 3<sup>rd</sup> conditions and we asked a restoration company to start work on the 4<sup>th</sup> of December.

On the other hand, the special nursing home for the elderly (80 residents) that was affected in the same city by Typhoon Hagibis decided to move into temporary welfare housing installed by the Prefecture from April 2020. The land for the facility was the grounds of an disused elementary school where Keyakii no sato asked to use to the city on the 23<sup>th</sup> of October. However, the number of disaster victims eligible to move into emergency temporary welfare house was limited and there was the restriction of not being able to fill the vacancy if a resident were to pass away. When designing facilities and selecting equipment, the staff of the special nursing home for the elderly was not consulted until the last stage.

#### **(4) Long-term evacuation site**

We also looked for places that could replace temporary welfare housings. One week after the flood, with the cooperation of city and prefectural council members, we considered renovating disused hotels or Japanese inns, a disused elementary school and a disused day care centre for the elderly to try to secure both living space and space for daily activities. However, it was not possible to get licensing by the end of December.

Soon after the flood, we had a proposal for construction of temporary welfare housing from a private construction company, we could not take it because we heard that there were some limitations on privately built temporary housings. In the Great East Japan Earthquake, wooden temporary welfare housing was built for individuals with disabilities through financial assistance from the Nippon Foundation. However, reflecting on that time, not being able to receive public support for equipment such as negotiations to install six electrical appliances provided by the Japan Red Cross in the temporary housing and restrictions such as not being able to receive public support for dismantling costs were abandoned. The future issue is to assemble support from multiple private organizations to build temporary welfare housing, including equipment which is offered to public temporary housing

and cost for dismantling.

## **6. Transfer of Residents**

Although the affected corporation requested that an evacuation location was secured as a group, multiple public institutions and organizations for persons with disabilities recommended that the residents should be split up and moved to different facilities. This method was used at a special nursing home for the elderly that was damaged at the same time. Seventeen facilities for elderly had already arrived to the evacuation centre to pick up evacuees of affected facilities for elderly on the day they were rescued. Saitama Prefecture Developmental Disorder Welfare Association adjusted the number of evacuees that it was possible to house in places such as affiliated facilities that support persons with disabilities and respite care facilities. The idea of dispatching and paying staff at the facilities to which the residents with autism moved was also proposed, but scattering the staff was a difficult decision. This was another painful reminder of the necessity of having a business continuity plan. One of service providers advised elaborating a resident transferral plan with a group of 5-10 residents with accompanied with one or two staff members for at least initial 3 days. However, none of the 21 transferred residents appeared to be candidates for this proposal at the time.

The corporation decided to split the residents up and move them at the beginning of December, because there was a quote that it would take 9 months to complete restoration works and because there was no progress with temporary welfare housings or long-term residential facilities. However, moving did not progress easily, as the corporation expected. Even if we had provided 71 people with residential places on the 21th of November (90 people at the beginning of December), there were only one parents who consented to these moves. Rather than moving to another facility, there were parents and guardians who chose 1) for the resident to stay at home, only going to the gym where residents were living during the day or 2) for the resident to make short stays at the gym. Many of the residents were over 50 years old and many of the parents and guardians were over 70 years old and living alone. As the residents had severe intellectual disabilities or autism and as most of them had severe behavioural disorders, it was estimated that long-term evacuation at home would put both physical and mental burden on the parents and guardians. After adjustment, the highest number of people to be moved was 21. It was not easy to decide whether to move the residents with less severe disabilities who would easily get used to life in the new place or to move the residents with more severe disabilities who were having difficulties with life in the gym. There were some cases in which the new place did not suit the person, some in which the person caused issues and came back after one day and cases in which the corporation had to use its insurance to cover damages to property at the new place.

The concern on splitting up the residents was the decrease in operation costs. Operation costs for facilities that support persons with disabilities are calculated on a daily basis. If the residents had been moved to other facilities, income to the disaster-affected corporation would have been only that

corresponding to the number of people who had stayed at the General Welfare Centre. Income of the corporation from the six months of evacuation was 40% of normal income. Just under 80% of operation costs went on paying salaries but even through there was no support work for the staff, we could not reduce their working hours. Work such as facility restoration, contact and adjustment with related organizations and families and creating complex documents for submission increased after the disaster. In November, we communicated our wishes to our member of parliament but the only month that we were able to request the budget for operation costs equivalent to the previous three months. This point has been repeatedly brought up by affected facilities since the Great East Japan Earthquake. Only basic remuneration operation costs were covered by the government, when the support by the welfare corporation to evacuees who had stayed home was authorized.

Workplaces that we had been leasing outside were reopened on November 5th. We leased another place for implemented daily activities until 25<sup>th</sup> of November, once power and water supply had been restored to the affected areas. We also leased the other places for daily activities for group home users and day service users. The residents from the 2<sup>nd</sup> floor of the group home went back to the cleaned home on December 16<sup>th</sup>.

The number of residents requiring support decreased but as they were in an environment which was not satisfactorily organised, it was not possible to reduce the number of people supporting them in accordance with this. We also provided support patrols for residents who has been split up. In addition, the staff spent more time than usual on work that they were not used to doing in order to get back to normal. Another issue is the communication between staff members working on restoring and staff members supporting users. Financial advice from the government said that it was preferable to guarantee two months of operation costs but we earnestly hope for measures to pay staff wages in cases in which it is estimated that residents will have to be moved from more than two months.

## **7. Lessons learned: New model for local evacuation centre for residential facilities for persons with disabilities.**

The lessons learned by Keyaki no Sato from the damage caused by Typhoon Hagibis were as follows. We present them here as we imagine that other facilities located in places that have a high risk for flooding might have the similar issue. That is creating a specific evacuation plan (or business continuity plan) or a restoration plan. The corporation began preparing for the next typhoon season. With this disaster, we really experienced that it is difficult for a Social Welfare Corporation to create an evacuation plan for residential facilities for persons with disabilities as prescribed by law without help. In particular, if evacuation is going to be long term, it is essential to have the cooperation of the administration such as public funds and private sectors to secure an evacuation destination which should be prepared on a regular basis.

Firstly, an evacuation plan requires a place where people with disabilities can stay long-term in a



group for at least two months, when there is a danger of long-term submergence. This is because it took two months to get a handle on the recovery plan. It is preferable that it is within an area in which it is possible for staff to commute. This was because the multiple proposals we received to move the group as a whole were either outside of the city or outside of the prefecture and staff could not commute from their homes.

Secondly, in preparation for evacuation to the closest designated evacuation centre when a disaster occurs, it is recommended to communicate with local residents on a regular basis to establish understanding about the facilities and disabilities so that we can co-exist in evacuation centres or public facilities. In Kawagoe City, as there were limited places with a high risk of disasters, most residents were not affected and wanted to use the hall to which we had evacuated the day after the disaster because they had reserved it for a dance presentation. On the other hand, many community centers in the other cities closed the day after the disaster, because most areas of the cities were damaged. We hope to use local designated evacuation centres or public facilities for several days by cultivating understanding of local residents on an everyday basis about persons with disabilities.

Thirdly, it is recommended to discuss on temporary welfare housings with the local government in advance so that are installed promptly rather than general temporary emergency housing. It is preferable to prepare a space that it is possible to evacuate to as a group on a daily basis. For example, preparing the site for temporarily welfare housings or re-using a disused elementary school. The school has multiple classrooms of a suitable size, optimal for reconstruction as residential facility units. Individual units for five or six people can be created in one classroom using partitions to separate them. If there are desks and chairs, the foundations of a work space for people with autism can be created. It can be used as a work space (living care work, etc.) for the daily activities of facility residents on a regular basis. As there are multiple classrooms, we can recreate the same work spaces in 5 – 10 rooms. It could also be opened to the general public as a space for individual offices or recreational activities for the elderly and children. We could prepare simple beds and food stores to make it possible to stay overnight. It would be good if there as a shower but there are also methods such as building temporary showers after a disaster has occurred or using container trucks.

We are interested in operating the facility according to the Designated Manager System. Cleaning and keeping supplies are employment opportunities for corporation users. School grounds are used for gatherings of local residents.

Fourthly, if it is not possible to organize group evacuation, it is necessary to look at guaranteeing operation costs if residents are moved to other facilities.

Fifthly, considering the prevention of contagion such as through COVID-19, there is merit in investigating evacuation of corporation users and staff in small numbers to ordinary families in the city, particularly to houses where elderly people live alone or live with their spouses. By having users help at such houses with the garden or shopping on a regular basis, users and local residents will get

to know each other. This will be another option to put in an individual evacuation plan.



Fig.20 Image of work space partitioned into classrooms. (Reproduced with permission from ‘Common Space Nakatsu’)

## **Chapter 3 Good practices on Disaster Preparedness for Persons with Disabilities**

### **Section 1 An Example of Disaster Preparedness at a Special Education High School: Initiatives at Onagawa Special Education High School using the experience of the Great East Japan Earthquake**

Hideyuki Mori

Koichi Sato, former Deputy Head Teacher,  
Miyagi Prefectural Onagawa Special Education High School

This manuscript is a re-composition of lecture records from 20<sup>th</sup> December 2018 (Disaster Prevention Study Meeting, Research Institute, National Rehabilitation Center for Persons with Disabilities) and 19<sup>th</sup> February 2019 (Workshop for Disability-inclusive Risk Reduction at Special Elementary Schools, Ministry of Education, Chiang Mai, Thailand).

#### **1. Introduction**

Onagawa town in Miyagi Prefecture suffered extensive damage and losses in the 2011 Great East Japan Earthquake (M9). Maximum tsunami height was 14.8m, maximum run-up height was 34.7m and there were 824 deaths in a population of 10,000 (mortality rate: 8.24%). Five years later, in April 2016, Miyagi Prefectural Onagawa Special Education High School opened on elevated ground in Onagawa town (Figure 1). It was the first 3-year all-boarding Special Education High School in Miyagi Prefecture and students with mild intellectual disabilities attend. Twenty-four students are selected from candidates using a selection examination. The ratio of applicants to places is 1.5 in an average year and students come from all over the prefecture. Students are accepted after taking academic ability tests in Japanese and mathematics as well as task and exercise tests, so they have the ability to follow all instructions and guidance and act accordingly. However, student abilities in understanding, judgement and behaviour are all different.

Students aim to get jobs after graduation and learn specialist subjects. These include nursing care, food production and cleaning or service in hotels or restaurants. (Figures 2, 3 and 4). All students from 1<sup>st</sup> years to 3<sup>rd</sup> years do work experience in June and October every year. Through repeated work experience, the company also gets an understanding of the students and this links to them getting a job after graduation.

As well as learning the necessary life skills for working, the three-year boarding system aims to teach students skills so that they can live without depending on their parents. There are even students who live independently without their parents after graduation. In addition, through communal life with other students, they learn practical ways to forge relationships with other people. This report contains

information on Comprehensive Disaster Preparedness Drills at Onagawa Special Education High School, in particular, the Evacuation Centre Operation Drill (Onagawa Version). The Evacuation Centre Operation Drill was adapted from the Evacuation Centre Operation Game (HUG: Hinanjo Unei Game, Japanese).



Fig. 1. Miyagi Prefectural Onagawa Special Education High School. Top right: Onagawa Port



Fig.2 Nursing care work experience



Fig.3 Food production work experience



Fig.4 Service work experience

## **2. Overall structure of the Comprehensive Disaster Preparedness Drill**

At Onagawa Special Education High School, disaster preparedness activities are planned based on the status of the students and have the goal of giving them roles and a sense of responsibility. The six groups of the dormitory council each perform a Comprehensive Disaster Preparedness Drill by staying one night in the gym in September as a culmination of regular monthly activities as an autonomous disaster preparedness system. In the Comprehensive Disaster Preparedness Drill, students are responsible for running the programme. The students' sense of responsibility is cultivated through the pressure of having to teach someone else what to do.

The six groups are the general affairs group, the information group, the environmental improvement group, the safety inspection group, the rescue group and the food and water supply group. The general affairs group is in charge of the Evacuation Centre Operation Drill as well as the operation of the overall system. The information group is in charge of recording the activities of each group using iPads that are usually used in class. The environmental improvement group is in charge of cleaning and educational activities. The safety inspection group makes regular safety inspections and the rescue group manages first aid equipment. The food and water supply group is responsible for cooking and food distribution drills as well as managing stockpiles and dining hall cleaning. We also keep participation in the community through disaster preparedness activities after graduation in mind.

The premise for the Comprehensive Disaster Preparedness Drill is that there has been a major earthquake followed by the issue of a major tsunami warning and it difficult for people to go home. The gym becomes evacuation centre and local residents who have evacuated spend the night there.

Table 1 shows the Comprehensive Disaster Preparedness Drill schedule and explains the following overview.

- 1) Evacuation drill: This drill has the students protect themselves under their desks when a major earthquake strikes during class. Then the classes line up and go to the evacuation point. (Figures 5 and 6)
- 2) Rescue drill: This drill has four injured or sick people (heat stroke, high fever, arm injury, leg injury). The group has to discuss the cases and treat them. (Figure 7)
- 3) Evacuation Centre Operation Drill: Students learn the necessity of helping each other in a crowded and confused evacuation centre.
- 4) Evacuation centre environmental improvement: Partitions are erected in the evacuation centre. (Figures 8 and 9)
- 5) Food cooking and distribution drill: With the cooperation of the local women's association, the students learn how to cook and provide meals and etiquette when receiving food distribution. In addition, the students listen to local residents talking about their experience as a leader of one of evacuation centres at the Great East Japan Earthquake. (Figures 10 and 11)

6) Patrol drill: While checking the safety of the school buildings that have been plunged into darkness, the students revise the contents of the drill on the day. (Figures 12 and 13)

7) Review: After spending the night in the gym, this is conducted the next morning in classrooms. (Figure 14)



Fig. 5 Evacuation drill: Hide under desk and protect body from falling objects directly after the earthquake



Fig. 6 Evacuation drill: Check if it is safe and move to the the gym.



Fig. 7 Rescue drill



Fig. 8 Environmental improvement of the evacuation centre: making partitions with cardboard



Fig. 9 Environmental improvement of the evacuation centre: installing partitions with cardboard



Fig. 10 Food distribution drill: distribution



Fig. 11 Food distribution drill: Making tonjiru soup



Fig. 12: Patrol drill: Night-time safety check



Fig. 13 Patrol drill: Night-time rescue



Fig. 14 Review (2<sup>nd</sup> day / classroom)

Table 1 Comprehensive Disaster Preparedness Drill Schedule

<b>&lt;Day 1&gt;</b>		
<b>Time</b>	<b>Activity Details</b>	<b>Remarks</b>
13:10~ 13:25	1) SHR	Each class unit
13:30~	2) Evacuation drill	Whole school unit

13:50	<b>Premise: Major earthquake/tsunami warning issued</b>	
14:00~ 15:00	3) <b>Opening ceremony (general affairs group)</b> (Provisional) <b>Rescue drill (rescue group)</b>	<b>Council units</b> <b>(Vertical split)</b>
15:00~ 15:20	4) <b>Evacuation Centre Operation Drill: Preparation / break</b>	
15:20~ 17:30	5) (Provisional) <b>Evacuation Centre Operation Drill (general</b> 6) (Provisional) <b>Food distribution drill (food and water supply</b> 7) (Provisional) <b>Listening to the experience of disaster victims</b>	<b>Ensure breaks during</b> <b>activities</b>
17:30~	8) <b>Dinner / bath (boys: training building/girls: white building</b> <b>Prepare for bed</b>	
20:00~	9) <b>Stay overnight in the evacuation centre (general affairs</b> 10) (Provisional) <b>Make/install partitions</b> 11) (Provisional) <b>Patrol drill (safety inspection group)</b>	
21:00 21:35~	12) <b>Roll call ~bed</b> <b>Group leader meeting</b>	

**<Day 2>**

<b>Time</b>	<b>Activity Details</b>	<b>Remarks</b>
6 : 30	13) <b>Get up / get ready</b> <b>Tidy up belongings</b>	
7:00	14) <b>Morning meeting (general affairs group)</b> <b>Put belongings away, change into uniform</b>	
7:30	15) <b>Breakfast (food and water supply group)</b>	<b>Disaster preparedness</b>
8:20	<b>Go to school</b>	
8:45	<b>HR</b>	
9:00	16) <b>Tidy up, cleaning (environmental improvement group)</b>	
9:25	17) <b>Closing meeting (general affairs group)</b>	

Students follow the instructions of teachers for the evacuation drill and review. For the other drills, the group members who are in charge of the drill play the role of those provide support or lead and the other students and the teachers play the role of the evacuees.

### **3. Evacuation Centre Operation Drill Concept**

The Evacuation Centre Operation Drill has been implemented since the 1<sup>st</sup> Comprehensive Disaster Preparedness Drill (September, 2018). HUG, which was used as a reference for drill planning, is a Disaster Imagination Game that is performed in groups and was developed by Shizuoka Prefecture. It reproduces the feel of an evacuation centre at the time of a disaster and is useful for making preparations. That is why it has won several prizes. With HUG, group members become evacuation centre operators. Using a mock evacuation centre (elementary school) layout, operators have an hour to place the evacuees represented by 206 cards including 85 cards of evacuees with disabilities and response to 45 different events. For example, they think about situations such as if one member of an evacuated household is a wheelchair user, should the family be placed in the gym or in a classroom close to the accessible toilet. Or, in response to a card that says, 'Five portable toilets will be delivered tomorrow. Decide where they should be installed,' the operators have to look at a map of the school



grounds, fill in the location for installation and display a notice on the notice board to say that five portable toilets will be installed the next day.

The major features of HUG are that there are no answers and that participants have to imagine hypothetical situations. These two tenets were predicted to be very difficult for the students with intellectual disabilities. This is because it is difficult to think about issues in an abstract setting. In addition, they are required to express their opinions and adjust to differing opinions in a game played by several people and it was predicted that students who have difficulty with communication would become uninvolved onlookers.

The reason why HUG was incorporated into the drill all the same was because we considered that it was necessary for the students to prepare for the following tasks.

- 1) Can you tell someone about your own situation at the time of a disaster?
- 2) Can you pay attention to the situation around you at the time of a disaster?

Most of the students would find these two tasks difficult to execute without preparation but if they do prepare in advance, they have sufficient skills to provide support at the time of a disaster in aspects such as physical strength, ability to take action and understand instructions. The two tasks require the skills to be someone who provides support as well as someone who needs support. In order to reproduce how hard it is to operate an evacuation centre in the confusion after a disaster and the main themes of HUG that creates the experience of how difficult it is to decide what is best, the Evacuation Centre Operation Drill adopts a roleplay format in which participants play specific roles such as the person or event that is written on the card.

Table 2 Comparison of HUG and the Evacuation Centre Operation Drill

	HUG	Evacuation Centre Operation Drill
Format	Disaster Imagination Game in groups	Roleplay game
No. of participants	Around 5 groups of 7	Around 35 people per reception desk
Setting	Hypothetical elementary school	Drill implementation venue
Evacuee residential area	Hypothetical town name	District numbers (District Direction in the English version)
Evacuee names	Disaster preparedness terms	District names within Onagawa town (Disability Terms in the English version)
Size of cards	Playing card size	Postcard size

#### 4. Evacuation Centre Operation Drill Schedule

A total of 136 people participated in the 2<sup>nd</sup> Evacuation Centre Operation Drill in September, 2019 (69 students with mild intellectual disabilities, 57 teachers and 10 neighbourhood association committee members). The drill took around 1 hour from introduction and the actual drill to exchanging opinions and reviewing.

### (1) Preparation

Procedure and the required equipment were prepared in advance. Using the HUG cards as a reference, we created cards like those shown in Figure 15 after selecting situations that could actually occur and adapting them to the number of evacuees.

The name of the residential area was not the hypothetical town name used in HUG; we only used the district numbers. In HUG, evacuee names are disaster preparedness terms (e.g. Mr Tsunami) but here we used district names within Onagawa town. In the English version shown in Figure 15 and Appendix 1, the name of the residential area is the number of the area, and the evacuee names are alphabet.

Cards were playing card-sized in HUG but we used postcard-sized cards in holders that can be hung around the neck so that both hands are free and both the person in question and others can easily check what is on the cards. We also made sure they were easy to handle and difficult to tear. If the cards are printed on photographic paper, it is thick and easy to handle. We inserted the review sheet (Figure 16) into the back of the card holder and asked participants to fill it in when they were exchanging opinions in groups; they were a good prompt for discussion. Review sheets were collected along with the cards at the end of the drill. Table 3 shows the results of review sheet tabulation. Although there are many people with disabilities in the general population who say that they do not want to go to an evacuation centre, only 11% of students responded that they did not want to go and most students responded that they thought that cooperation, kindness and peace of mind were important in the evacuation centre. Therefore, we believe that this drill was a success.

Table 3 Evacuation Centre Operation Drill Review Sheet Tabulation (No. collected: 108, collection rate: 79.4%)

1 How was your role in the drill?						
	Students		Teachers		External participants	
		%		%		%
Difficult	41	61.2	13	68.4	6	27.3
I played it well	26	38.8	6	31.6	16	72.7
Total	67	100.0	19	100.0	22	100.0
2 Picture an actual disaster. What would you do if a person playing this role was in front of you? (Choose as many answers as you like)						
Ignore them	9	13.4	1	5.3	0	0.0
Talk to them	37	55.2	12	63.2	8	36.4

Help them (I want to try to help them)	23	34.3	15	78.9	5	22.7
<b>3 Could you go to an evacuation centre during a disaster? (Choose as many answers as you like)</b>						
I don't want to go	8	11.9	1	5.3	1	4.5
I would go if it would save my life	29	43.3	15	78.9	4	18.2
I would take my family with me	32	47.8	12	63.2	9	40.9
<b>4 Choose three things that you think are important in the evacuation centre.</b>						
Cooperation	39	58.2	15	78.9	6	27.3
Kindness	35	52.2	13	68.4	7	31.8
Safety	27	40.3	13	68.4	3	13.6
Food	25	37.3	11	57.9	3	13.6
Conversation	23	34.3	7	36.8	7	31.8
Peace of mind	25	37.3	10	52.6	1	4.5
Privacy	11	16.4	6	31.6	3	13.6
Laughter	10	14.9	3	15.8	1	4.5
Space	11	16.4	2	10.5	0	0.0
Endurance	9	13.4	3	15.8	0	0.0
Money	9	13.4	0	0.0	0	0.0
Leadership	6	9.0	0	0.0	2	9.1

Appendix 1 shows the list of evacuee cards and events. It is possible to change some of the details on the card and increase the number of event details. By changing the settings according to the disaster risk of the area where the drill will be implemented and the particularities of the participants, the drill becomes more realistic and the degree of difficulty increases.

Evacuation Centre Operation Drill	
Household No, 4	Residential area 1
name <b>D</b>	
【male · <input type="checkbox"/> female】	72 years old
Head of household, wife Two children, (grand)mother	
The head of the household has died. The wife is falling apart. The children explain the family situation at the reception of the evacuation centre. The (grand)mother has dementia.	
Card No.14	2019© Hideyuki Mori

Fig. 15 One of cards of evacuees

Evacuation Centre Operation Drill Review Sheet				
Date: / /2020	Day:			
Year: Group: Name:				
1 How was your role in the drill?				
<input type="checkbox"/> Difficult				
<input type="checkbox"/> I played it well				
2 Picture an actual disaster. What would you do if a person playing this role was in front of you?				
<input type="checkbox"/> Ignore them				
<input type="checkbox"/> Talk to them				
<input type="checkbox"/> Help them (I want to try to help them)				
3 Could you go to an evacuation centre during a disaster?				
<input type="checkbox"/> I don't want to go				
<input type="checkbox"/> I would go if it would save my life				
<input type="checkbox"/> I would take my family with me				
4 Choose three things that you think are important in the evacuation centre. (Circle)				
Kindness	Laughter	Money	Food	
Conversation	Leadership	Space	Safety	Privacy
Cooperation	Endurance	Peace of mind		

Fig. 16 Review sheet

## (2) Introduction

First of all, the master of ceremonies explained the main points of the drill using slides. We checked the premise for the evacuation (Figure 17) and showed videos of what a disaster looks like (Figure 18) and disaster area and evacuation centre photos while sharing images of a potential disaster even for people who had never experienced life in an evacuation centre before. Then, they explained how to play the game.

Evacuation Centre Operation Drill
<Evacuation Premise>
•A major tsunami hits after a major earthquake
•Instructions to evacuate are given; people cannot go home
•Water and electricity supplies have stopped
↓
•People have come to the school on a hill as it seems like it could be an evacuation centre

Fig. 17 Check evacuation premise tsunami



Fig. 18 Images of the Great East Japan Earthquake

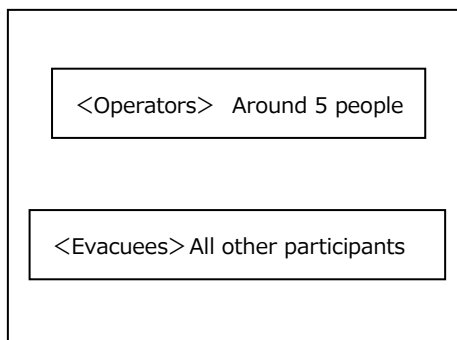


Fig. 19 Evacuation Centre Operation Drill roles

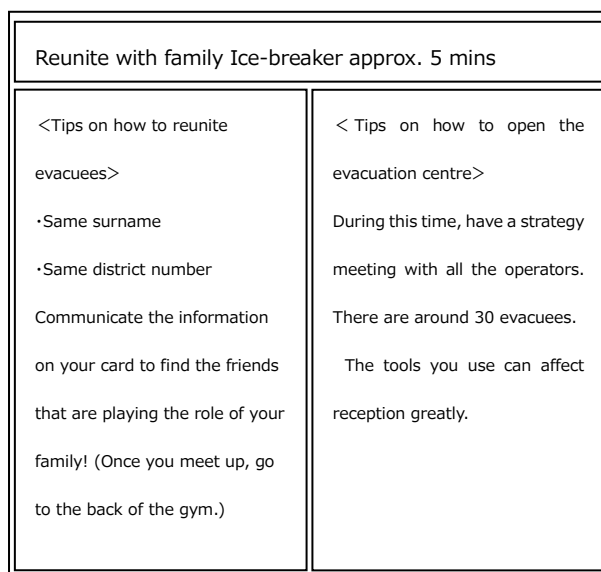


Fig. 20 Evacuation Centre Operation Drill ice-breaker

Five students and two teachers took operator roles and around 10 people took event roles. Other students and teachers played evacuees as described on the card they received (Figure 19). We prepared 10 events that occur at the time of a disaster. If there are not enough people to take the 10 event roles, we ask one person to play multiple events at reception. Appendix 1 shows the details of the cards.

### (3) The role of evacuees

Evacuee roles were distributed randomly between students and teachers.

1) Check the role on your card.

2) At the signal to start, look for your 'family'. (Figure 20)

- The set-up is that participants have to look for their family from whom they have become separated during the disaster.

- Using the card information (name and address) as a guide, they meet up with their family and once they have found everyone, they all sit together. The major earthquake that affected Onagawa town in 2011 occurred at 2:46pm so it took a while for family members to meet up because kids were at school and adults were at work. Many people experienced the anxiety and difficulty of finding their family after the earthquake had struck. The task of finding your family does not exist in HUG but we incorporated it into the Evacuation Centre Operation Drill.

3) Ice-breaker (5 mins)

- Check the roles on the cards within the family that has gathered.

- Think about how you will play your roles.

- Select the required equipment (wheelchair, white cane, etc.) and use them.

4) Once you hear the request for the evacuation centre to be opened (event card), the whole family goes to reception.

5) Explain the family's situation and requirements at reception.

- Keep the explanations real by making them easy to understand or difficult to understand.

6) After finishing at reception, think of what you can do as a family and be attentive to the other evacuees.

7) Once the event card showing reception closure has been read, go to the next stage.

#### **(4) The role of operators**

Students who are operators wear training bibs so they are easily distinguished. Operators do not know what information is on the evacuees' cards. They respond to the information that the evacuees give at reception. This is to make it closer to the actual situation in a disaster.

1) Ice-breaker (5 mins)

At the signal to start, operators discuss how to guide evacuees (Figure 20).

This is preparation for smooth guidance within limited evacuation space.

- Divide roles between assembled group members and organize and check the equipment required at reception.

- Decide how to subdivide the gym. This is so that evacuees can be placed in different divisions according to address, family situation, gender and disability.

2) Set up reception before the event card that says the evacuation centre will be opened is read.

- If there is a lot of people, set up multiple reception desks. At this school there were 14 operators and 110 evacuees so two reception desks were set up.

3) At reception, operators listen to the evacuees talking about their situations and give them instructions on an appropriate evacuation space or guide them to it.

- They respond taking injuries, disabilities, age and gender into account.

4) Once the event card showing reception closure has been read, go to the next stage.

#### **(5) Exchanging opinions within the group and presentations**

After reception has closed, each person fills in the review sheet. Using this as a reference, participants in each group (families, operators) review the drill and exchange their thoughts and opinions (what was good, what was difficult, questions, etc.). The master of ceremonies observes how the discussions are progressing, urges individuals and groups present their thoughts to the other and finds out whether the drill goals were achieved or not.



Fig. 21 Before reception opens (operators wear bibs)



Fig. 22 Just after reception opens (raising hands is the signal for the start of reception)



Fig. 23 Evacuees explaining their situation at reception (left)



Fig. 24 Evacuees queueing at reception

## (6) Revision

Finally, they revise what they learned from the drill. In Figures 25 and 26, the evacuation centre, which was confused at the beginning when the disaster struck, became organized as time went on. This was demonstrated with photos. We communicated the necessity of two things in order to make the evacuation centre more comfortable to live in as soon as possible. The first was how evacuees must explain their own needs at reception because evacuees with all kinds of need will be living in the evacuation centre. For example, wheelchair users need to communicate that they need a flat place with no steps and passage of 90cm in width. The second was the need to understand the person you are talking to and to have a spirit of compromise. For example, operators should think about organizing the evacuation centre so that they can create passages of 90cm in width and get other evacuees to help create them. We also stated that communication is adjusting to ‘what you know about yourself’ and ‘the situation of the person you are talking to’ and that communication works to overcome difficult situations. (Figure 27).

The schedule for the 1<sup>st</sup> Evacuation Centre Operation Drill was overseen by the initial author of the planning and preparation for the Drill (Figure 28). That was because it was the first time. Students took over for the 2<sup>nd</sup> Evacuation Centre Operation Drill. This was because the students themselves understood the purpose of the Evacuation Centre Operation Drill using the experience of the previous year and prior guidance and it was decided that they had learned the skills to take the lead.



Fig. 25 Evacuation centre after the Great East Japan Earthquake (initially)



Fig. 26 Changes in the evacuation centre after Great East Japan Earthquake (after 1 month)

Review

Things that are required at the evacuation centre

- ① Let yourself
- ② Know the others

⇒ Communication

⇒ Strength to overcome a difficult situation

Fig. 27 Things that are required at the evacuation centre



Fig. 28 Hideyuki Mori, author and master of ceremonies. The slide shows “Disaster Preparedness Drill 2018. Feel and send messages.”

## (7) Results of the Evacuation Centre Operation Drill

### 1) The Spread of Communication

During the first drill, the households that were assembled through the cards communicated well. However, at the evacuation centre reception, students were less positive and there was an increase in the number of students who depended on teachers to negotiate for them at reception. In addition, there was almost no conversation between households in the divided evacuation space. In contrast, during the second drill, reliance on teachers during negotiations at reception decreased and conversation between households was observed. We believe that this is because the students had accumulated experience and acted independently.

In actual evacuation centre operation, it is important that evacuees compromise and help each other. People who are thrust into a difficult situation due to a disaster need to consider the situations of other families, share tasks and solve issues. The teachers and those of the same generation experienced this in the Great East Japan Earthquake. The next challenge is to add events after placement in the



evacuation space, in order to accrue this kind of simulation.

## **2) Ability to communicate**

Some students realized that the information written on the card, for example, an evacuee particularity such as ‘I don’t cope well with the noise from babies’, required individual preparation and responded on the review sheet that they had learned the importance of communication. The Evacuation Centre Operation Drill introduced here progresses according to the hypothetical information written on the cards. Students must prepare themselves by working out what they can and can’t do themselves in preparation for a disaster that could come at any time. It is important for students to continue to learn the skills to communicate information about themselves through future drills. We would like to have the students learn the notion that it is natural to provide information about themselves. We will continue to improve the programme in the future.

## **5. Summary**

With this school’s Comprehensive Disaster Preparedness Drill, people learn to talk to each other and the process of forming a circle of mutual help through mutual understanding of feelings through experience. Being able to have this kind of experience during school education is considered to be an experience that can be used in life after graduation which is why we have continued to do these drills since the school opened.

In particular, during the Evacuation Centre Operation Drill, older students with more experience lead the younger students and we can see the growth and reliability of the students as they work towards smooth operation. Students who were in charge of the Evacuation Centre Operation Drill met before the day to predict the movements of evacuees using a whiteboard and, when discussing the movements of operators, the students worked autonomously to solve problems – it was a scene that made us feel like there are unlimited possibilities for growth.

In addition, on the day of the drill, we saw operators guiding evacuees with kinds words and evacuees encouraging each other to help after that. Furthermore, from that encouragement, we observed situations in which students playing the evacuee role helped the people around them.

‘When I said I had a problem, the operator was kind to me.’

‘There was someone who was in a worse position than me, so I helped them.’

‘I hope we will be able to help each other if a real disaster happens.’

These are some of the students’ thoughts after completing these drills. Even though they were drills, the students are aware that they are themselves involved in the process of widening the circle of mutual assistance. It is considered that the school’s initiative links significantly to the growth of students due to the fact that they think that they would like to use their experiences in the future.

No.	Household No.	Residential Area	Family Name	Age	Family Structure	Family Details
1	1	1	A	35	Head of household, wife, child 1, child 2	You cannot get in touch with your wife. Child 2 has low vision (can't see well). The child is anxious because the mother is not there.
2	1	1	A	12	Head of household, wife, child 1, child 2	You cannot get in touch with your wife. Child 2 has low vision (can't see well). The child is anxious because the mother is not there.
3	1	1	A	10	Head of household, wife, child 1, child 2	You cannot get in touch with your wife. Child 2 has low vision (can't see well). The child is anxious because the mother is not there.
4	2	1	B	40	Head of household, wife, child 1, child 2	The head of the household is a neighbourhood association committee member. You have appealed for the opening of the evacuation centre. You have twins who won't settle. Child 1 wants to keep pressing switches. Child 2 wants to talk. (Event 1: Can you open the gym as an evacuation centre?)
5	2	1	B	35	Head of household, wife, child 1, child 2	The head of the household is a neighbourhood association committee member. He has appealed for the opening of the evacuation centre. You have twins who won't settle. Child 1 wants to keep pressing switches. Child 2 wants to talk. (Event 1: Can you open the gym as an evacuation centre?)
6	2	1	B	10	Head of household, wife, child 1, child 2	The head of the household is a neighbourhood association committee member. He has appealed for the opening of the evacuation centre. You are twins who won't settle. Child 1 wants to keep pressing switches. Child 2 wants to talk. (Event 1: Can you open the gym as an evacuation centre?)
7	2	1	B	10	Head of household, wife, child 1, child 2	The head of the household is a neighbourhood association committee member. He has appealed for the opening of the evacuation centre. You are twins who won't settle. Child 1 wants to keep pressing switches. Child 2 wants to talk. (Event 1: Can you open the gym as an evacuation centre?)
8	3	1	C	18	Head of household, wife, child 1, child 2, father	The head of the household and the wife cannot be contacted. The grandfather has been injured and finds it difficult to walk.
9	3	1	C	15	Head of household, wife, child 1, child 2, father	The head of the household and the wife cannot be contacted. The grandfather has been injured and finds it difficult to walk.
10	3	1	C	65	Head of household, wife, child 1, child 2, father	The head of the household and the wife cannot be contacted. The grandfather, yourself has been injured and finds it difficult to walk.
11	4	1	D	50	Head of household, wife, child 1, child 2, mother	The head of the household has died. The wife is falling apart. The children explain the family situation at the reception of the evacuation centre. The mother has dementia.
12	4	1	D	20	Head of household, wife, child 1, child 2, mother	The head of the household has died. The wife is falling apart. The children explain the family situation at the reception of the evacuation centre. The mother has dementia.
13	4	1	D	18	Head of household, wife, child 1, child 2, mother	The head of the household has died. The wife is falling apart. The children explain the family situation at the reception of the evacuation centre. The mother has dementia.

(Appendix 1)

14	4	1		D	72	Head of household, wife, child 1, child 2, <b>mother</b>	The head of the household has died. The wife is falling apart. The children explain the family situation at the reception of the evacuation centre. The mother has dementia.
15	5	1		E	30	<b>Head of household</b> , child 1, child 2	A one parent family (mother and children). Does not know many people. They had to move recently. The children won't leave their mother and cannot look other people in the eye.
16	5	1		E	12	Head of household, <b>child 1</b> , child 2	A one parent family (mother and children). Does not know many people. They had to move recently. The children won't leave their mother and cannot look other people in the eye.
17	5	1		E	10	Head of household, child 1, <b>child 2</b>	A one parent family (mother and children). Does not know many people. They had to move recently. The children won't leave their mother and cannot look other people in the eye.
18	6	1		F	39	<b>Head of household</b> , wife, child 1, child 2	The head of the household is a neighbourhood association committee member. Takes the lead and talks to the people around them. The children were frightened by the disaster and won't leave their mother.
19	6	1		F	37	Head of household, <b>wife</b> , child 1, child 2	The head of the household is a neighbourhood association committee member. Takes the lead and talks to the people around them. The children were frightened by the disaster and won't leave their mother.
20	6	1		F	11	Head of household, wife, <b>child 1</b> , child 2	The head of the household is a neighbourhood association committee member. Takes the lead and talks to the people around them. The children were frightened by the disaster and won't leave their mother.
21	6	1		F	9	Head of household, wife, child 1, <b>child 2</b>	The head of the household is a neighbourhood association committee member. Takes the lead and talks to the people around them. The children were frightened by the disaster and won't leave their mother.
22	7	1		G	31	Head of household, <b>wife</b> , child 1, child 2	The head of the household cannot be contacted. The wife is a nurse. The children are young but calm.
23	7	1		G	8	Head of household, wife, <b>child 1</b> , child 2	The head of the household cannot be contacted. The wife is a nurse. The children are young but calm.
24	7	1		G	6	Head of household, wife, child 1, <b>child 2</b>	The head of the household cannot be contacted. The wife is a nurse. The children are young but calm.
25	8	1		H	38	<b>Head of household</b> , wife, child 1, child 2	The wife cannot be contacted. Child 1 has injured with his head. Worrying about Child 2 crying at night.
26	8	1		H	10	Head of household, wife, <b>child 1</b> , child 2	The wife cannot be contacted. Child 1 has injured with his head. Worrying about Child 2 crying at night.
27	8	1		H	4	Head of household, wife, child 1, <b>child 2</b>	The wife cannot be contacted. Child 1 has injured with his head. Worrying about Child 2 crying at night.
28	9	1		I	70	<b>Head of household</b>	Lives alone. Has lost his cane in the disaster. It takes time for them to walk.

29	10	1		J	27	Head of household, <b>wife</b> , child	The head of the household cannot be contacted. The wife is in the late stages of pregnancy. She is stable but is anxious about living in the evacuation centre. She can't hear? She does not react quickly when called. She is not wearing hearing aids.
30	10	1		J	7	Head of household, wife, <b>child</b>	The head of the household cannot be contacted. The wife is in the late stages of pregnancy. She is stable but is anxious about living in the evacuation centre. She can't hear? She does not react quickly when called. She is not wearing hearing aids.
31	11	2		K	50	<b>Head of household</b> , wife, child 1, child 2	The head of household and his wife are foreigners. They understand simple Japanese. The wife is worrying about not being able to contact their children.
32	11	2		K	47	Head of household, <b>wife</b> , child 1, child 2	The head of household and his wife are foreigners. They understand simple Japanese. The wife is worrying about not being able to contact their children.
33	12	2		L	46	Head of household, wife, <b>child 1</b> , child 2	Child 2 is withdrawing and has communication difficulties. Hopes to have a separate room. The head of household is stubborn.
34	12	2		L	44	Head of household, wife, child 1, <b>child 2</b>	Child 2 is withdrawing and has communication difficulties. Hopes to have a separate room. The head of household is stubborn.
35	12	2		L	21	Head of household, wife, <b>child 1</b> , child 2	Child 2 is withdrawing and has communication difficulties. Hopes to have a separate room. The head of household is stubborn.
36	12	2		L	18	Head of household, wife, child 1, <b>child 2</b>	Child 2 is withdrawing and has communication difficulties. Hopes to have a separate room. The head of household is stubborn.
37	13	2		M	78	<b>Head of household</b>	Living alone. Being very nervous. Cannot say even his name.
38	14	2		N	40	<b>Head of household</b> , wife, child 1, child 2, grandmother	The head of household is a neighborhood association committee member. Bring the members of household no. 13. The wife is in the early stage of pregnancy. Her physical condition is unstable. The grandmother has been working as a leader of the neighborhood association.
39	14	2		N	35	Head of household, <b>wife</b> , child 1, child 2, grandmother	The head of household is a neighborhood association committee member. Bring the members of household no. 13. The wife is in the early stage of pregnancy. Her physical condition is unstable. The grandmother has been working as a leader of the neighborhood association.
40	14	2		N	7	Head of household, wife, <b>child 1</b> , child 2, grandmother	The head of household is a neighborhood association committee member. Bring the members of household no. 13. The wife is in the early stage of pregnancy. Her physical condition is unstable. The grandmother has been working as a leader of the neighborhood association.
41	14	2		N	4	Head of household, wife, child 1, <b>child 2</b> , grandmother	The head of household is a neighborhood association committee member. Bring the members of household no. 13. The wife is in the early stage of pregnancy. Her physical condition is unstable. The grandmother has been working as a leader of the neighborhood association.
42	14	2		N	65	Head of household, wife, child 1, <b>grandmother</b>	The head of household is a neighborhood association committee member. Bring the members of household no. 13. The wife is in the early stage of pregnancy. Her physical condition is unstable. The grandmother has been working as a leader of the neighborhood association.

43	15	2		O	35	Head of household, <b>wife</b> , child 1, child 2, child 3, grandfather, grandmother	The head of household cannot be contacted. Child 3 uses a wheelchair. Grandparents are not very involved in their grandchildren's care very much.
44	15	2		O	15	Head of household, wife, <b>child 1</b> , child 2, child 3, grandfather, grandmother	The head of household cannot be contacted. Child 3 uses a wheelchair. Grandparents are not very involved in their grandchildren's care very much.
45	15	2		O	12	Head of household, wife, child 1, <b>child 2</b> , child 3, grandfather, grandmother	The head of household cannot be contacted. Child 3 uses a wheelchair. Grandparents are not very involved in their grandchildren's care very much.
46	15	2		O	9	Head of household, wife, child 1, child 2, <b>child 3</b> , grandfather, grandmother	The head of household cannot be contacted. Child 3 uses a wheelchair. Grandparents are not very involved in their grandchildren's care very much.
47	15	2		O	63	Head of household, wife, child 1, child 2, child 3, <b>grandfather</b> , grandmother	The head of household cannot be contacted. Child 3 uses a wheelchair. Grandparents are not very involved in their grandchildren's care very much.
48	15	2		O	60	Head of household, wife, child 1, child 2, child 3, grandfather, <b>grandmother</b>	The head of household cannot be contacted. Child 3 uses a wheelchair. Grandparents are not very involved in their grandchildren's care very much.
49	16	2		P	43	Head of household, <b>wife</b> , child 1, child 2	The head of household has died. Children are twins and have difficulty communicating with others.
50	16	2		P	15	Head of household, wife, <b>child 1</b> , child 2	The head of household has died. Children are twins and have difficulty communicating with others.
51	16	2		P	15	Head of household, wife, child 1, <b>child 2</b>	The head of household has died. Children are twins and have difficulty communicating with others.
52	17	2		Q	32	<b>Head of household</b> , child 1	A one-parent family. The mother and the child do not have a good relation and do not want to be together.
53	17	2		Q	14	Head of household, <b>child 1</b>	A one-parent family. The mother and the child do not have a good relation and do not want to be together.
54	18	2		R	35	<b>Head of household</b> , child 1, child 2, child 3, grandmother	The wife and the father of the head of household have died. Child 2 and 3 are crying a lot. The mother is keeping her composure.
55	18	2		R	12	Head of household, <b>child 1</b> , child 2, child 3, grandmother	The wife and the father of the head of household have died. Child 2 and 3 are crying a lot. The mother is keeping her composure.
56	18	2		R	9	Head of household, child 1, <b>child 2</b> , child 3, grandmother	The wife and the father of the head of household have died. Child 2 and 3 are crying a lot. The mother is keeping her composure.

57	18	2		R	7	Head of household, wife, child 1, child 2, <b>child 3</b> , grandmother	The wife and the father of the head of household have died. Child 2 and 3 are crying a lot. The mother is keeping her composure.
58	18	2		R	70	Head of household, child 1, child 2, child 3, <b>ggrandmother</b>	The wife and the father of the head of household have died. Child 2 and 3 are crying a lot. The mother is keeping her composure.
59	19	2		S	35	<b>Head of household</b> , child 1, child 2, child 3	A mothe-child family. Child 1 has a classmate of houseoud number 17. Child 2 and 3 has hard of hearing.
60	19	2		S	14	Head of household, <b>child 1</b> , child 2, child 3	A mother-child family. Child 1 has a classmate in household number 17. Child 2 and 3 are hard of hearing.
61	19	2		S	12	Head of household, child 1, <b>child 2</b> , child 3	A mothe-child family. Child 1 has a classmate of houseoud number 17. Child 2 and 3 has hard of hearing.
62	19	2		S	12	Head of household, wife, child 1, child 2, <b>child 3</b>	A mothe-child family. Child 1 has a classmate of houseoud number 17. Child 2 and 3 has hard of hearing.
63	20	2		T	20	Head of household, wife, <b>child 1</b> , child 2, child 3, grandmother	The head of household and his wife cannot be reached. Three children are taking care of their grandmother, albeit feeling nervous about not being able to establish contact with their parents.
64	20	2		T	16	Head of household, wife, child 1, <b>child 2</b> , child 3, grandmother	The head of household and his wife cannot be reached. Three children are taking care of their grandmother, albeit feeling nervous about not being able to establish contact with their parents.
65	20	2		T	12	Head of household, wife, child 1, child 2, <b>child 3</b> , grandmother	The head of household and his wife cannot be reached. Three children are taking care of their grandmother, albeit feeling nervous about not being able to establish contact with their parents.
66	20	2		T	89	Head of household, wife, child 1, child 2, child 3, <b>grandmother</b>	The head of household and his wife cannot be reached. Three children are taking care of their grandmother, albeit feeling nervous about not being able to establish contact with their parents.
67	21	2		U	35	<b>Head of household</b> , wife, child 1, child 2	The head of household is a neighborhood association committee member. He is cooperating with the evacuation center's operations, Child 2 is hyperactive, does not join the other evacuees and does not move at all.
68	21	2		U	32	Head of household, <b>wife</b> , child 1, child 2	The head of household is a neighborhood association committee member. He is cooperating with the evacuation center's operations, Child 2 is hyperactive, does not join the other evacuees and does not move at all.
69	21	2		U	14	Head of household, wife, <b>child 1</b> , child 2	The head of the household is a neighbourhood association committee member. He is cooperative to operating the evacuation center, Child 2 is hyperactive and does not join the other evacuees and get stuck.
70	21	2		U	12	Head of household, wife, child 1, <b>child 2</b>	The head of the household is a neighbourhood association committee member. He is cooperative to operating the evacuation center, Child 2 is hyperactive and does not join the other evacuees and get stuck.
71	22	3		V	45	<b>Head of household</b> , wife, child 1, child 2	The head of household is a neighborhood association committee member. The wife has a fever of 39° C since yesterday. Child 2 is hyperactive and speaks to anybody. Child 1 takes good care of Child 2.

72	22	3		V	42	Head of household, <b>wife</b> , child 1, child 2	The head of household is a neighborhood association committee member. The wife has a fever of 39° C since yesterday. Child 2 is hyperactive and speaks to anybody. Child 1 takes good care of Child 2.
73	22	3		V	17	Head of household, wife, <b>child 1</b> , child 2	The head of household is a neighborhood association committee member. The wife has a fever of 39° C since yesterday. Child 2 is hyperactive and speaks to anybody. Child 1 takes good care of Child 2.
74	22	3		V	12	Head of household, wife, child 1, <b>child 2</b>	The head of household is a neighborhood association committee member. The wife has a fever of 39° C since yesterday. Child 2 is hyperactive and speaks to anybody. Child 1 takes good care of Child 2.
75	23	3		W	43	Head of household, <b>wife</b> , child 1, child 2, child 3	The head of household and Child 1 cannot be reached. The wife is in a panic. Child 3 has separation anxiety with regard to his/her mother.
76	23	3		W	12	Head of household, wife, child 1, <b>child 2</b> , child 3	The head of household and Child 1 cannot be reached. The wife is in a panic. Child 3 has separation anxiety with regard to his/her mother.
77	23	3		W	8	Head of household, wife, child 1, child 2, <b>child 3</b>	The head of household and Child 1 cannot be reached. The wife is in a panic. Child 3 has separation anxiety with regard to his/her mother.
78	24	3		X	54	<b>Head of household</b> , , child 1, child 2	A father-child family. There is no close paeron in the community. Child 2 can explain the situation. Child 1 feel anxious about the evacuation center and does not come in.
79	24	3		X	15	Head of household, <b>child 1</b> , child 2	A father-child family. There is no close parent in the community. Child 2 can explain the situation. Child 1 feels anxious about the evacuation center and does not come in.
80	24	3		X	13	Head of household, child 1, <b>child 2</b>	A father-child family. There is no close parent in the community. Child 2 can explain the situation. Child 1 feels anxious about the evacuation center and does not come in.
81	25	3		Y	38	Head of household, <b>wife</b> , child 1, child 2, child 3	The head of household cannot be contacted. The wife is a nurse. Child 1 has trained as a caregiver for the elderly. Child 2 and 3 do not make eye contact and do not answer, even when called upon them.
82	25	3		Y	18	Head of household, wife, <b>child 1</b> , child 2, child 3	The head of household cannot be contacted. The wife is a nurse. Child 1 has trained as a caregiver for the elderly. Child 2 and 3 do not make eye contact and do not answer, even when called upon them.
83	25	3		Y	14	Head of household, wife, child 1, <b>child 2</b> , child 3	The head of household cannot be contacted. The wife is a nurse. Child 1 has trained as a caregiver for the elderly. Child 2 and 3 do not make eye contact and do not answer, even when called upon them.
84	25	3		Y	9	Head of household, wife, child 1, child 2, <b>child 3</b>	The head of household cannot be contacted. The wife is a nurse. Child 1 has trained as a caregiver for the elderly. Child 2 and 3 do not make eye contact and do not answer, even when called upon them.
85	26	3		Z	20	Head of household, wife, <b>child 1</b> , child 2, child 3, grandfather, grandmother	The head of household and his wife cannot be contacted. Child 1 crushed his/her leg during evacuation. Child 2 majors in Social Welfare in college. Child 3 has many monologues. The grandfather has dementia. The grandmother takes good care of family members.
86	26	3		Z	19	Head of household, wife, child 1, <b>child 2</b> , child 3, grandfather, grandmother	The head of household and his wife cannot be contacted. Child 1 crushed his/her leg during evacuation. Child 2 majors in Social Welfare in college. Child 3 has many monologues. The grandfather has dementia. The grandmother takes good care of family members.
87	26	3		Z	15	Head of household, wife, child 1, child 2, <b>child 3</b> , grandfather, grandmother	The head of household and his wife cannot be contacted. Child 1 crushed his/her leg during evacuation. Child 2 majors in Social Welfare in college. Child 3 has many monologues. The grandfather has dementia. The grandmother takes good care of family members.

88	26	3		Z	80	Head of household, wife, child 1, child 2, child 3, <b>grandfather</b> , grandmother	The head of household and his wife cannot be contacted. Child 1 crushed his/her leg during evacuation. Child 2 majors in Social Welfare in college. Child 3 has many monologues. The grandfather has dementia. The grandmother takes good care of family members.
89	26	3		Z	70	Head of household, wife, child 1, child 2, child 3, grandfather, <b>grandmother</b>	The head of household and his wife cannot be contacted. Child 1 crushed his/her leg during evacuation. Child 2 majors in Social Welfare in college. Child 3 has many monologues. The grandfather has dementia. The grandmother takes good care of family members.
90	27	3		AA	45	<b>The Head of Household</b>	The head of the household is Chinese and can communicate with simple Japanese.
91	28	3		AB	37	<b>Head of household</b> , child 1, child 2	The family has recently moved in and has no close neighbors. Child 2 is hyperactive, and Child 1 takes care of Child 2.
92	28	3		AB	15	Head of household, <b>child 1</b> , child 2	The family has recently moved in and has no close neighbors. Child 2 is hyperactive, and Child 1 takes care of Child 2.
93	28	3		AB	12	Head of household, child 1, <b>child 2</b>	The family has recently moved in and has no close neighbors. Child 2 is hyperactive, and Child 1 takes care of Child 2.
94	29	3		AC	51	<b>Head of household</b> , wife, child 1, child 2, child 3	The wife cannot be connected. Child 2 has low vision and uses white cane. Child 1 and 3 take care of Child 2.
95	29	3		AC	22	Head of household, wife, <b>child 1</b> , child 2, child 3	The wife cannot be connected. Child 2 has low vision and uses white cane. Child 1 and 3 take care of Child 2.
96	29	3		AC	16	Head of household, wife, child 1, <b>child 2</b> , child 3	The wife cannot be connected. Child 2 has low vision and uses white cane. Child 1 and 3 take care of Child 2.
97	29	3		AC	13	Head of household, wife, child 1, child 2, <b>child 3</b>	The wife cannot be connected. Child 2 has low vision and uses white cane. Child 1 and 3 take care of Child 2.
98	30	3		AD	50	Head of household, <b>wife</b> , child 1, child 2, grandmother	The head of household cannot be contacted. The grandmother feels anxious about staying at the evacuation center, because she is experiencing issues with her knees. She hopes to obtain an accommodation which is close to the bathroom. Child 1 and 2 are cooperating with the evacuation center's operations.
99	30	3		AD	20	Head of household, wife, <b>child 1</b> , child 2, grandmother	The head of household cannot be contacted. The grandmother feels anxious about staying at the evacuation center, because she is experiencing issues with her knees. She hopes to obtain an accommodation which is close to the bathroom. Child 1 and 2 are cooperating with the evacuation center's operations.
100	30	3		AD	18	Head of household, wife, child 1, <b>child 2</b> , grandmother	The head of household cannot be contacted. The grandmother feels anxious about staying at the evacuation center, because she is experiencing issues with her knees. She hopes to obtain an accommodation which is close to the bathroom. Child 1 and 2 are cooperating with the evacuation center's operations.



101	30	3		AD	77	Head of household, wife, child 1, <b>grandmother</b>	The head of household cannot be contacted. The grandmother feels anxious about staying at the evacuation center, because she is experiencing issues with her knees. She hopes to obtain an accommodation which is close to the bathroom. Child 1 and 2 are cooperating with the evacuation center's operations.
102	31	3		AE	40	<b>Head of household</b> , wife, child 1, child 2	The house was destroyed. The wife is a nurse. Child 1 hopes to be separated from others, because he/she has been experiencing diarrhea and vomiting since this morning.
103	31	3		AE	43	Head of household, <b>wife</b> , child 1, child 2	The house was destroyed. The wife is a nurse. Child 1 hopes to be separated from others, because he/she has been experiencing diarrhea and vomiting since this morning.
104	31	3		AE	17	Head of household, wife, <b>child 1</b> , child 2	The house was destroyed. The wife is a nurse. Child 1 hopes to be separated from others, because he/she has been experiencing diarrhea and vomiting since this morning.
105	31	3		AE	15	Head of household, wife, child 1, <b>child 2</b>	The house was destroyed. The wife is a nurse. Child 1 hopes to be separated from others, because he/she has been experiencing diarrhea and vomiting since this morning.
106	32	3		AF	16	Head of household, wife, <b>child 1</b> , child 2, grandmother	The head of household and his wife cannot be contacted. Child 1 uses a wheelchair. Child 2 is crying because of the disaster. The grandmother takes good care of her grandchildren. She also assists her neighbors.
107	32	3		AF	12	Head of household, wife, child 1, <b>child 2</b> , grandmother	The head of household and his wife cannot be contacted. Child 1 uses a wheelchair. Child 2 is crying because of the disaster. The grandmother takes good care of her grandchildren. She also assists her neighbors.
108	32	3		AF	60	Head of household, wife, child 1, <b>grandmother</b>	The head of household and his wife cannot be contacted. Child 1 uses a wheelchair. Child 2 is crying because of the disaster. The grandmother takes good care of her grandchildren. She also assists her neighbors.
109	2	Event 1		B	40	<b>Head of household</b> , wife, child 1, child 2	Can you open the gym as an evacuation centre?
110	☆	Event 2				Town hall staff (5)	I can help with evacuation centre operation!
111	☆	Event 3			40's	Foreign tourist visiting the town	I can't speak Japanese.
112	☆	Event 4			50's	Foreign tourist visiting the town	I wanted to go home today but my car has broken down. Is there no other way? (Angry)
113	☆	Event 5			60's	Salesperson visiting the town	I need a cigarette! It is OK if I smoke around here?
114	☆	Event 6			40's		The toilet isn't flushing properly . It might be blocked...
115	1	Event 7		A	30		I am trying to join my family but...
116	☆	Event 8				Town hall staff	Please make a list of the names of the evacuees.
117	☆	Event 9			20	Head of household, <b>wife</b> , child 1	Is there a room where I can change and feed my baby?
118	☆	Event 10				Town hall staff	I brought partitions. Where should I put them? ~End~



## **Chapter 3 Good practices on Disaster Preparedness for Persons with Disabilities**

### **Section 2 A good cooperation practice between the local government and the community. Support for persons with disabilities in the community at the time of disasters: Disaster prevention with no one left behind in Beppu city, Oita Prefecture.**

Junko Murano

Department of Risk Management, Beppu City, Oita Prefecture

This lecture text is a re-composition of lecture records from 21<sup>st</sup> December 2018 (Disaster Prevention Study Meeting, Research Institute, National Rehabilitation Center for Persons with Disabilities and Toshima Women's Network on Disaster Risk Reduction) and 18<sup>th</sup> February 2019 (Workshop for Disability-inclusive Risk Reduction at Special Elementary Schools, Ministry of Education, Chiang Mai, Thailand).



Fig.1 Junko Murano, the presenter of the meeting

MC: Junko Murano is working on the latest initiatives in disaster prevention for persons with disabilities in Japan. Today, I would like to take this opportunity to talk to you all about how many of these are being implemented in Toshima Ward. Following on from Ms. Murano's speech, the plan is to obtain information from the Ward Office concerning community support relating to persons with disabilities in disasters in Toshima Ward, Tokyo which is where this venue is located and, finally, to exchange information between participants in groups of six or so.

Today, we have filled the venue with 36 participants including representatives from Toshima Ward Office Crisis Management Division, General Welfare Affairs Division, Disability Welfare Division, Social Welfare Councils, the Disaster Volunteer Centre, comprehensive community centres in charge of nursing care insurance for the elderly, organizations for persons with disabilities (visual, hearing,

physical, intellectual), community lifestyle centres for persons with mental disorders, heads of residents' associations, leaders of residents' association disaster prevention groups, social workers, midwives and students. Over to you, Junko Murano.

Murano: Good morning everyone. I am Ms. Murano from Beppu City. I was really looking forward to coming here today. I hope to be able to explain as clearly as possible our activities to people who are interested. Dr. Yayoi Kitamura mentioned the word "latest" in her introduction but I don't think that it is possible to implement what we are doing in Beppu in other places due to various local characteristics. It would be happy if you could give me some advice. I would like you to see what we are doing specifically and what potential solutions we are providing. There are some people here today who have visual impairments so I would like to use both slides and words to give you this information. I hope you will understand if you are not used to this kind of speech.

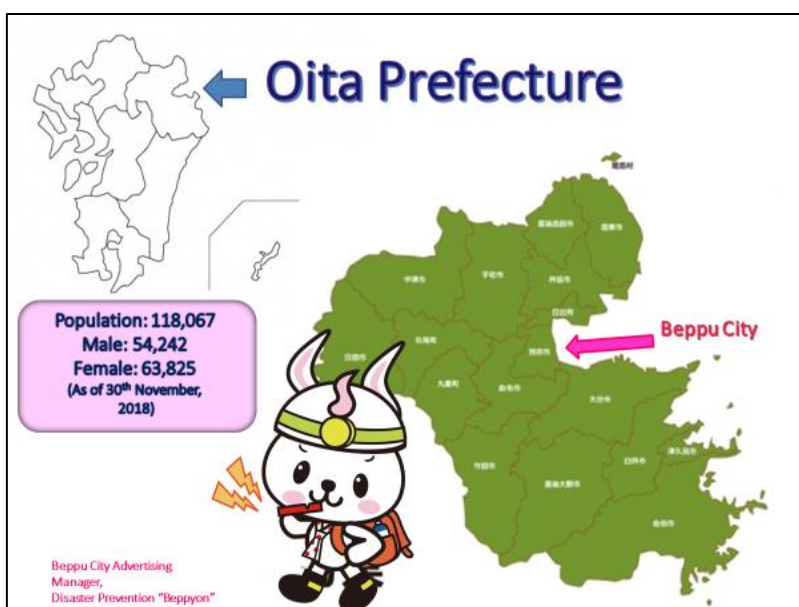


Fig.2 The location of Beppu city

I will talk about the support of persons with disabilities in the community at the time of a disaster and Beppu City's No One Left Behind disaster prevention initiative. The map in the top left is a map of Kyushu; Oita Prefecture is on the Pacific Ocean side. Beppu City is located on the slight indent of Beppu Bay in Oita Prefecture. The population is just under 120,000. Allow me to promote Beppu's appeal as one of Japan's leading hot spring tourism cities.

I have been working at Beppu City Hall for around two and a half years. Before that, I worked at Oita Prefecture Social Welfare Council for around 15 years. I got most of my experience in disaster areas as a member of staff of the Social Welfare Council. I went to areas that had been affected by disasters and worked on providing lifestyle support for those affected. That experience has led to this initiative. Beppu City has an organization called Japan Sun Industries with many persons with disabilities who work from home. For those people, there are risks (related to disasters) in living in

the community. I have been thinking about how to protect these people since my time as a member of staff of the Social Welfare Council.

At the same time, when I went to the affected areas, I was extremely worried by the fact that I didn't see persons with disabilities in evacuation centers or in the community. When I was working at the Social Welfare Hall, persons with disabilities came every day to play wheelchair basketball or enjoy table tennis but I didn't see anyone like that in the disaster areas. One of the first motives for starting this initiative was me thinking about trying to find out why this was.

Using what I learned during support activities for the victims of the continuous earthquake disaster in the north of Miyagi Prefecture in 2003 for two weeks, I performed lifestyle support activities for victims in disaster areas across the country such as the 2004 Niigata Chuetsu Earthquake and the 2007 Noto Peninsula and Niigata Chuetsu Offshore Earthquakes. Since then, I have become actively involved in the Welfare Forum in Bekki Hayami Executive Committee and have started to hold study meetings, evacuation drills and educational activities with the theme of considering disaster prevention for persons with disabilities along with persons with disabilities themselves, their families and the people who support them. Following this, I was involved as a committee member in the enforcement of the bylaw that allows persons with or without disabilities to live in Beppu City in safety with peace of mind and incorporated disaster response for persons with disabilities into the bylaw. After the Tohoku Earthquake, I worked on improving evacuation shelters and I am implementing training so that evacuation shelters can be operated so that victims can protect their lives and lifestyles. In addition, in facilities that have been designated as welfare evacuation shelters, I have been encouraging the creation of business continuity plans. Utilizing activities up until now, I started work on creating a model for individual support plans in Beppu City from January 2016 in order to concretize the aforementioned bylaw.

March 2004 – March 2015  
Cabinet Office Disaster Prevention Volunteer Investigation Committee Member

April 2012 – March 2013  
Nankai Trough Huge Earthquake Countermeasures and Investigation Working Group Committee Member

From April 2013  
Central Disaster Prevention Conference Disaster Prevention Countermeasures Executive Conference Committee Member

April 2017 – March 2018  
Ministry of Internal Affairs and Communications International Office Information Coordinator Investigation Committee Member

From 2007  
Oita Prefecture Disaster Prevention Conference Committee Member

3

Fig.3 History of Welfare Forum in Bekki Hayami Executive Committee

This initiative began in 2007 with a discussion about disaster prevention for persons with disabilities in Beppu City. Beppu City's No One Left Behind disaster prevention initiative took the lead in activities such as Welfare Forum in Bekki Hayami Executive Committee (I will refer to this as the Forum from now on), which is a citizen's gathering focusing on persons with disabilities themselves. The Forum has been active since 2002 with the theme of living together in the community. It is composed of persons with disabilities, their families, facility staff, lawyers, university professors, staff from the administration and so on and people who are interested in and sympathize with this theme gather. Meeting once a month, we discuss the theme of the year. Each organization is involved in various activities and through these, they cooperate with each other to make various proposals as the collective Forum. I also worked on disaster prevention issues after the fire in a block of flats in Beppu

City in which a woman with a disability died in 2007 and listening to the anxieties of many people with disabilities who experienced the earthquake swarm.

In addition to talking about disaster prevention, the thing that most concerned the Forum was how to work on bylaws to prohibit discrimination. The Act for Eliminating Discrimination against Persons with Disabilities was created in 2016. Before this, a study group on bylaws to prohibit discrimination against persons with disabilities was started in Chiba Prefecture. At the Forum, we thought that we would like to work on the creation of bylaws concerning prohibiting discrimination against persons with disabilities specifically in Beppu City and I was involved as a committee member from the preparation stages. After the establishment of the bylaw that allows persons with or without disabilities to live in Beppu City in safety with peace of mind that was enacted on the 1<sup>st</sup> of April, 2014 (nickname: Living Together Bylaw), we raised the issue of welfare for persons with disabilities and town planning from the point of view of citizens. We are also conducting surveys and proposal activities with the participation of the administration and many citizens.

**Welfare Forum in Bekki Hayami Executive Committee**  
2017 Oita Joint Welfare Agency Welfare Award received

Established in 2002 as a gathering focusing on people with disabilities. In addition, the people with disabilities and their families, lawyers, university professors, people related to the government and people related to welfare participated. I began to work on disaster prevention after the fire in a block of flats in the city in which a woman with a disability died in 2007 and understanding the anxiety of even more people with disabilities who experienced the earthquake swarm.

I was involved with the bylaw that allows persons with or without disabilities to live in Beppu City in safety with peace of mind (nickname: Living Together Bylaw), which was enforced in 2014, as a committee member from the preparatory stages and after establishment, it raised the issue of the welfare of persons with disabilities and town planning from the point of view of city residents; we are conducting surveys and proposal activities while having as many residents and government representatives participate as possible.

At the moment, I am working on a project aiming to create a framework that protects people who require consideration at the time of a disaster in the community and achieve disaster prevention that is inclusive for people with disabilities using a subsidy from the Nippon Foundation along with Beppu City and Kamegawa District Furuichi-machi Residents' Association. This year we plan to conduct this in sections 1 and 2 of Minami District Hama-machi and section 2 of Matsubara-cho. We are also planning training at evacuation shelters.

4

Fig.4 Overview of the Forum

Article 12 of this bylaw concerned reasonable accommodation relating to disaster prevention. When creating this bylaw, participants raised two big issues as characteristics of Beppu City. These were the issue of what happens after parents die and disaster prevention. The bylaw states that shall the City will work to continuously create a framework on a routine basis after specifying the details of care

that is required at the time of a disaster in order to minimize injury and damage incurred by persons with disabilities and their families at the time of a disaster as part of reasonable accommodation in disaster prevention. It is a bylaw so these are achievement goals that do not incur a penalty if they are not executed but discussions at the Forum progressed with the conclusion that we must create a framework that makes it possible to formulate individual evacuation plans, etc. so that the bylaw is not just pie in the sky.

**Bylaw that allows persons with or without disabilities to live in Beppu City in safety with peace of mind (Nickname: Living Together Bylaw)**

**Enforced on 1<sup>st</sup> April 2014**

**(Reasonable accommodation relating to disaster prevention)**  
**Article 12 The City shall work to provide accommodation for persons with disabilities when formulating disaster prevention plans in order to ensure their safety at the time of a disaster.**

**2 The City shall work to continuously create a framework on a routine basis after specifying the details of care that is required at the time of a disaster in order to minimize injury and damage incurred by persons with disabilities and their families at the time of a disaster.**

[http://www.city.beppu.oita.jp/03gyosei/syogai/aru\\_nai/townmeeting/pdf/jyorei\\_soan.pdf](http://www.city.beppu.oita.jp/03gyosei/syogai/aru_nai/townmeeting/pdf/jyorei_soan.pdf)

Persons with disabilities experience difficulties and anxiety in their everyday lives due to a lack of understanding and various barriers that exist in society. Beppu City as a whole will work to improve the situation of people with disabilities and this bylaw has been enacted in order to create a society with mutual recognition, consideration and support regardless of whether a person has a disability or not.

Beppu City

Fig.5 Living Together Bylaw

When this bylaw was created, I thought about what we could do to progress with this at City Hall and that it would be essential to notify what would be required specifically. The characteristics of disabilities differ by type. Support requirements also differ. Intellectual disabilities, visual impairment, hearing impairment, invisible disabilities, mental disorders and physical disabilities. The first year, people with various disabilities gathered and discussed specific difficulties that they face and what kind of support they would like to have.

The photo in the top left shows this discussion. The families of persons with intellectual disabilities gathered to tell us what they were anxious about. We put these details into a report and distributed it to the relevant people at a prefectural and national level. We held a number of briefing and training sessions so that members of the community would understand these details with the hope that there would be progress with initiatives for persons with disabilities at the time of a disaster.

This report placed importance on listening to the voices of persons with disabilities and their parents or guardians. One thing that we all agreed on was that support for those who require special help at

the time of a disaster cannot be achieved without creating a community that involves persons with disabilities, for example the elderly and so on, on a routine basis. The report made five specific proposals in order to implement this.

1. 27<sup>th</sup> July, 2014 (Sun) **Disasters in Oita Prefecture**  
Speaker: Keiji Takemura, Professor, Kyoto University Graduate School
2. 7<sup>th</sup> September, 2014 (Sun) **From evacuation shelter survey in the Tohoku Earthquake**  
Speaker: Hidehito Kawakita, Representative, International Institute for Human, Organization and the Earth
3. 13<sup>th</sup> September, 2014 (Sat) **Persons with intellectual disabilities persons in disasters**  
Chairperson: Yoichi Uryyuda, Beppu Yu-yu
4. 21<sup>st</sup> September, 2014 (Sun) **Persons with visual impairment in disasters**  
Chairperson: Sachio Nishida, Former Chairperson of Beppu City Council for Persons with Disabilities
5. 9<sup>th</sup> November, 2014 (Sun) **Persons with hearing impairment in disasters**  
Chairperson: Chairperson of Beppu City Council for Persons with Disabilities
6. 15<sup>th</sup> November, 2014 (Sat) **Persons with invisible disabilities/patients with intractable diseases in disasters**  
Chairperson: Hisashi Kono, Head of Network Secretariat for Persons with Disabilities who stay at home
7. 16<sup>th</sup> November, 2014 (Sun) **Persons with mental disabilities in disasters**  
Chairperson: Hiroshi Fujiuchi, Mental Health Welfare Beppu Family Classroom
8. 30<sup>th</sup> November, 2014 (Sun) **Children with orthopaedic impairment in disasters**  
Chairperson: Noriyuki Gotanda, Independent Support Centre Oita
9. 20<sup>th</sup> December, 2014 (Sat) **How to prepare from the reality of a disaster area**  
Speaker: Fukiko Ishii, Representative, Sakura Net (NPO)
10. 10<sup>th</sup> January, 2015 (Sat) **Summary of training up to the present**  
Chairperson: Akenori Shinoto, Professor, Beppu University
11. 7<sup>th</sup> February, 2015 (Sun) **Discussion and briefing from relevant people**  
Chairperson: Yasuyuki Tokuda (Lawyer), Representative, Network Secretariat for Persons with Disabilities who stay at home

6

Fig.6 Study meetings by the Forum



Fig.7 Participants at study meetings



Fig.8 Reports on study meetings



From the report:

**★Opinions directly from persons with disabilities and their parents/guardians**

ALS patients. "Thought we would die together during the earthquake." Representative of many opinions

**★Direction after training**

Agreed that it is not possible to achieve support for people who require care at the time of a disaster without community planning that involves persons with disabilities and the elderly on a routine basis.

**1. Creation of list of people who require support and the nature of sharing such information**

The sharing of information on an everyday basis is required. → Efforts to have multiple conversations with the people with disabilities and their families, asking questions such as: What kind of information should be shared and with whom? What advantages and disadvantages are there in sharing this information for the person with disabilities? in order to get a better understanding and come to a mutual agreement.

**2. The importance of individual evacuation plans and issues with a view to their creation**

It is important to exchange preparation information and so on from various organizations on a routine basis with the aim of encouraging self-help for the person with disabilities. When formulating individual evacuation plans, the contribution of care managers and/or support experts who make care plans is indispensable and there must be partnership with people involved with welfare.

**3. The role of residents' associations, social workers and independent disaster prevention organizations and the necessity of new community planning**

It is important for persons with disabilities themselves to participate more in residents' association activities. However, there are many issues such as the ageing of residents' association officials and differences in communities. It is impossible to achieve just within the community.

Depending on the population and age composition of the community, junior and senior high school students, university students and the working population can also provide support. Efforts to encourage smooth community cooperation based on the characteristics of the community are crucial.

9

**4. Various issues with welfare evacuation shelters**

There are differing anxieties depending on the disability: "Panics in an emergency"(intellectual), "There is more of an issue with privacy for the ostomate than at a medical facility. There are issues such as odours so is it possible to use a welfare evacuation shelter?" (invisible disability). The response to the question of how a limited number of staff will be able to deal with an evacuee from outside in a facility that is designated as a welfare evacuation shelter which already has residents is totally unsatisfactory. The reality is that the government is only making agreements at the current time.

**5. Significance of liaison meetings for people who require evacuation support and the nature of these operations**

Persons with disabilities and their families who live in the community have a comprehensive lifestyle which is never divided like government sections. It is necessary to have successive cross-departmental liaison meetings. It is also necessary to set up meetings that include not only the people in charge in the administration but also the persons with disabilities themselves, relevant people and community representatives.

**In conclusion**

The training brought the fact that the differing needs dependent on type of disability in various phases into sharp relief. We must deepen our understanding and plan for this diversity through conversations with persons with disabilities themselves and the relevant people must share information. This changes depending on the type and scale of the anticipated disaster. Further substantiation of the outline set out in the Guidelines for initiatives concerning evacuation support for those who require it (Cabinet, August, 2013) is the responsibility of the community and can only be achieved through the cooperation of everyone involved including the person with disabilities and their family.

10

Fig.9 Five proposals made on the report

The first is the creation of a list of people who require support and the nature of sharing this

information. The second is the importance of individual evacuation plans and issues with respect to their creation. The third is the necessity of roles for residents' associations, social workers and autonomous disaster prevention organizations and the creation of new communities. In the current situation, it may be that we need to create new communities including working out if there is enough community spirit and enough people to work on this issue. The fourth is the various issues surrounding welfare evacuation centers. Welfare evacuation centers are often spoken about but there is still much to discuss and we need to look at them a little more closely. The fifth is the significance of liaison meetings for people who require evacuation support and the nature of their operation. The administration works from the top down when working on disaster prevention issues for persons with disabilities so it is difficult to provide solutions without holding liaison meetings on a level playing field. The fifth concerns the creation and operation of such meetings.

Year 1. We were planning to start an initiative to support people who require special help at the time of a disaster after the 2016 Kumamoto Oita Earthquake. However, on the 14<sup>th</sup> of April there were foreshocks and then the earthquake struck on the 16<sup>th</sup>. We experienced a seismic intensity of 6-lower in Beppu City during the earthquake and 6,000 people evacuated temporarily to evacuation centers. That year, there was a lot of confusion so the initiative finally started in December after the residents' association community festivals. We held a drill on 15<sup>th</sup> January, 2017. I have a video of initiatives up to that point so let's take a look and you can tell me what you think afterwards.

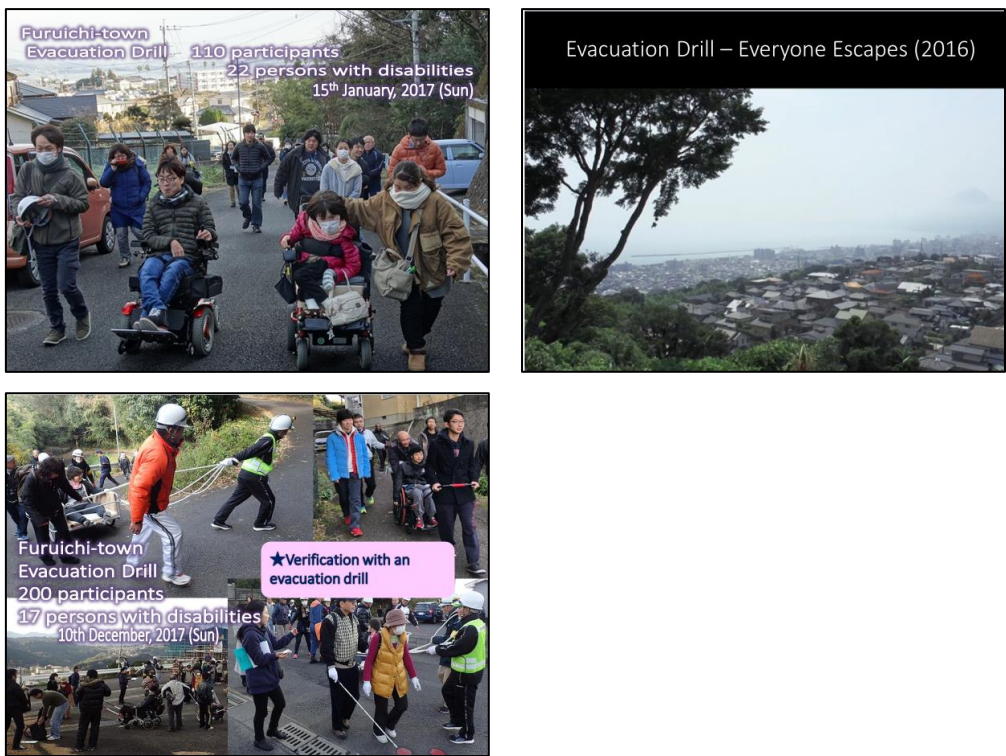


Fig.10 Some images from videotaped reports on the project

So, now you have seen the situation in the first year. I created individual evacuation plans because

the Kumamoto Earthquake had struck. I had really wanted help from consulting support specialists for persons with disabilities but with all the confusion of the earthquake, it wasn't possible. In the second year, I met with such specialists when creating individual evacuation plans and talked to the people in question (persons with disabilities) or their parents or guardians and found out specifically what was required in order for them to evacuate. Not only did I give all this information to the community, I also created a document with only the necessary information for evacuation and took it to the people of the community at adjustment meetings. The photos of this are below.

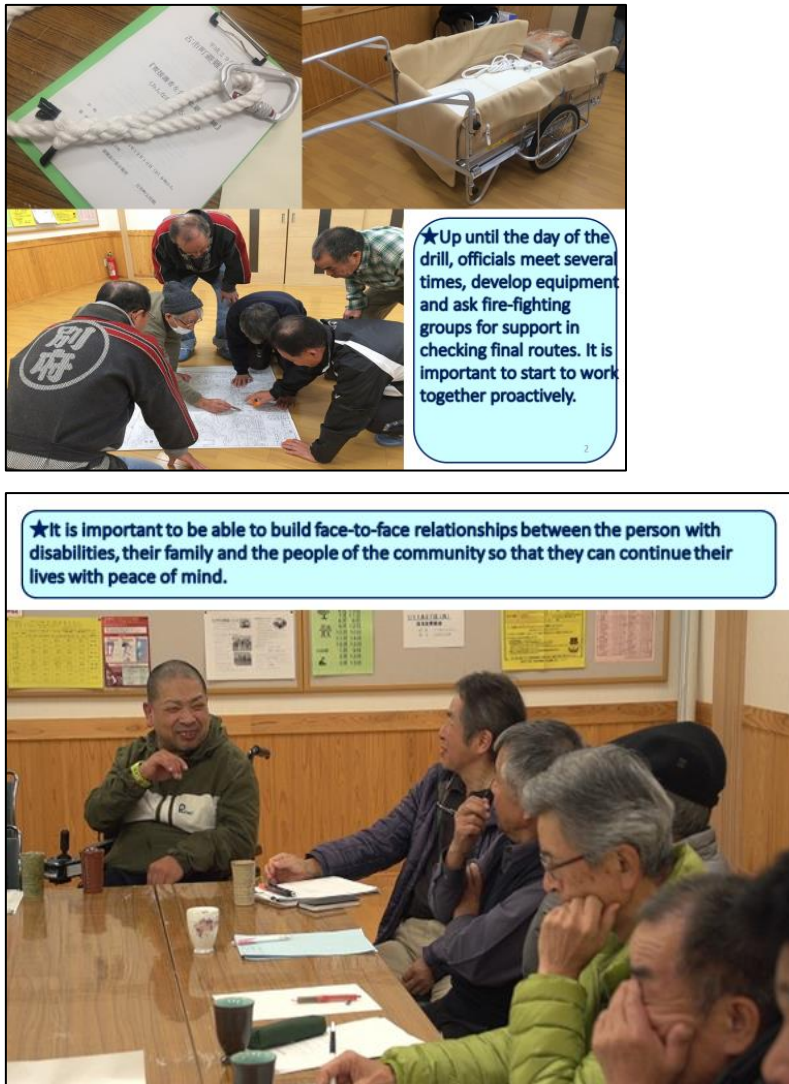


Fig.11 Discussion to make an individual evacuation plan for the wheel chair use in the community

The man shown here in the electric wheelchair had not spoken to people in his community for many tens of years. At the adjustment meetings, people who could communicate their own information were asked to speak themselves and those who could not come to the meeting or who could not speak for themselves were represented by consulting support specialists and we talked about the specifics with the people of the community. Consequently, we discussed how to evacuate when necessary and held

evacuation drills together.

In the second year, the people of the community selected and created the items required by themselves by the day of the drill. You saw people pulling a wheelchair with a rope in the video of the 1<sup>st</sup> year. Initially, we planned to connect a pulling handle called JINRIKI to wheelchairs to pull them along. However, the hooks did not fit the shape of the wheelchair so the people of the community hurriedly used a rope to start pulling instead. At that time, the rope was thin and it was not easy to pull. Therefore, in the second year, the people of the community bought and prepared ropes to that were adapted for their hands and brought them to the drill. They also prepared hooks that can be operated with one hand and locked and brought them to the drill. In this way, rather than just deciding on someone to go and get something if there is a problem, the local people and the people in question used the experience of the first year to evolve the drill in the second year by trying specific evacuation methods. I think the real meaning of drills is continuous brushing up.

The people of the community were most worried about how much of the information they had discussed could be shared and with whom. I had the people in question or their parents and guardians sign a certificate. When we first assess the people in question, we tell them specifically what kind of disasters are likely to occur in the area and check whether they have understood the meaning of sharing this information with the community.

★ My disaster checklist (Understood – will prepare)

■ Disasters that occur where I live

Nankai Trough	Beppu Bay Earthquake
Earthquake intensity:	Earthquake intensity:
Tsunami: _____m tsunami arrives in ___ mins	Tsunami: _____m tsunami arrives in ___ mins
Lifelines (sewage): stops for _____days	Lifelines (sewage): stops for _____days

■ Required preparation (Kit 4)

Prepare by myself:

■ Support that I need in an emergency

I need:

so I will ask for support from neighbours.

■ On making a checklist of what you need in a disaster

I understand what kinds of disasters happen in the community where I live and I will make the above required preparations. As I will need the above-mentioned support in an emergency, I will actively engage with the people around me on an everyday basis in order to obtain support and I consent to share the information on my disaster checklist with the relevant people and organizations.

4

**It is important that...**  
**The person with disabilities and their parent/guardian has a good knowledge of the person with disabilities. Rather than the awareness from the support side, you must do what you can to prepare properly. Have the awareness that you can ask for help with what you cannot do by yourself.**




Fig.12 My disaster checklist

The next task was to check what the person in question could do to prepare themselves using a Disaster Prevention Handbook that you make yourself created by Dr. Jun Suzurikawa of the Research Institute at the National Rehabilitation Center for Persons with Disabilities as essential preparation. We make sure that the person understands what is lacking in their own required preparation and that they write down what is lacking so that they can prepare these things themselves. They write what they can manage and then what they cannot do and what they want to ask the community to help with as support that is required in an emergency.

In the end, the person in question fills in their personal information once they are satisfied with the certificate that states that they understand what disasters are likely to occur in the community in which they live and will make the necessary preparations they have listed. It also states that they will actively participate in relationships with the people around them on a routine basis in order to obtain the required support that is listed and that they consent to the relevant organizations and people sharing the information about them on the certificates required at the time of a disaster. The people of the community can look at this certificate to check what information can be shared and use this for procedures pertaining to drills.

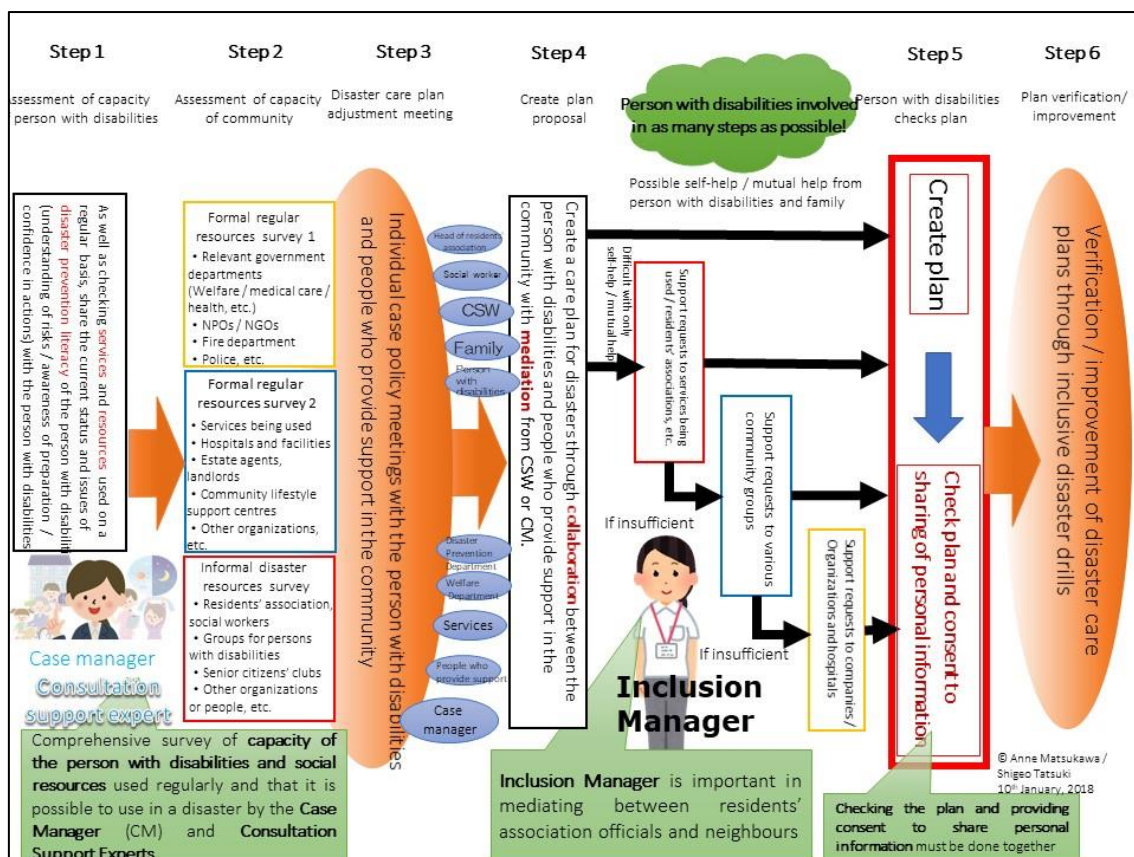


Fig.13 Steps to elaborate individual evacuation plans

Specific steps start with assessing the abilities of the person in question. We also assess community abilities. Then we compare and adjust disaster care plans create by consulting support specialists at

adjustment meetings with the community. With all this information, we make a new plan, check the plan and fill in certificates and then do the actual drill. Those are the steps that we take to progress. This was what we did in the first and second years.

In 2018, the third year, we conducted a drill entitled ‘What is required at an Evacuation Center?’ ‘I have a video of an adjustment meeting so let’s have a look. The venue is the gym of Hokubu Junior High School, the designated evacuation center for Kamegawa district. The mother of a woman with an intellectual disability who had created an individual plan and participated in evacuation drills came to the adjustment meeting and discussed with the people of the community how her daughter, Yumi, would be able to live in the gym.

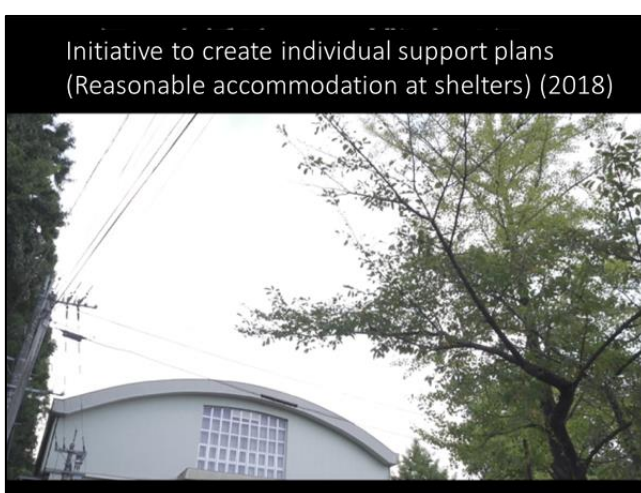


Fig.14 An image of a video-taped report of the practice of 2018

This video is of the third year. We had adjustment meetings for a number of different people but I have showed you the one that I think it most easy to understand. After these adjustment meetings, we held an evacuation center operation drill on 25<sup>th</sup> November, 2018. Beppu City has created a basic manual for evacuation center operation. Based on this manual, we discussed what each group should do in order for everyone to live at their evacuation center, adjusted the manual a little to suit the situation and worked from that. For example, we discussed what the emergency care group would need to prepare.

In addition, we investigated a network to check safety at the time of a disaster. I thought we could use it to check safety during the Kumamoto Oita Earthquake. For the elderly, we went to the Senior Welfare Section and asked comprehensive support centres and home nursing care support offices for specific information based on a list of approximately 1,100 people. The assistant to the head of the Senior Welfare Section asked why wanted the information and what we were going to do with it. From the documents I received, I divided people into groups: those who require volunteers to clean their rooms, people who require a specialist and people who require a specialist when the degree of welfare services may change slightly.

However, there was no information about the individual situations of persons with disabilities at City Hall. The Disability Welfare Section contracts everything out to other organizations so I was told that information about specific services being used is not available at City Hall. Therefore, I created a network that loosely connected people who were already in relevant organizations in order to get a proper understanding of information on persons with disabilities (focusing on the Forum), thought about checking on safety individually as much as possible and held an establishment preparation meeting on the 10<sup>th</sup> of November 2018. We have a view to making information about support needs obtained through checks on safety available externally in order to obtain support. On 19<sup>th</sup> January, 2019, we initially launched the network with around 50 people who agreed to participate and we are thinking of holding study groups and confirming the division of roles in the future.

## Projects implemented along with individual support plans

- 1. Disaster Safety Check Network (provisional name)**
  - Check safety / needs / receipt of support with relevant people such as persons with disabilities, family and other associations, services and facilities.
- 2. Training session to make BCPs (Business Continuity Plans) for facilities at disasters**
  - It is necessary to prepare to protect the lives of their residents (patients) at facilities (hospitals, etc.).
  - Can facilities accept the general public at the time of a disaster, after facilities' understanding of the situation and circumstances of the community?
  - Can facilities work as welfare evacuation shelters for persons who made their individual evacuation plans?
- 3. Training sessions to consider disaster prevention and community planning**
  - Review current status of residents' association operation and apply to required activities plan

2

Fig.15 Projects implemented along with individual support plans

Secondly, the City is holding training sessions to create Business Continuity Plans (BCP) at the time of a disaster. We have been holding study groups and practical training sessions to create BCPs for people who are responsible for facility day service businesses. After checking that users' lives will be protected at welfare facilities, if possible, they should start preparing to receive people from places that are in difficulty. We would like them to work out how many people they could accept in this kind of situation. We want them to continue their business and start the day service again as quickly as possible. We are studying together with each business to work out what is needed immediately after a disaster strikes, who will be in charge of what and how to make decisions as preparation to be able to open again as soon as possible.

Thirdly, I said that we had brought up the subject of reviewing the community a while ago. This is

a training session to think about disaster prevention and community planning. We are reviewing the current operation of residents' associations. The current situation of residents' associations is that it would be odd to continue doing what they have been doing up until now if there are many elderly people and not many children. If festivals are really necessary for communities then they should organize festivals. If a meal distribution service is more essential than a festival then they should have a community meal distribution service. The heads of residents' associations have lots of meetings to go to so they are very busy. Yesterday they could have been wearing a red hat as the protector of the community and today a yellow one as part of a crime prevention patrol but the contents are almost the same. If that is the case, meetings should be reviewed. This means that we must also review the internal system at City Hall. We are actually holding study groups at the moment.

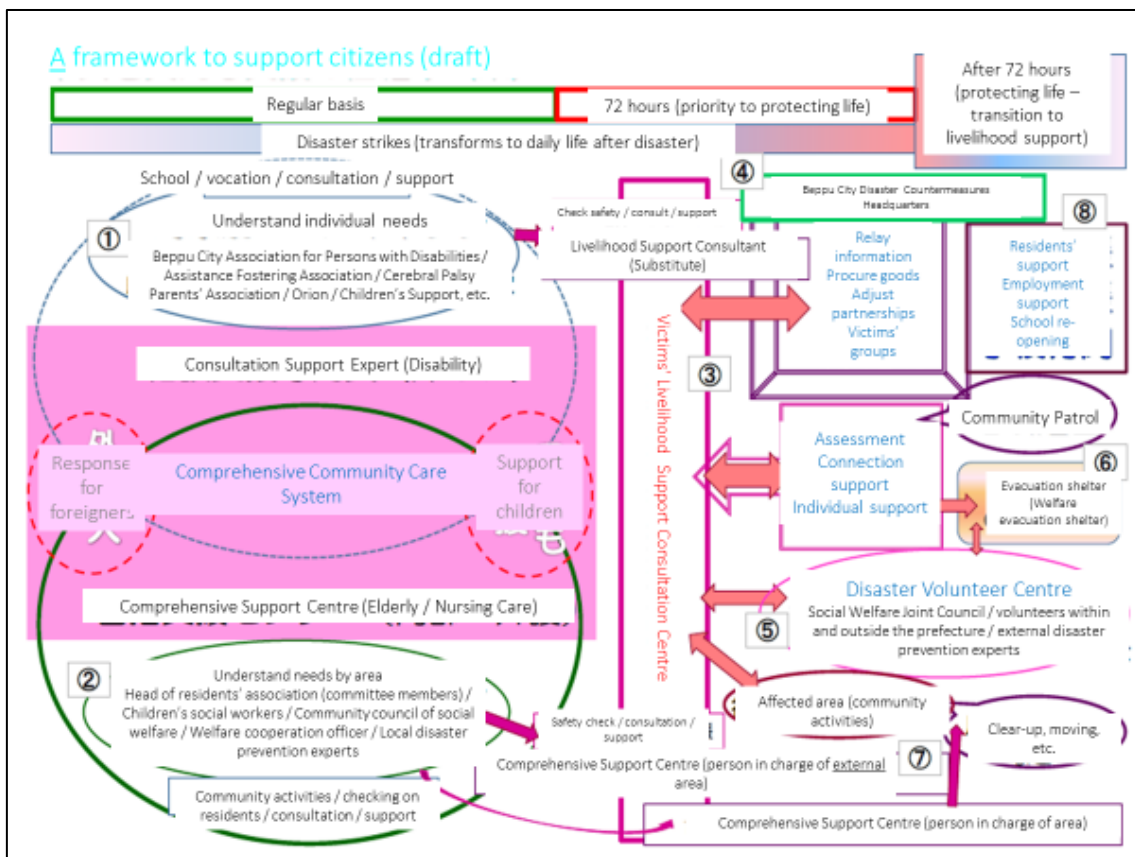


Fig.16 A framework to support citizens (draft)



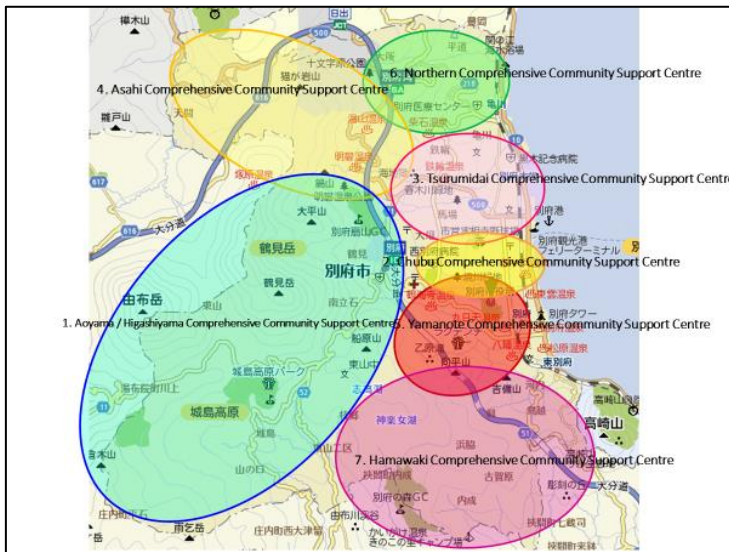


Fig.17 Comprehensive Community Support Centres at Beppu City

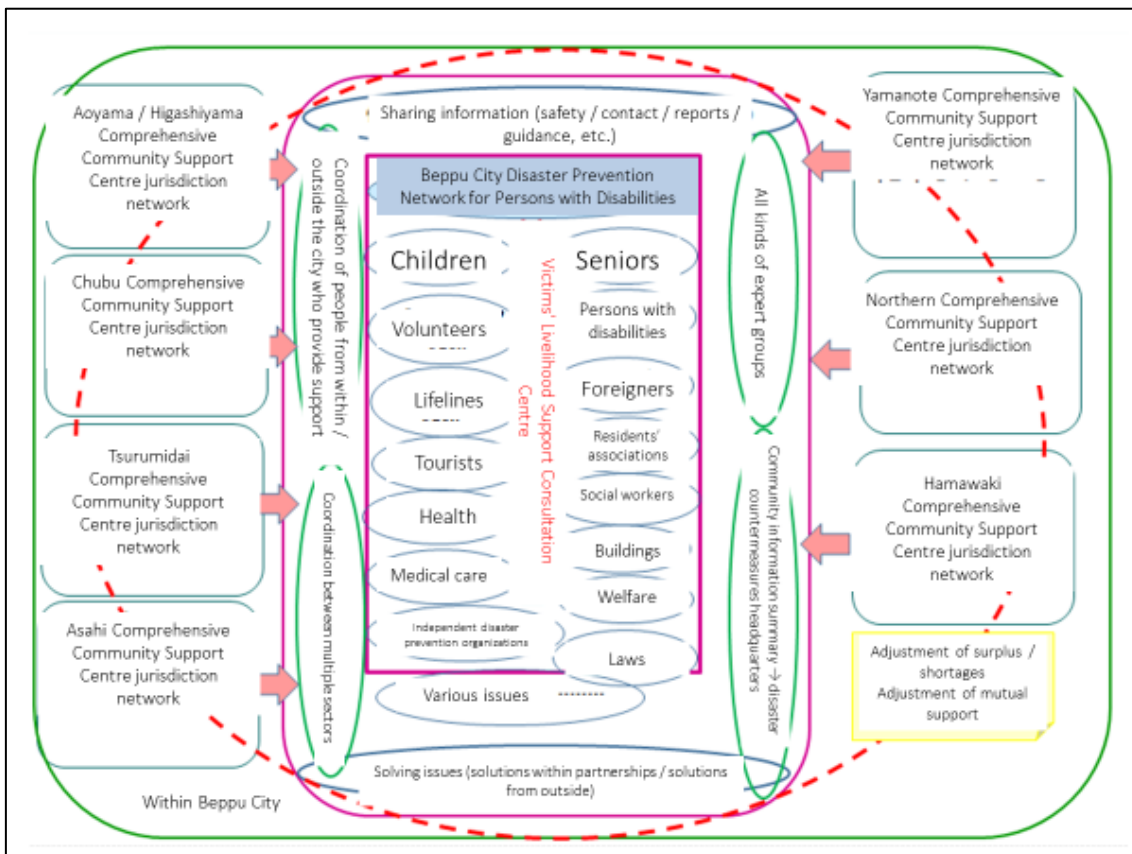


Fig.18 Beppu City Disaster Prevention Network for persons with disabilities

Finally, I have created this figure to show the overall picture. There are seven comprehensive community centres in Beppu City. Each community is sharing information on the elderly to a certain extent. However, there are no organizations equivalent to comprehensive community centres for persons with disabilities. There is no cooperation in the community. Users who are under the

responsibility of consulting support specialists t live in various places across the city. We are thinking of progressing with the development of comprehensive community care systems that can also share information about persons with disabilities in areas that focus on comprehensive community support centres for the elderly. This is also a framework that is recommended by the Ministry of Health, Labour and Welfare. We are aiming for a certain amount of information sharing within the comprehensive community care system and to create a framework that can solve issues that are identified by companies or medical institutions within the system. Persons with disabilities who are living in the community are also included. In the case of Beppu, there is Ritsumeikan Asia Pacific University which has a lot of overseas students, which is an issue. There is also the issue of children. I would like to create a framework in which a certain amount of information can be shared in the afore-mentioned area to include these issues.

It is important to absorb issues when it happen and solve them. At the time of a disaster, I think victim lifestyle support consultation counters should be the usual lifestyle support consultation counters. I would like to create a network with various organizations in order to enhance (these functions). We need mechanisms that can solve various issues. They don't all have to gather in one place. All we need to know is who is where and who can solve the issue. We are making progress with the relevant people to create a framework in which information that is provided from the community is properly understood to solve issues and if it is not possible to solve them, to pass them on to somewhere else that can solve them.

I found documents related to this from the Ministry of Health, Labour and Welfare called Achieving a Convivial Local Society. There was a project to create a framework with the welfare aspect and train coordinators in the community. These kinds of projects do not function if they are not linked to disaster prevention projects. I often hear from comprehensive community centres that the staff are specialists in nursing care insurance but when they go into the community and see families, there are all kinds of issues including NEETs who are not currently employed, educated or trained, lifestyle difficulties and psychiatric disorders. They need to pass issues that exceed their expertise to organizations that can solve them. Nursing care insurance work only is not really for the benefit of the community and does not help the elderly.

It is the same for consulting support specialists to persons with disabilities. We are working on training coordinators that specifically connect specialists who work closely with persons with disabilities and the elderly and specialists and the community linking various projects to try to create a framework to be able to provide specific solutions.

As a representative of the Welfare Department, I think that we should be discussing how to achieve multi-functional coordination. Budget formulation is the last stage so we need to talk to public finance about this and have them understand in order to create a budget. Meanwhile, as a community, we need to think about how to change the system so that it can be arranged to suit the local community and

used properly rather than just using what we have now as is. We also need to create responsible human resources who can be used for the community. If this is not possible, I think things will be difficult.

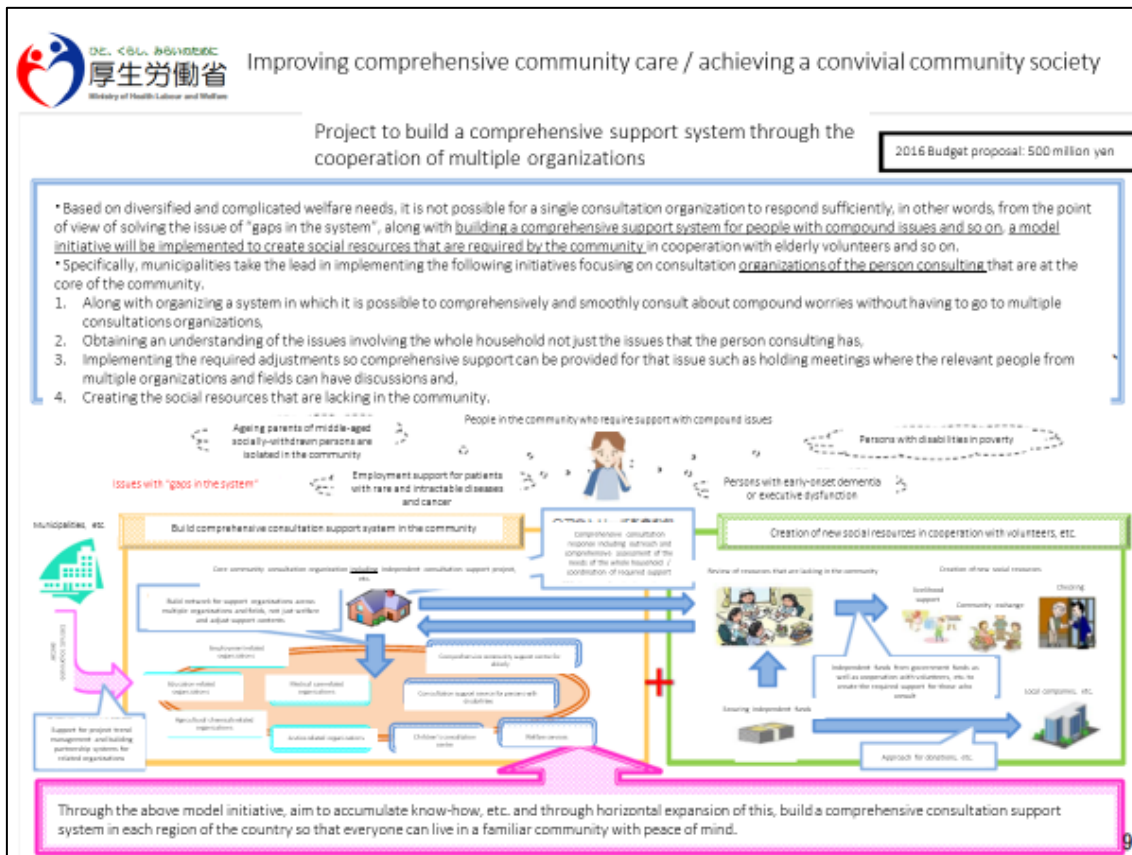


Fig.19 Improving comprehensive community care (Source : Ministry of Health, Labour, and Welfare. Presentation material 280114 <https://www.mhlw.go.jp/topics/2016/01/dl/tp0115-1-13-05p.pdf>)

The graphic features icons for Sustainable Development Goals 3 (Health and Well-being), 5 (Gender Equality), 10 (Reduced Inequalities), 11 (Sustainable Cities and Communities), 16 (Peace, Justice and Strong Institutions), and 17 (Partnerships for Development). The text reads:

Decisions on when, what and who; what actions should be taken, time required and the role of each organization in detail

Community planning and training people so that they can continue to live in safety with peace of mind

Disaster prevention that no one left behind

Fig.20 Disaster prevention that no one left behind

We need to decide where, what and who with respect to what Beppu is currently doing for disaster prevention for persons with disabilities. This is decided through discussion of details including what

actions need to be taken, how long each action takes and the roles of each organizations. It is extremely important to hold these kinds of discussions but Japanese people are not great at doing this. Offering opinions during a discussion is perceived as attacking the individual and it is when opinions differ that feelings stop. We must not do this; we must discuss these issues properly. We must make choices that we would not necessarily make on a routine basis but that must be made as a person who is in an environment where there has been a disaster. There are times when you have to do certain things to protect your life or lifestyle. This means that if we don't discuss these issues on a routine basis and create relationships that will be able to do what is for the best in the present circumstances, we will not get through the disaster. I have seen this in disaster-affected areas time and time again. I want to continue to have discussions and carry out drills on a routine basis.

In the end, I am working hard to aim for a Beppu City in which people can continue to live in safety and with peace of mind. Issues will not be solved unless we create communities and train people on a routine basis. The No One Left Behind disaster prevention initiative encourages us all to cooperate and create a proper plan of when, what and who.

There are numbers such as 3 and 5 at the top of the slide. I am sure you all know about this but for the No One Left Behind disaster prevention initiative, we are aware of SDGs (Sustainable Development Goals) 3, 5, 10, 11, 16 and are putting them into practice along with citizen activity organizations. Citizen activity organizations are voluntary in times of peace. So, how significant are these activities? They have the intention of being for everyone, not just themselves and are working hard to help people in difficulty all over the world. In Beppu City, we are working jointly (with these organizations). By conducting activities with persons with disabilities themselves, we are gradually increasing the number of Beppu City residents that participate. The people from the residents' associations that you saw in the video came as well as other relevant people and representatives from the fire service and the police. We also held a drill in which City Hall staff who could pass for suspicious people played that role and the police came to arrest them. Beppu City is hoping that, by accumulating real experiences, people will realize that they have no choice but to work together on disaster prevention for persons with disabilities. For example, they will become aware of what they will actually have to do to prepare and what they should do when there are people lining up at the contact point with a particular issue.

I'm afraid my time is up so I will stop here. Thank you for listening.

### **【Question and Answers】**

**MC (Yayoi Kitamura):** Thank you. Do you have any questions?

**A:** I am A from B University. Thank you very much for this important information. I believe that the leader of residents' association in the first video raises an extremely important point at issue. He said that all the local residents do not have extra room to help persons with disabilities. I don't know what

the basis was for the statement but I think that the following responses and how the people shared their feelings is extremely important so, if you have no objections, could you please tell us about that?

**Murano:** I have known the leader for quite a long time and they have a lot of passion for their work. The leader of the residents' association has been working on what the people in the community need for a long time. I think they are people who heard about providing support for evacuating persons with disabilities and can imagine how difficult it would be if they were in that situation. The most worrying thing is that this kind of issue is just glossed over without being discussed, when it is brought up. Circumstances in which nothing is done for us can arise. This person perceived the issues as their own in this way and that is why they made that statement. Then there was applause. And everyone came round to that way of thinking (no glossing over).

We talked about it properly. To be honest, up to now the administration and the community have given us various things to work on. As the community, they ask us to do this and that. But this time, for a change, there was the attitude of, "Let's do this together," and I ended up going to that community every day for a month. To the point where I am never at my desk. That is how much the people of the community talked about various issues and what to do about them. As I don't know anything about Beppu, I had to be taught by everyone but through umpteen discussions about how things could be done and what things they thought were not possible, there were more and more people who were of the opinion that they didn't know what to do but they would give it a try. It is not that people involved in residents' associations do not want to provide evacuation support for persons with disabilities, it is that they are unsure about what to do and if they are capable of doing it.

I think that the drills that we have held up to now have required that we perform everything correctly. I always say that it is OK to make lots of mistakes in drills so that we don't make mistakes when the real thing happens, let's find lots of issues and let's make it a drill that flags up what we can't do so that we can think about what we can't do afterwards. I feel that the people of the community have started to change their feelings a little by creating a platform on which to exchange opinions. For example, if there is a request from someone in the community, I will go around the area from eight o'clock in the morning on a Sunday. The people of the community see that so I think that they feel that the administration is making a serious effort. And I feel that the residents' association members also change their feelings a little and might want to work together with us.

**MC:** The next question will be asked in sign language by Mr Hasegawa. It will be spoken by the sign language interpreter.

**C (Interpreter):** I am a person with hearing impairment. On figure 13, there are steps 1, 2, 3 and 4. Step 3 mentions residents' associations, social workers, CSW and disaster prevention departments. Are guides for the visually impaired and sign language interpreters included in the people who provide support?

**Murano:** Well, there are cases in which sign language interpreters come and there are other times

when we use writing to communicate. We adjust to the situation. Guides for the visually impaired were used if the person in question requested them.

MC: We don't have a lot of time so we'll move on to the next part of the session.

( sharing information and a group work )

MC: Thank you. In conclusion, Ms. Murano, could you say a little about your thoughts after today's session? First of all, what do you think about the statement that Beppu City and Toshima Ward are completely different?

**Murano:** Thank you all for your time. As I attend more and more of these events and become involved with various people who are different to each other, the unexpected happens. I really like that. Things that are contrary to my expectations happen. I think it is really great if these things go in a good direction. I think it is a good thing that we continue to have these kinds of meetings.

In the group work, there was someone who said that it is difficult to talk to the people of the community (about disabilities) alone. I think that is true. Yumi's parents did not suddenly just turn up at adjustment meetings with citizens; they started from steps before that. First, consulting support specialists explain to the members of the community. They felt that the people of the community were in a position to accept Yumi by holding evacuation drills so they can then talk to the junior high school. But when you go, you can understand why the person in question pulled back. This kind of situation is very difficult. Only by holding discussions in advance, drills and creating specific relationships are we able to move on to the next step. It is not possible to suddenly have a discussion involving a lot of people. If we don't do things properly in order and create relationships, it is not possible to do this. This is omitted on the DVD.

What I was jealous about was that, in Toshima Ward, the administration has already started a number of initiatives. Community social workers are already in place. To the point where we are wondering how to create a system like this. If there is no one to accompany the members of the community, it is not easy to mediate. I think it is really great that those people are doing their jobs properly and participating in these activities. And Toshima Ward is making progress with activities with different orientations. I think that this will become a really good initiative connected horizontally rather than top-down. I will keep on working in Beppu but I will be keeping an eye on Toshima Ward, too. I have learned a lot today. I have great expectations for you all in the future. Thank you very much.

