

Our BOSAI 2019 for the Future

Case Studies of Sendai Citizens' Learnings from **the Sendai Framework**



This booklet was prepared based on group work by those who attended "Think about the Future of BOSAI Together - Series of the Sendai Framework for Disaster Risk Reduction Seminars for citizens in Sendai City" in serial lectures that have been held by the International Research Institute of Disaster Science of Tohoku University and Sendai City since 2016, as an opportunity for citizens to learn the "Sendai Framework for Disaster Risk Reduction 2015-2030." This booklet will continue to be updated with more content through to 2030.



Based on past disaster experience...



When the Great East Japan Earthquake and Tsunami struck, the shaking was stronger than imagined, causing even cars and buses to jump. I had never been able to imagine that a great earthquake could shake the ground so violently until it actually occurred.

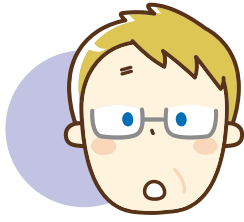
Essential utilities, including electricity and water supply, stopped. Mobile telephone service was also interrupted. Suspension of the water supply, in particular, caused a lot of trouble, and I had to manually pump water for a long time.



There were elementary schools whose students were unable to go home. When their parents tried to pick them up, heavy traffic congestion blocked their path.

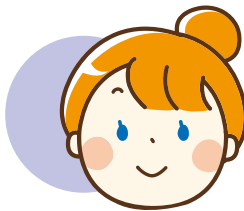
Many people fled to evacuation centers, and we prepared food late into the night. Some of evacuated families included babies. We all helped each other to survive, and children who were babies at that time, were able to soundly become elementary school students.





Since I didn't have enough knowledge about disasters, I didn't know what to do. In my neighborhood, when it rained torrentially, some people went to see the state of the rivers and lost their lives. It made me think that it was important to gain correct knowledge about disaster risk reduction on a daily basis.

I realized that it is absolutely necessary to help each other in the event of a disaster, for example, for the operation of evacuation centers. When the Great East Japan Earthquake and Tsunami struck, there were many neighbors whose faces I didn't recognize. It is necessary to build face-to-face relationships with neighbors by fostering connections with each other in many ways on a daily basis.



In the event of a disaster, all we can do is to deal with the issue at hand as best we can, so things don't necessarily go as we like. Under such a situation, consideration towards others is what is important.

I had a hard time after the Great East Japan Earthquake and Tsunami struck; however, I realized that it is important to make use of these experiences to consider what we can do to build back better and take action.



Outline of the Great East Japan Earthquake and Tsunami

On March 11, 2011, Sendai City was struck by a tremendous earthquake of magnitude of 9.0 that occurred off the Sanriku coast of northern Japan. The tsunami devastated the coastal areas of eastern Sendai. The city's hilly north-western areas and their surroundings suffered significant landslides that damaged residential areas.

What can we do for the "Four Priorities for Action"?

The Sendai Framework for Disaster Risk Reduction says that we need to act based on the "Four Priorities for Action" to prevent disasters and reduce disaster risk.

Priority for Action **1** Understanding Disaster Risk

Priority for Action **2** Strengthening Disaster Risk Governance to Manage Disaster Risk

Priority for Action **3** Investing in Disaster Risk Reduction for Resilience

Priority for Action **4** Enhancing Disaster Preparedness for Effective Response and to "Build Back Better" in Recovery, Rehabilitation and Reconstruction

Learn about your community. **1**

- Learn about past disasters.
- Trace back to the history of your local area.
- Study the geological features of your local area.
- Collect information on your local area through PR brochures and SNS.
- Stroll and explore your local area with your children (parents).

Participate in a disaster drill. **1 2 4**

- Participate in a disaster drill in your community.
- Learn about other people who are participating in the disaster drill.
- Update the directories of neighborhoods at the time of a disaster drill.
- Learn where evacuation centers are.

Prepare for a disaster. **3**

- Prepare various DRR goods.
- Check again that the emergency kit is complete.
- Enhance the safety of your house.
- Organize gatherings for those who have undergone collective relocation.
- Strengthen the bonds within communities of your local area.

Organize / hold a disaster drill. **2 3**

- Participate in meetings for the disaster drill.
- Call for resident's participation in the disaster drill.
- Make a DRR plan suitable for each community.
- Provide evacuation guidance at the time of the disaster drill.
- Watch over children at the time of the disaster drill.
- Call for participation and cooperation with private sectors.
- Organize a DRR lecture during the disaster drill.



Raise disaster risk reduction awareness.

2 3 4

- Speak of the need for self-help, mutual aid and public assistance.
- Think how much you can budget for disaster risk reduction.



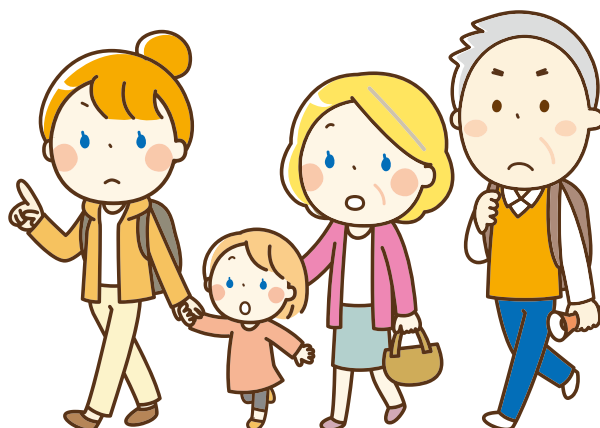
Learn disaster risk reduction.

1 2 3 4

- Take a DRR lecture.
- Tie up DRR education at schools with local DRR efforts.
- Recognize what you can do and what role you must play.
- Hold study sessions with universities and NPOs.
- Learn about risk in the event of a disaster, not only when you are at home, but also when you are away from home.



Those who have learned about BOSAI go on to invest time and money on disaster risk reduction, exercise the wisdom for survival.



What do we do to advance "Mainstreaming Disaster Risk Reduction"?

Mainstreaming Disaster Risk Reduction

Incorporating elements of disaster risk reduction into our daily lives in a natural manner.

Utilize events and festivals.

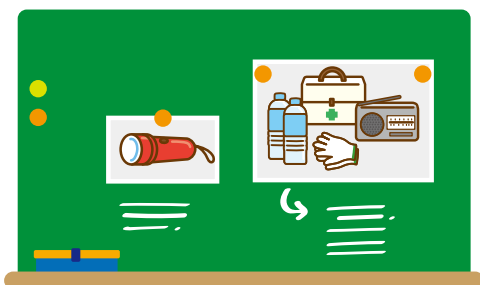
- Incorporate disaster drills into events.
- Hold a disaster drill to coincide with a festival or another opportunity where many people gather.
- Run a DRR booth at a festival venue.
- Distribute hazard maps at festival venues.

Prepare signs and goods.

- Prepare signs that indicate flooding areas.
- Indicate dangerous areas, including underpasses, in an easy-to-understand manner.
- Prepare and distribute goods used for disaster in your community, including flags to indicate that each household is safe.

*I SBL

SBL stands for "Sendai City Regional Bosai (disaster risk reduction) Leader." Members shoulder the responsibility for regional disaster risk reduction fostered under Sendai City's original curriculum. As of the end of February 2019, 680 SBLs are carrying out activities.



Provide opportunities for information exchange and study.

- SBL *I must get to know more residents.
- Provide opportunities for information exchange and study among citizens.
- Exchange information with other neighborhood associations.
- Cooperate with local governments.

Obtain cooperation from schools.

- Incorporate DRR classes into the school curriculum.
- Hold DRR lectures at schools.
- Provide lectures that hand down disaster experience as school classes.
- Display maps that were made through DRR games in schools.
- Teach why evacuation drills and disaster drills are necessary to students.
- Prepare survival meals at school.



Check whether everything is ready.

- Check supplies.
- Check DRR measures in each family.
- Have meetings to review DRR goods.
- Check for dangerous areas on routes to and from school.



Daily efforts

- Use the emergency communication tree of the neighborhood association also for daily communication.
- When using an evacuation center for a local community event, let others know that the place is an evacuation center and what to do in the event of a disaster.
- Form a habit of "rolling stock" for food supplies.
- Consider daily activities of the neighborhood association to be important.
 - ▶ To this end, live a daily life with a smile and be healthy.



Reasonable disaster risk reduction

- Think about DRR efforts that you can easily make.
- Provide means to donate easily to disaster-stricken areas, such as SNS and apps.



Incorporate a disaster risk reduction point of view into plans.

- Include costs for disaster risk reduction in the budget for the neighborhood association.
- Be sure to establish a town-building scheme with priority given to disaster risk reduction.
- Plan DRR-related events as annual events, such as a festival.



Remember and do not forget.

- Media must produce and broadcast disaster-related programs.
- Consider the monthly return of the date of the Great East Japan Earthquake and Tsunami (on the 11th of every month) to be important.
- Determine the family DRR day.
- Be aware that disaster must occur. (There is no region where disaster never occurs.)



What can we do to further strengthen cooperation among stakeholders?

Stakeholders

Any individual and organization regardless of age, sex or nationality. It is desirable that various stakeholders are involved in DRR activities and cooperate with each other.



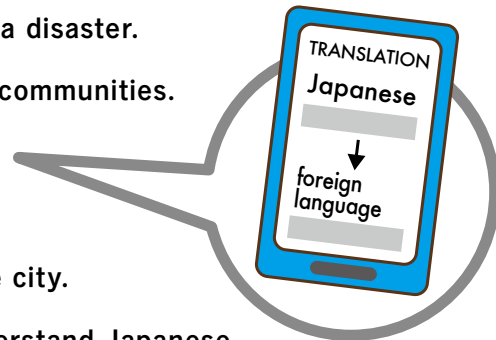
Citizen centers *2

- Use citizen centers on a daily basis as venues where people gather.
- Propose the establishment of locations for disaster risk reduction (display).
- Co-organize DRR lectures with neighborhood associations.
- Learn a way to use a citizen center as a supplementary evacuation center.



Foreigners

- Obtain information as to which countries residents come from in communities.
- Elaborate signs in the region.
 - ▶ Provide translations, e.g., in English, on signs.
 - ▶ In consideration of cultural differences, use illustrations that can be understood by people of any nationality.
- Tell foreigners about action in the event of a disaster.
- Keep up communication on a daily basis in communities.
- Use a translation app.
- Organize a disaster drill together.
- Learn about cases of advanced areas in the city.
- Obtain help from foreign students who understand Japanese.
- Consult the Sendai Tourism, Convention and International Association. *3



Hospitals

- Share evacuation center operation manuals in preparation for disaster.
- Call for participation in the evacuation center operation committee.
- Organize a disaster drill together.



Disabled and aged people

- Think about a structure for evacuation and support in advance.
 - ▶ Deepen understanding of dementia and disability as information for making a decision.
 - ▶ To consider support for aged people in the event of a disaster, obtain information from the Community Comprehensive Care Center. *4
 - ▶ Make a system for allocating disabled and aged people to evacuation centers at a short-term refuge area according to their nursing care and disability levels.
- Watch for disabled and aged people on a daily basis.
- Visit facilities to build relationships.
- Make the locations and roles of the facilities known to residents of the region.
- Hold a disaster drill together with the facilities.



Private sectors, stores, etc.

- Discuss whether private sectors, stores, etc. can be used as evacuation centers.
- Cooperate with economic groups.
- Strengthen the relationships with private sectors by, for example, asking them to propose what they can do as community members.
- Conclude a DRR agreement.
- Organize a disaster drill together.

*2 Citizen centers

Facilities where citizens enjoy lifelong learning, voluntary activities and social interaction in their local communities. 60 centers are located in the city.

*3 Sendai Tourism, Convention and International Association

An organization that is responsible for inviting domestic and international tourists, providing opportunities for international exchange, and making efforts to promote multiculturalism. It also operates many projects for multicultural disaster risk reduction, which involves foreign residents.

*4 Community Comprehensive Care Center

A facility to which aged people and their family members can ask for consultation about nursing care, welfare, health, medical care, etc. free of charge. Sendai City commissions organizations with the operation and management of each center and there are 52 centers in the city.

*5 PTA

PTA stands for "Parent-Teacher Association." It is a group involved in social education that is organized school by school. Families and schools conduct various activities together in order to improve educational effectiveness.



Families with babies/infants

- Incorporate women's points of view into DRR plans.
- Share and understand what is needed for babies and infants and their families in the region.



Our BOSAI, Wishing to Communicate to the Rest of Japan and the World

By communicating lessons from the Great East Japan Earthquake and Tsunami, which we experienced, people in various regions can prepare for disaster that will possibly occur, minimize damage, and use them for recovery from disaster.

- **Nothing is more important than life.** Protect yourself by evacuating as appropriate!
- **Disasters can occur at any time.** Always be prepared!
- Even in an evacuation center, facilities and supplies are not necessarily in ample supply. Learn that public help is not always perfect, and work on **self-help efforts and mutual help!**
- **Provide opportunities for all citizens to obtain knowledge of disaster risk reduction** by, for example, planning to organize a DRR lecture!
- **Listen directly to people who have experienced disaster** by, for example, visiting disaster remains or memorial facilities!
- **Consider disaster risk reduction** rather than disaster prevention!
- Since we have **fellow members who carry out activities together**, we can work hard for daily DRR activities and even in the event of a disaster.
 - ▶ Consider daily relationships with the community and schools, including PTA *5 activities and tea parties, to be important!
 - ▶ Exchange information not only with people in your community but also with people in other communities!
 - ▶ Build relationships among women!

Eight years have passed since the Great East Japan Earthquake and Tsunami. We have many things that we have become able to do by learning lessons from the earthquake.

We will show consideration to others and hand down lessons from the earthquake together with our fellow members who work on DRR activities.

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Prepared by Members who attended "Series of the Sendai Framework for Disaster Risk Reduction Seminars for citizens in Sendai City" from FY2016 to FY 2018
Tetsuya Abe, Hiroki Aruga, Yukiko Ouchi, Sumie Kanno, Masatoshi Kikuchi, Takako Kusa, Shoichi Sekiuchi and Aya Wako

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Contact information about this booklet

Disaster-Resilient and Environmentally-Friendly City Promotion Office,
City Planning Policy Bureau, City of Sendai
TEL: +81-(0)22-214-8098 / E-mail: mac001605@city.sendai.jp

About the Sendai Framework for Disaster Risk Reduction
Disaster-Resilient and Environmentally-Friendly City Sendai website
<https://sendai-resilience.jp/en/sfdrr/>

