



# To save our lives from tsunami -Practical activities of evacuation planning and drill-Yoshi Abe, International Research Institute of Disaster Science, Tohoku University E-mail: yabe@irides.tohoku.ac.ip



# Practical activities to protect human life from the tsunami

- We have supported the tsunami evacuation planning in costal region.
- ◆ And we are working to build program of tsunami evacuation drill corresponding to the various challenges.
- From these two sides of efforts, we have been working on the reconstruction of the evacuation measures.

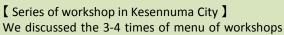
## Community based planning for evacuation

◆ Through proactive participation and discussion of residents, we shared evacuation rules, way of self-help and public-help..

### [Workshop in Sendai City]

Around a table, we will discuss how to escape from tsunami.

- Mapping: Evacuation area and routes
- Discussion: rules, target time, by walk or by car
- Materials and goods, etc.



with the local government, and held workshops.

- 1. Sharing of experiences at the time of the Great East Japan Earthquake
- 2. Creating a tsunami evacuation map (evacuation routes, area, buildings, etc.)
- 3. Discussion of local evacuation rule
- Target time of evacuation
- Rules that call for evacuation
- Preparation of emergency goods
- Rules of evacuation by car
- Support method of evacuation person requiring support, etc.
- 4. Town watching, route confirmation
- 5. Evacuation drill and check

Information and opinions that residents were discussed, is summarized in map, and will be distributed to residents in the future.







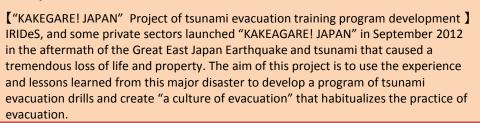
## Study and practice of tsunami evacuation drills

Design of various tsunami evacuation drill method that matches the local situation.

[ Iwanuma City: by walk and using artificial structures ] The eastern district of Iwanuma is located in the Sendai plain. And there is no high ground around. Instead of hills, utilizing tall buildings, the highway embankment, river embankments and bridges, residents have repeated evacuation training run up by walk. In our laboratory, we support the evacuation drill over three years, we have surveyed the behavior of people to evacuate.

#### Yamamoto Town: by car

In this town, residents of near the coast have to evacuate using their car. Yamamoto town planned evacuation drills using the car. In the drill, for many residents and reconstruction workers evacuated by car, traffic jam has occurred in some areas. We obtained the video taken from a helicopter, identified the point of traffic jam.



#### For enhancement of tsunami evacuation measures

We want to build a mechanism to turn the PDCA cycle with the aim of continuous improvement.

By using the research results of the probabilistic tsunami hazard analysis, it is expected to be able to assess the safety of tsunami evacuation area or building.

