

# AHWIN PAPERS

## Lessons For Aging-Related Policy

### Key Lessons

- Japan is at high risk of natural disasters due to the nature of its land. Based on lessons learned from past disasters, the government has been reviewing its legal system and strengthening its countermeasures to specifically protect those at greatest risk.
- Older people are disproportionately affected by disasters, and in Japan's case, they have accounted for the vast majority of “disaster-related deaths” in recent years—those that occur in the period following a disaster.
- In Japan's super-aged society, older persons are regarded as people in need of special care in times of disaster and the legal system gives them high priority in disaster management and relief systems.
- Supporting older people during disasters requires preparation in advance by building coordination between and a system of collaboration among institutions that are responsible for their wellbeing.
- Individualized evacuation plans for people who are most at risk are an important aspect of disaster preparedness, although there are challenges with implementing this policy on the ground.

## Disaster Preparedness for Aging Populations: Lessons from Japan

**Dr. Hiroko Okuda**, *Chief Senior Researcher, Department of Health Crisis Management, National Institute of Public Health, Japan (NIPH)*

**Dr. Jun Tomio**, *Director, Department of Health Crisis Management, NIPH*

### Disasters and Aged Society in Japan

Between 1900 and 2021, an average of 90 disasters occurred annually in Asia, and Asia accounted for about 90 percent of the world's disasters in terms of fatalities and injuries. During this period, China experienced the highest number of natural disasters, followed by India, the Philippines, Indonesia, Bangladesh, Vietnam, Japan, Pakistan, Afghanistan, and Iran.<sup>1</sup>

In recent years, Japan has experienced many natural disasters that have caused extensive damage, and disaster management has been positioned as one of the country's most important policy priorities. In addition, since the 1970s, Japan's population has been aging rapidly, and the number of older people living alone or in households with only old people has been increasing.<sup>2</sup> Therefore, disaster preparedness that fully considers the needs of older residents is an urgent issue.

This policy brief will outline some of the changes that Japan has made to its legal systems over the years in response to past large-scale disasters in order to strengthen disaster management and relief measures for older people, and will explain recent measures and challenges. It is hoped that Japan's experience might offer lessons to other countries in Asia Pacific and around the world that likewise will face the challenge of ensuring the health and wellbeing of an aging population in the face of increasingly frequent natural disasters.

1. Asia Disaster Reduction Center (ADRC), *Natural Disaster Datebook 2022, An Analytical Overview*, [https://www.adrc.asia/publications/databook/ORG/databook\\_2022/pdf/DataBook2022.pdf](https://www.adrc.asia/publications/databook/ORG/databook_2022/pdf/DataBook2022.pdf).

2. Cabinet Office, *Annual Report on the Ageing Society 2023*, [https://www8.cao.go.jp/kourei/whitepaper/w-2023/html/zenbun/s1\\_1\\_3.html](https://www8.cao.go.jp/kourei/whitepaper/w-2023/html/zenbun/s1_1_3.html).

## Changes in the Legal System and Countermeasures Related to Disasters for Older Persons

### Laws Related to Disasters

Japan has experienced many large-scale disasters in the past and has developed a number of laws based on the lessons learned. This section outlines the laws that form the basis of Japan’s current disaster countermeasures and the evolution of measures specifically for older persons.

#### ■ Disaster Relief Act (1947)

This law was enacted in response to the 1946 Nankai Earthquake, in which 1,443 people died, to provide emergency relief to citizens affected by disasters and to place preserving the social order as a responsibility of the national government. In the event of a disaster with damage above a certain scale, prefectural governors shall confirm the damage information of municipalities and decide on the application of this law on a municipal basis. If this law is applied, emergency relief (provision of shelters and emergency temporary

**Table 1. Major disasters in Japan and changes in laws, regulations, and systems related to persons requiring assistance**

Year	Disaster	No. of deceased*	Major changes in laws, regulations and systems
1946	Nankai Earthquake	1,443	
1947			Disaster Relief Act enacted
1959	Isewan Typhoon (Vera)	5,098	
1961			Basic Act on Disaster Management enacted
1995	Great Hanshin-Awaji Earthquake	6,437	Revision of the Basic Act on Disaster Management: Introduced necessary disaster prevention measures for the elderly, disabled persons, infants, etc.
2004	Typhoon No. 23 (Tokage)	98	
2004	Niigata Chuetsu Earthquake	68	
2006			Issuance of Guidelines for Evacuation Assistance for Persons in Need of Support During Disasters
2011	Great East Japan Earthquake	22,318	
2013			Revision of Basic Act on Disaster Management: Mandated that local government leaders prepare a list of residents in need of assistance in evacuation
"			Issuance of Guidelines for Supporting the Evacuation Behavior of Those Who Require Assistance Evacuating
"			Issuance of Guidelines for Ensuring Satisfactory Living Conditions at Shelters
2016	Kumamoto Earthquake	273	
2018	Heavy Rain Event (July)	271	
2019	Typhoon No. 19 (Hagibis)	108	
2020	Heavy Rain Event (July)	88	
2021			Revision of Basic Act on Disaster Management: Mandated that local government leaders create individual evacuation plans for those needing assistance to evacuate

\* Including missing persons presumed to be deceased. Source: White Paper on Disaster Management (Cabinet Office, 2023)

housing, supply of food and drinking water, medical care, etc.) will be provided to the affected residents at public expense. In addition, other municipalities and prefectural governors will be requested to support rescue operations as necessary.

#### ■ **Basic Act on Disaster Management (1961)**

The purpose of this law is to protect the land and the lives and property of the people in the event of a disaster. Its enactment was triggered by the Isewan Typhoon (Vera) that occurred in 1959 (5,098 people died). In addition to causing far more casualties than the Nankai Earthquake, this disaster also caused tremendous economic damage. Based on the lessons learned from this event, the national government and local governments were obliged to create a basic disaster management plan (national) and local disaster management plans (prefectural and municipal) in order to manage damage from disasters. In addition, organizations that provide public services and social infrastructure—e.g., businesses that provide electricity, gas, water, and telecommunications; medical and health services; transportation infrastructure such as railroads and logistics, etc.—were recognized as “designated public corporations.” These organizations are also charged with the responsibility of developing disaster management operation plans and implementing emergency measures in the event of a disaster.

### Changes in Disaster Countermeasures for Older People

#### ■ **Persons Requiring Disaster Prevention Measures**

The 1995 Great Hanshin-Awaji Earthquake, which claimed the lives of 6,437 people, led to the revision of the Basic Act on Disaster Management. The revision defined people with characteristics that make them vulnerable to difficulties in times of disaster as “the elderly, disabled persons, infants, and other people requiring special consideration,” and tasked the national and local governments with the

implementation of measures necessary for disaster management for those people (Article 8, Paragraph 2, Item 15 of the Basic Act on Disaster Management).

#### ■ **Developing Guidelines to Help People Who Need Evacuation Assistance**

However, in subsequent disasters—e.g., Typhoon No. 23 (Tokage) (98 deaths) and the Niigata Chuetsu Earthquake (68 deaths), both of which occurred in 2004—older persons accounted for approximately 60 percent of the casualties.<sup>3,4</sup> In response, the Guidelines for Evacuation Support of People Requiring Assistance during a Disaster was issued in 2006 to strengthen countermeasures. It recommended the sharing of information on older residents and other persons in need of special consideration and implementing specific evacuation support plans.<sup>5</sup>

In order to promote efforts by local governments to develop an evacuation support system, the aforementioned guidelines define persons in need of assistance during disasters as “people who need assistance in taking a series of actions during a disaster, such as quickly and accurately obtaining necessary information and evacuating to a safe place to protect themselves from a disaster, generally including the older persons, disabled persons, foreigners, infants, and pregnant women.”

As specific examples, each municipality should clarify the scope of the target population, referring to

- (1) those who are certified as needing high levels of nursing care, as defined by Japan's long-term care insurance system (i.e., unable to stand up, walk, etc., by themselves),
- (2) those certified as having other physical or developmental disabilities, and
- (3) others, such as older persons living alone or with other older persons.

The aforementioned guidelines provide three methods for collecting and sharing information on persons requiring assistance in the event of a disaster: inter-agency sharing, voluntary application, and the direct consent

3. Ministry of Land, Infrastructure and Transport (MLIT), “Anzen anshin shakai no kakuritsu ni muketa kokudokoutsu gyousei no tenkai” [Disaster safety and security in light of declining birthrate and aging population], *White Paper on Land, Infrastructure and Transport in Japan, 2006*, <https://www.mlit.go.jp/common/000027168.pdf>.

4. Hokuriku Regional Development Bureau, MLIT, *Niigata-ken Chuetsu Jishin* [Niigata Prefecture's Chuetsu Earthquake], chap. 1, section 2, para. 1-1, “Jinteki higai” [Human Damage] (2004), <https://www.hrr.mlit.go.jp/saigai/H161023/chuetsu-jishin/1/1-2-1.html>.

5. Cabinet Office, “Saigaiji yoengosha no hinan shien gaidorain ni tsuite” [Guidelines for evacuation assistance for persons requiring assistance in times of disaster] (2006), <https://www.bousai.go.jp/taisaku/youengo/060328/index.html>.

method. Of these, it was found that the optimal method for collecting and sharing such information is “to share information with related organizations on persons requiring assistance through the inter-agency method, and then proceed by obtaining confirmation from the persons themselves through the consent method in order to obtain the detailed information necessary to formulate an evacuation support plan.”<sup>6</sup>

### ■ **Mandatory Registration of Residents in Need of Evacuation Assistance**

The Great East Japan Earthquake of 2011 was the deadliest disaster in Japan since World War II, with 22,318 people killed or missing in the triple disaster of a magnitude 9.0 earthquake, a tsunami that reached up to 40 meters high (equivalent to a 10-story building), and a nuclear power plant accident.<sup>7</sup> It was found that 65 percent of the dead were aged 60 or older, and the number of fatalities was exacerbated by the delay in escaping from the tsunami (see fig. 1).<sup>8</sup> As a result of the government’s interviews with municipalities affected by that disaster, it was revealed that they had not yet started to prepare a list of persons requiring assistance in times of disaster and had not provided the list to evacuation supporters in the community.<sup>9</sup> In response, the Basic Act on Disaster Management was revised in 2013, and the previous Guidelines for Evacuation Support of People Requiring Assistance during a Disaster were also revised to provide Guidelines for Supporting the Evacuation Behavior of Those Who Require Assistance Evacuating. The revised guidelines require each municipality to identify “persons requiring special consideration,” such as the elderly, the disabled, and infants, and to register residents who will experience particular difficulties in evacuating on a list of “residents in need of assistance for evacuation” (Article

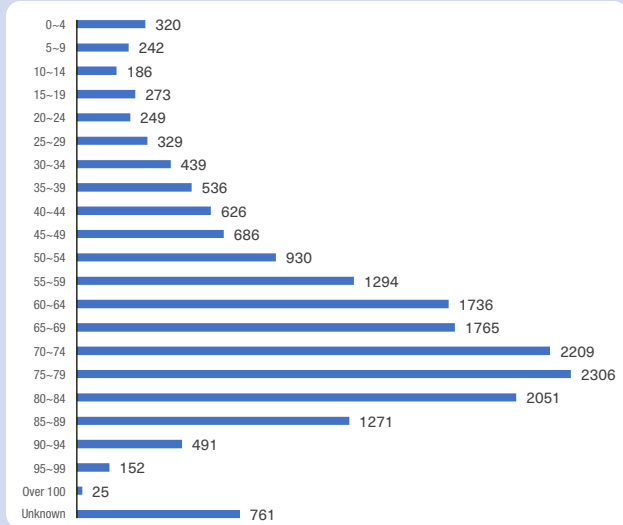
49-10 of the Basic Act on Disaster Management) (fig. 2.). These lists “are the basis for implementing measures necessary to support the evacuation of or confirm the safety of residents in need of assistance in evacuation or to protect from disasters the lives or bodies of residents in need of assistance in evacuation” (Section 1). The lists are to include basic information (name, date of birth, gender, address or residence), telephone numbers and other contact information, reasons for requiring evacuation support, and matters deemed necessary by the municipal mayor for providing evacuation support (Section 2). Since the reasons for requiring evacuation support, etc., include information that is considered to fall under the category of personal information requiring special consideration, such as the type and degree of disability and the classification of nursing care requirements, the protection of personal information is critical.

### ■ **Development of Individual Evacuation Plans**

With the revision of the Basic Act on Disaster Management, municipalities have been working to create lists of residents in need of assistance for evacuation. However, in recent years, the proportion of older people aged 65 and over among the casualties in the frequently occurring wind and flood disasters has remained high. For example, 65 percent of the 84 deaths caused by Typhoon No. 19 in 2019, and 79 percent of the 80 deaths due to torrential rains in July 2020 were people aged 65 or older.<sup>10</sup> In response, the Japanese government has sought ways to make evacuation support more effective in the event of a disaster. In 2021, municipalities were also required to make efforts to create individual evacuation plans for each person on the list who requires support in evacuation (Article 49, Sections 14~17 of the Basic Act on Disaster Management). Individual evacuation plans are prepared

6. Study Group on Evacuation Measures for Persons Requiring Assistance in Times of Disaster, Cabinet Office, Government of Japan, “Saigaiji yoengosha no hinan shien gaidorain” [Guidelines for evacuation assistance for persons requiring assistance in times of disaster] (March 2006), <http://www.bousai.go.jp/taisaku/youengo/060328/pdf/hinanguide.pdf>.
7. Number of deaths from the Great East Japan Earthquake according to the Cabinet Office’s White Paper on Disaster Management 2022, [https://www.bousai.go.jp/en/documentation/white\\_paper/pdf/2022/R4\\_hakusho\\_english.pdf](https://www.bousai.go.jp/en/documentation/white_paper/pdf/2022/R4_hakusho_english.pdf).
8. See Figure 1-1-5, “Higashi Nihon Daishinsai ni okeru shisha to chiiki jinko no nenrei kosei hikaku” [Comparison of the age structure of the East Japan Great Earthquake victims and the regional population], in the Cabinet Office, Government of Japan’s *Heisei 23-nenban Bosai Hakusho* [2011 White Paper on Disaster Prevention], <https://www.bousai.go.jp/kaigirep/hakusho/h23/bousai2011/html/zu/zu005.htm>.
9. Study Group on Evacuation Measures, *Saigaiji yoengosha no hinan shien ni kansuru kentokai hokokusho* [Report of the Study Group on Evacuation Support for Persons Requiring Assistance in Times of Disaster] (March 2013), [http://www.bousai.go.jp/taisaku/hisaisyagyousei/youengosya/h24\\_kentokai/houkokusyo.pdf](http://www.bousai.go.jp/taisaku/hisaisyagyousei/youengosya/h24_kentokai/houkokusyo.pdf).
10. Cabinet Office, *Hinan kodo yoshiensha no hinan kodo shien ni kansuru torikumi shishin no kaitei* [Revision of guidelines for efforts to support evacuation actions for persons in need of evacuation assistance] (May 2021), <https://www.bousai.go.jp/taisaku/hisaisyagyousei/youengosya/r3/index.html>.

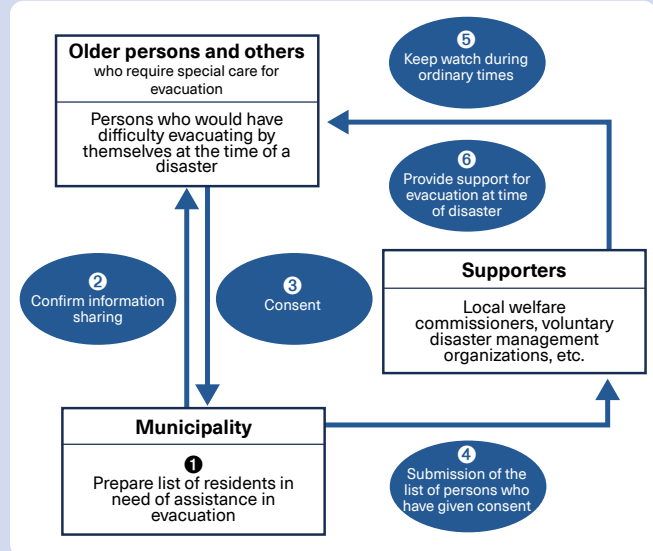
Figure 1. Number of fatalities by age group in the 2011 Great East Japan Earthquake



Note: Data are as of Dec. 2011, at which point there were 18,877 fatalities confirmed.

Source: Ministry of Health, Labour and Welfare (MHLW, 2011) [https://www.mhlw.go.jp/toukei/saikin/hw/jinkou/kakutei11/dl/14\\_x34.pdf](https://www.mhlw.go.jp/toukei/saikin/hw/jinkou/kakutei11/dl/14_x34.pdf).

Figure 2. Development and use of the list of residents in need of assistance with evacuation



by visiting each person who needs evacuation support individually. This is done primarily by local governments, welfare committee members, and community associations, and they discuss specific evacuation support methods with the person in question, taking into account the characteristics and actual conditions of the community. The information will be included as an addition to the list so that necessary information can be shared among municipalities and parties involved in evacuation support. Examples of information to be recorded in the individualized plan include evacuation supporters who will provide evacuation support at the time of a disaster, points to keep in mind when providing evacuation support, evacuation support methods, evacuation sites, evacuation routes, etc.

■ **Current Status of the Lists of Persons Requiring Assistance and Individual Evacuation Plans**

In Japan, based on lessons learned from past disasters, the necessary legal systems have been established to strengthen disaster countermeasures for older people. As of January 1, 2023, about 10 years after it became mandatory for local governments to create lists of persons requiring support for evacuation action, all 1,741 municipalities in Japan had done so.<sup>11</sup> On the other hand, only 159—less than 10 percent of all municipalities—had prepared individual evacuation plans for those on their lists, while 1,144 (66 percent) had “partially prepared” plans and 438 (25 percent) had “not prepared” them. Due to the high proportion of municipalities with incomplete planning, the government developed a sample procedure for formulating individual plans<sup>12</sup> based on a successful model project, and it has encouraged each municipality to use that as a reference.

11. Fire and Disaster Management Agency, Cabinet Office, “Hinan kodo yoshiensha meibo oyobi kobetsu hinan keikaku no sakusei-to ni kakaru torikumi jokyo no chosa kekka” [Results of survey on efforts to prepare lists of persons requiring support for evacuation actions and individual evacuation plans, etc.] (June 30, 2023), <https://www.bousai.go.jp/taisaku/hisaisyagousei/pdf/r4hinan.pdf>.

12. Cabinet Office, “Kobetsu hinan keikaku no sakusei ni torikumu na sama he” [To those working on individual evacuation plans], [https://www.bousai.go.jp/taisaku/hisaisyagousei/pdf/230302\\_hinan.pdf](https://www.bousai.go.jp/taisaku/hisaisyagousei/pdf/230302_hinan.pdf).

## Addressing Health Issues for Older People Resulting from Disasters

### Disaster-Related Deaths and Health Issues

Most of the deaths resulting from disasters are considered “direct” deaths, such as being crushed in a collapsed building, succumbing to fire, or drowning due to flooding caused by heavy rains or tsunamis. But the prevalence of “disaster-related deaths”—in which people avoid these direct causes of death but subsequently die as a result of a deterioration in their physical condition due to the evacuation and other related factors—has also become an issue.

In the Great East Japan Earthquake, 90 percent of the 1,632 deaths that were classified as disaster-related deaths (as of March 2012) occurred among people aged 66 years or older. A detailed analysis of 1,263 of these deaths, which was limited to three prefectures in the Tohoku region<sup>13</sup> that suffered particularly severe damage, revealed that 90 percent were among those aged 70 or older. The causes of disaster-related death were “physical/mental fatigue from living in shelters, etc.” (33 percent), “physical/mental fatigue during transportation to shelters, etc.” (21 percent), “aggravation of pre-existing diseases due to hospital shutdown (including transfer)” (15 percent), and “physical/mental fatigue due to stress from the earthquake/tsunami” (2 percent). Regarding the living environment at the time of death, approximately 30 percent of the deaths occurred in a “hospital/nursing care facility, etc.” and 30 percent were “staying in the same place as before the disaster, such as a home,” while 10 percent occurred when the person was “staying in an evacuation center,” indicating that many disaster-related deaths occurred at home (including among those who required nursing care at home). The specific factors that may have contributed to the deaths were highlighted as problems in living environment and health management, such as “staying on a cold floor only with a thin blanket,” “being crammed into a small space at an evacuation center, mentally and physically exhausted,” “refraining from drinking water because of water shortages and fear of needing to use the toilet,”

and “no helpers or visiting nurses at home, while home care service used to be available.” This shed light on the problems in terms of the post-disaster living environment and health management.

### Efforts to Ensure Satisfactory Living Conditions at Shelters

In response to the results of an analysis of earthquake-related deaths from the Great East Japan Earthquake, the government produced new Guidelines for Ensuring Satisfactory Living Conditions at Shelters.<sup>14</sup> These guidelines called for a strengthening of measures to be taken during normal times, before a disaster strikes, such as securing space for persons requiring special care and securing necessary supplies.

In the event of a large-scale disaster, evacuees are expected to arrive in large numbers and evacuation facilities may be in short supply. Therefore, with regard to admission to evacuation centers, older people and others requiring special care must be given priority and a support system for them must be established to (1) secure space in evacuation centers, (2) procure necessary nursing and medical supplies, and (3) coordinate the confirmation of individuals’ safety, provision of supplies, provision of medical and welfare support, etc., for persons requiring special care who are sheltering in place at their homes. In terms of securing necessary supplies, municipalities should stockpile emergency food appropriate for older persons, as some have difficulty chewing or swallowing regular meals. In addition, during a disaster, it may be difficult to use toilets due to power and/or water outages, so it also advisable to stockpile portable toilets and adult diapers. In addition, people with pre-existing medical conditions should be aware of the need for self-help and be prepared to carry their prescription medications and prescription records with them during an evacuation.

### Efforts to Prepare for Future Disasters

Given the increasingly frequent occurrence of disasters, it is critical that Japan prepare well in advance by strengthening

13. Study Group on Earthquake-Related Deaths, Reconstruction Agency, Government of Japan, *Higashi Nihon Daishinsai ni okeru shinsai kanrenshi ni kansuru hokoku* [Report on earthquake-related deaths in the Great East Japan Earthquake] (August 2012), [https://www.reconstruction.go.jp/topics/20120821\\_shinsaikanrenshihoukoku.pdf](https://www.reconstruction.go.jp/topics/20120821_shinsaikanrenshihoukoku.pdf).

14. Cabinet Office, “Hinanjo ni okeru ryoko na seikatsu kankyo no kakuho ni muketa torikumi shishin” [Revised guidelines for efforts to ensure a good living environment in shelters] (2023), <https://www.bousai.go.jp/taisaku/hinanjo/h25/pdf/kankyokakuho-honbun.pdf>.

measures for older people and others who require special consideration when disasters do strike. However, as local governments have worked to implement the measures outlined above, many have encountered structural problems. More specifically, the section in charge of disaster prevention, which is the main disaster management unit, and the section in charge of health and welfare services for older people are two separate and often siloed units. Moreover, in Japan's hyper-aged society, it takes a great deal of effort to obtain information on all of the people in need of assistance during disasters and to formulate individual support plans for each one. Therefore, collaboration and cooperation among relevant parties, both within and outside of the government, is essential to foster reliable disaster management measures.

To address this issue, there have been cases in recent years where local governments have attempted to promote the formulation of individualized disaster support plans for older persons by taking advantage of the opportunity presented by people applying for the long-term care insurance system or for the use of disability welfare services, which many older people or others who require disaster support plans use.

Japan's long-term care insurance system is a public insurance system established for the purpose of supporting the care of older people throughout society. This system covers a portion of the cost of long-term care services such as home visits and home nursing care for those 65 years of age or older who are approved as requiring long-term care or support. The application for these services is handled by the municipal department in charge of welfare for older persons, and the staff who handle this system are also devising ways to contribute to disaster preparedness for older people at home by preparing care plans for the use of long-term care insurance services together with individual support plans in case of a disaster (fig. 3).<sup>15</sup> The process is facilitated by local Councils for Independent Living Support, which are municipality-based councils that facilitate independent living for those with disabilities and older people in need of care.

In this way, adding disaster countermeasures to an existing framework that already serves to support older people should promote more effective initiatives to provide continued support during both normal times and times of disaster.

As described above, Japan has been incorporating lessons from past disasters as it has established relevant new laws, guidelines, and countermeasures to fortify its disaster preparedness for older people. However, challenges remain, and as disasters have become more frequent and severe in recent years, continuous efforts are required to minimize casualties, especially in areas with high percentages of older people. In particular, while efforts have recently been made to promote disaster management measures in an integrated manner through cooperation between the municipal departments in charge of disaster prevention and those in charge of welfare for older people, in order to prevent disaster-related deaths and secondary health damage, it is also vitally important to strengthen cooperation between those departments and the health department responsible for medical services.

## Implications for Asia

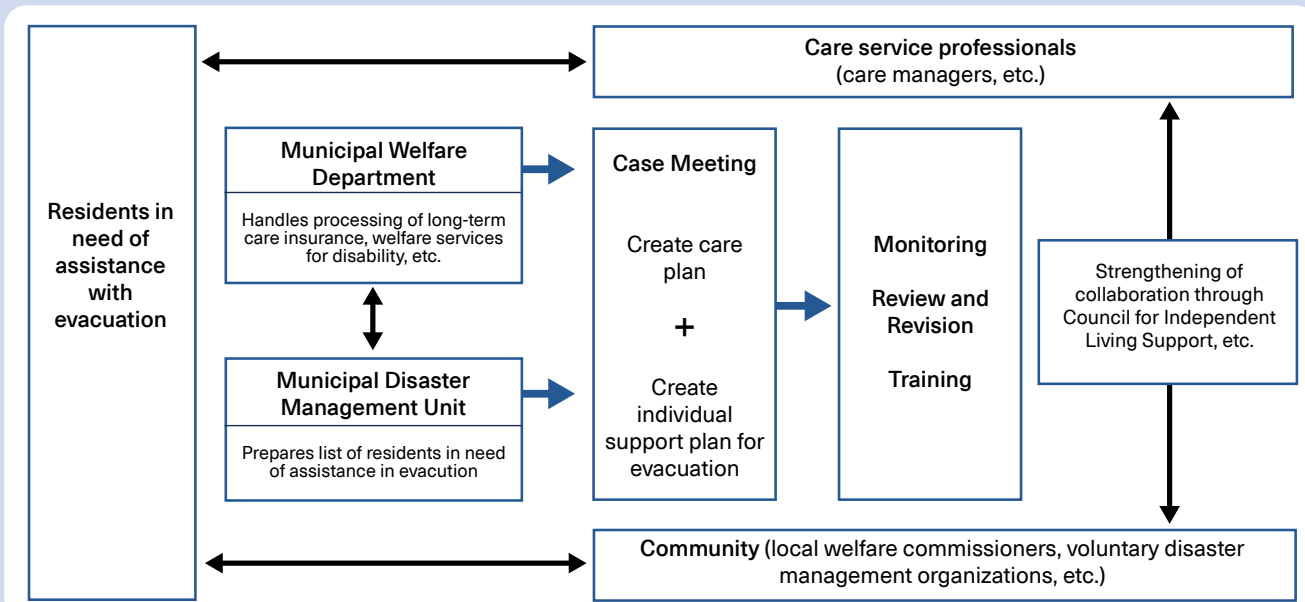
As climate change accelerates worldwide, there is concern that large-scale natural disasters caused by extreme weather events will continue to occur frequently and will affect the lives and health of older people. Particularly in Japan, which is now a super-aged society, the risk of death remains high for older persons, who have greater difficulty in obtaining disaster information<sup>16</sup> and in evacuating quickly by themselves. The country has realized that it is at a stage where it must further enhance support and protection for older persons.

Throughout the Asia-Pacific region, natural disasters such as typhoons, floods, earthquakes, and volcanic eruptions occur frequently, and the population is rapidly aging in many Asian countries. As in Japan, there are concerns that evacuation support for older people and others and the continued ability to provide health and welfare services

15. Cabinet Office, "Koureisha shogaisha to no kobetsu hinan keikaku ni kansuru bousai to fukushi no renkei ni tsuite" [Cooperation between disaster prevention and welfare on individual support plans for the older persons and people with disabilities] (2021), <https://www.mhlw.go.jp/content/12300000/000750360.pdf>.

16. Cabinet Office, Revision of the Guidelines, 2021. Japan has a system of disaster prevention radios (*bosai-musen*) that inform the community of disaster information, and in some areas, particularly in rural areas, all households are equipped with these radios. Evacuation alerts are divided into levels, with the older people encouraged to evacuate earlier than the rest of the population. However, there are challenges to the effectiveness of the alerts

Figure 3. An example of creating an individual evacuation plan through collaboration between municipal disaster management and welfare sections



during the evacuation period will be an issue when disasters strike. We believe that the legal system that Japan has developed based on its past disasters, as well as the establishment of a list of persons in need of assistance and individual evacuation plans based on this system, and the construction of a system of ongoing collaboration among relevant agencies and departments during normal times to strengthen emergency assistance, may provide suggestions for disaster management policies for older persons in Asia and around the world. It is our hope that this paper serves to spark further discussions, research,

and information-sharing so that we can better protect older people across the region.



While preparing this paper, on the very first day of 2024, another major disaster struck Japan. The Noto Peninsula Earthquake claimed the lives of more than 200 people and forced tens of thousands of people to evacuate. We extend our deepest sympathies to those affected and sincerely hope for a speedy recovery.