### HOW TO MAKE YOUR EVACUATION SWITCH

### Let's make evacuation switches together

#### Your evacuation switch When to evacuate without hesitation. Disasters requiring evacuation Necessity of early evacuation: Yes No Flood Landslide ■ Waterway next to house overflows 0 ■ Request for cooperation to call for evacuation ■ Warning Level 4 Evacuation Order Other Storm Surge ■ XX River floods with 2m remaining Please organize your situation according to your Black out circumstances based on what you have written. **Evacuation Destination** What to do before evacuation Early evacuation destination: Just call your great-grandfather. Miya junior high school Tell the head of the community Urgent evacuation destination: association about the situation Use the switch to act without hesitation. When in danger, take the safest actions you can take at that time.

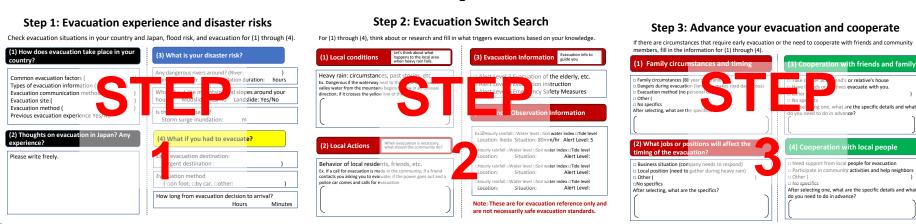
## INTRODUCTION

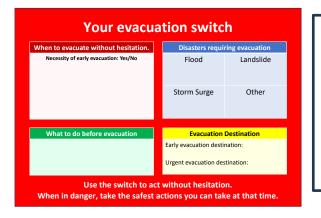
In the areas affected by heavy rain, we hear many people saying, "I never thought this would happen," or "I have never seen anything like this before." Disasters strike when we are caught off guard and are beyond our imagination.

In order to be prepared for such disasters, it is very important to set rules in advance as to when and where to evacuate and what to do beforehand.

This "How to Make an Evacuation Switch" is a list of things you should do in order to think about the rules and possibilities in advance. However, this does not make it perfect. Please talk with your family and community members to make it even better. We hope that you will use it at your own risk as one way to prepare for disasters.

# Heavy rain is expected today. Let's consider your evacuation switch as we trace a day in the life.





While using the three sheets, the final step is to compile them into an evacuation switch card.

## 8:00 IN THE MOBNING

One morning, I noticed that it was starting to rain heavily outside. I received a notification on my phone. 'Alert Level 3 Elderly Evacuation' has been issued. I wondered if I would be okay.

First, let us review the evacuation so far. How is evacuation conducted in your country? Have you ever been evacuated in your country? Please fill out Step 1(1) and 1(2) (black sheet in the left corner).



### Step 1: Identify evacuation experience and flood risk

### (1) How does evacuation take place in your country?

Common evacuation factors (Flood, Drought

Types of evacuation information (Levels 1-4)

Evacuation communication method (Cell phone)

Evacuation site (Relatives' house)

Evacuation method (Personal car)

Previous evacuation experience Yes/No

### (2) Thoughts on evacuation in Japan? Any experience?

Please write freely.

There is a lot of information. I was surprised because evacuation information came out but no one around me was evacuating. Why was no one evacuating?

First, let's compare your country's evacuation and Japan's evacuation.

\*Let's all exchange opinions on how we think about evacuation on a daily basis.

There are many possibilities.

- Japan rains a lot, but are you okay?
- What is a special warning?
- The sirens are going off, what are you going to do?
- What is a shelter like?

## 9:00 AM

Use your local disaster prevention map to see what hazards exist around your home!

The rain continues to fall. You were wondering if you need to evacuate, and now you are getting a little worried. When you turn on the TV and it says, "let's check the hazard map." Is my house safe?

Whether you have seen a hazard map or not, use the disaster prevention map of the municipality in which you live to check what hazards exist around your house. Fill in the results of your checks in step 1 (3) (blue sheet in the upper right corner).



(Source: Takamatsu Disaster Prevention Map)

If not listed, please write based on feeling of area.

### **Step 1: Check daily activities and flood risks**

### (3) What is your disaster risk?

Any dangerous rivers around? (River: Miya River) Inundation depth: 3-5 m, duration: under 12 hours

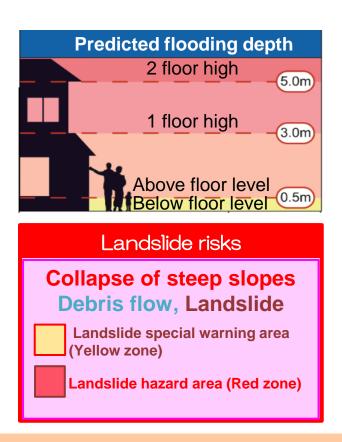
What about the mountains and slopes around your house? Mudslide: Yes No Landslide: Yes No

Is the ocean close by?

Storm surge inundation: 3-5 m

Look at hazard maps and identify hazards around your home.

Smaller rivers, for example, are often not listed, so in that case, please write based on your daily feeling.

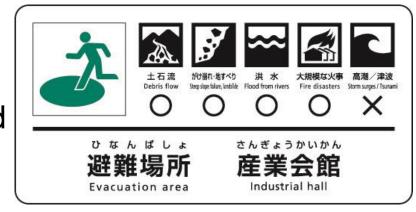


You can also check the hazard map portal site: https://disaportal.gsi.go.jp/

## 19:99 AM

The rain won't stop, so you call your friend. Your friend says, "if you are so worried, you should evacuate. Where should you go in the first place?

Where is the nearest evacuation site? Let's confirm the evacuation site in case of flooding on the disaster prevention map mentioned earlier. After confirming the location, fill in Step 1(4) (yellow sheet in the lower right corner).



https://www.bousai.go.jp/kyoiku/zukigo/index.html

### Step 1: Check daily activities and flood risks

### (4) What if you had to evacuate?

Early destination: Miya Elementary School

(Urgent destination: Sato's house (high ground))

Evacuation method ( □on foot, ■by car, □other:

How long from evacuation decision to arrival?

Hours 30 Minutes

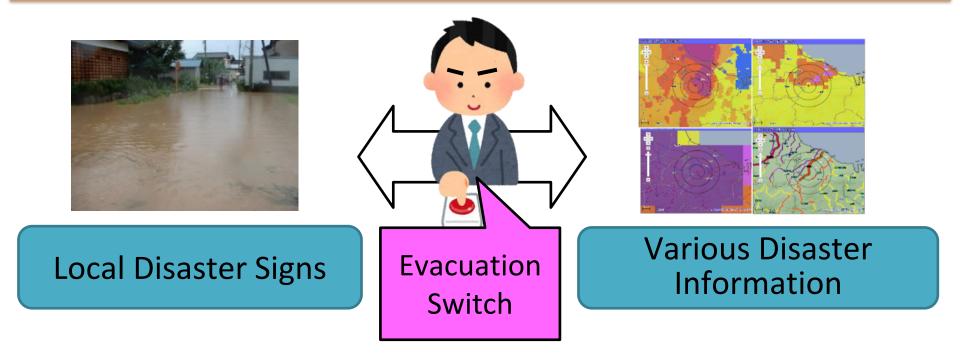
If you were to evacuate, where and how would you go?
Also think about the time required.

If your home is safe, the 2nd or 3rd floor could be evacuation sites.

### **Points**

Evacuation sites are divided into different areas for heavy rain, earthquakes, tsunamis, etc. Make sure you know where the nearest evacuation center is in case of heavy rain. Also, it is often more dangerous to force yourself to go there when your surroundings are flooded. Please think about what you will do if you are in real trouble, and consider emergency evacuation sites such as a neighbor's house or high ground around you, in case you cannot go to an evacuation site.

### When do we change from normal mode to disaster mode?



In order to protect yourself, use local disaster signs (past experience, telltale signs) and various disaster information (weather forecast, river info).

When to evacuate should be decide beforehand!

## 11:00 AM

Suddenly, the rain is coming hard. You are about to prepare lunch when you look out the window and see that the front of your house looks a little flooded, but the rain is too strong to properly see. What did the community look like before the disaster?

One of the evacuation switches is the "local conditions." This is a way to learn about danger in advance from what is going on around you. When a disaster is about to happen, what does your surroundings look like? Fill in step 2 (1) (the brown sheet in the upper left corner), referring also to the situation during heavy rain and past experiences.



### **Step 2: Search for evacuation switches**

### (1) Local conditions

Let's think about what happens to the local area when heavy rain falls.

Heavy rain: circumstances, past stories, etc,

Ex. Dangerous if the waterway next to the house overflows; if valley water from the mountains begins to flow in an unusual direction; if it crosses the yellow line of the levee

If a rock that is always visible is hidden, it is a sign of flooding.

Unusual sounds start coming from the mountains.

Please consider the situation around your home and where you think you will have to evacuate during a heavy rain event.

(Reference) Walking search for switches

If you have never thought about it before, try imagining what the community would be like in the disaster during a family walking or town walking.



## 12:00 NOON

While I was having lunch with my family, wondering what to do, a neighbor came to the front door of our house with a man dressed like a firefighter. He said, "the river may overflow soon, and I hear that the mountains are collapsing in the neighboring towns. Please prepare to evacuate." Oh no!

One of evacuation switches is the behavior of those around you. Many people evacuate by being called by their neighbors. Are there any evacuation efforts in your community? If there are any activities that might trigger an evacuation, please fill out step 2 (2) (brown sheet on the bottom left).



### **Step 2: Search for evacuation switches**

### (2) Local Actions

When evacuation is necessary, what should the community do?

Behavior of local residents, friends, etc.

Ex. If a call for evacuation is made in the community; if a friend contacts you asking you to evacuate; if the power goes out and a police car comes and calls for evacuation

If the head of the community association calls for evacuation.
If more and more neighbors start evacuating.

Refer to the behavior of your friends and people around. What behaviour would make you consider evacuating?

The ideas here will be put on the evacuation switch sheet.

### (Reference) Call-out evacuation

The importance of talking to your neighbors in the community during an evacuation is being reevaluated. In the event of an emergency, please call out to your neighbors and evacuate.



## 13:00 PM

As I am preparing to evacuate, I receive new information on my phone with the sound of "telorororo~n ♪". An evacuation order has been issued. We have a large family, but which evacuation information should we have used to evacuate?

Evacuation information is available from alert level 1 to 5. Evacuation information is the basic trigger for evacuation. Use it as an evacuation switch according to each family's situation. Please indicate at which level you should evacuate in step 2 (3) (brown sheet in the upper right corner).



### **Step 2: Search for evacuation switches**

#### (3) Evacuation Information

Evacuation info to guide you

- ☐ Alert Level 3 Evacuation of the elderly, etc.
- Alert Level 4 Evacuation instruction
- □ Alert Level 5 Emergency Safety Measures

Evacuation information should be chosen according to your situation.



https://www.bousai.go.jp/oukyu/hinanjouhou/r3\_hinanjouhou\_guideline/

## 14:00 PM

When you turn on the TV after preparing for evacuation, you will see a variety of information on the TV. Some of the words you have never heard before, such as "the river has exceeded the danger level of flooding" and "Landslide Warning Information has been issued." You finally realize, "this looks really dangerous."

This is a technical items and does not need to be filled in if you do not know it. If there is information you think you should know, look it up and fill in step 2 (4) (the brown sheet in the lower right corner). If you want to be sure, consult with someone who is familiar with disaster prevention.



### **Step 2: Search for evacuation switches**

### (Reference) Observation Information

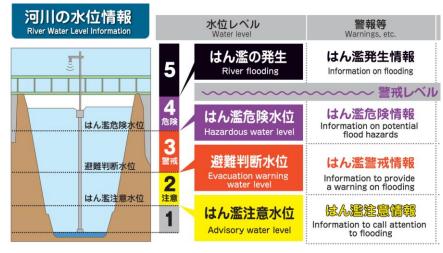
Ex.☑Hourly rainfall □Water level □Soil water index □Tide level Location: Ikeda Situation: 80mm/hr Alert Level: 5

✓ Hourly rainfall □ Water level □ Soil water index □ Tide level Location: Takamatsu Situation: 68 mm/hr Alert Level: 5

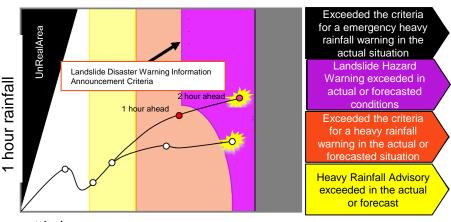
□Hourly rainfall ✓ Water level □Soil water index □Tide level Location: Nariai Situation: Water Level -2.84m Alert Level: 4

□Hourly rainfall □Water level □Soil water index ☑ Tide level Location: Takamatsu Harbor Situation: Storm surge warning 190cm Alert level: 4

Rain forecasts and water levels can be objective information. However since specialized knowledge is required, please refer to "How to check Observation Information." If you are not sure, you may ask someone in the know.



(参考:https://www.city.kitanagoya.lg.jp/moshimo/shelter/map1\_2022.pdf)



(参考: https://www.sabo.pref.ehime.jp/pc/help/dosha.html)

### (Reference) How to check observation information

### Hourly rainfall (Inland flooding)

The maximum one-hour rainfall of the historical ranking of nearby AMeDAS and the expected rainfall. Can be useful to compare with hazard map. Rain intensity and precipitation (Japan Meteorological Agency) is also helpful. Actual values can be found on the rain cloud radar.



**AmeDAS** 



Intensity of rain and how it falls

### Soil water index (Landslide)

The Soil water Index indicates the level of danger in the mountains. You can check the criteria for warnings and emergency warnings on the JMA website to see how different they are. In some prefectures, you can also check the actual real-time values.



Alert Criteria

\*If you want to know the mesh code, please refer to the website of the Wild Bird Society of Japan,
Saitama Branch. →→→



Emergency Warning Criteria



### Water level (Flood)

Select an observation point on a river near you and check the reference water level. If there is a reference water level, the flooding danger level is equal to alert level 4, and the planned high water level is equal to alert level 5. With a crisis-type water level gauge, consider how long before water goes over the levee you should evacuate. If there is no water level standard, think in terms of your intuition of area.



River Disaster Prevention Information

### Tide level (storm surge)

If there is a tide observation nearby, please refer to the warning standard (Alert level 4) or dangerous tide (Alert level 5) tides. If there is no nearby tide station, the announcement of a storm surge warning (Alert level 4) can be used as a reference.



Tide level observation

## 15:00 PM

When you were about to evacuate with your elderly family members, you received a call from your company. Your colleague said, "the area around the site and the company is in trouble, so you need to come here right away." You realized that you were in trouble. I should have evacuated earlier. I should have prepared yesterday.

Evacuation will be a part of your daily life. Some family members may need to evacuate early and others may need to do something at work during heavy rain. If there is anything you can think about that will affect the timing of your evacuation, please fill in step 3 (1) and (2) (brown sheet on the left).



### Impact of family circumstances, work or position

For persons requiring special consideration (elderly, disabled, infants, pregnant, children, injured or sick persons, foreign nationals, etc.), it may take a long time to evacuate.





People who have jobs or are involved in community disaster management during heavy rain may not be home when evacuation is necessary. It may be necessary for some family members to evacuate earlier.

### Step 3: Advance your evacuation and cooperate

### (1) Family circumstances and timing

- ✓ Family circumstances (80 year old grandma)
- □ Dangers during evacuation (landslide makes road dangerous)
- ☑ Evacuation method (no personal car)
- Other (power often goes out during typhoons)
- □ No specifics

After selecting, what are the specifics?

I have younger children and want to evacuate as soon as possible. Worried about my parents who are far away and want to evacuate them earlier than myself.

### (2) What jobs or positions will affect the timing of the evacuation?

- ☑ Business situation (company needs to respond)
- □ Local position (need to gather during heavy rain)
- ☑ Other (working at a construction site )
- □No specifics

After selecting, what are the specifics?

I need to evacuate my family as soon as possible because I may not be able to go home due to a change in my work schedule.

You may have to evacuate earlier than the switch you identified in step 2. Think about whether you or your family's circumstances, work or position require you to decide to evacuate early.

This point varies from person to person.

## 18:00 PM

The job problem was taken care of and another person was assigned to handle it. As I'm thinking, "good, good," my neighbor comes over and says, "we need help with the evacuation, so come on over." I was on district duty this month. So, I decided to call my relative's sibling to take care of my kids. He seemed to have no problem saying, "is your family coming now, okay!!"

During an evacuation, there will be times when you will need to help or cooperate in some way. If there are things that may affect the timing of the evacuation, please fill out steps 3(3) and 3(4) (green sheet on the right).



### Preparation for helping family, friends, and others around you

Are you evacuating to someone's house or are you expecting someone to come to your house? Contact them in advance and be prepared in case of an emergency.







Are you unable to evacuate alone and need to ask for help from those around you, or do you have neighbors who need help? Contact and discuss in advance to cooperate with others around you in case of emergency.

### Step 3: Advance your evacuation and cooperate with others.

#### (3) Cooperation with friends and family

- ☑ Take shelter at a friend's or relative's house
- ☐ Have friends or relatives evacuate with you.
- ☑ Other (call a foreign friend who is new to Japan)
- □ No specifics

After selecting one, what are the specific details and what do you need to do in advance?

Need to contact early to ask about evacuation. Friends who I'll evacuate with reside in dangerous areas

#### (4)Cooperation with local people

- □ Need support from local people for evacuation
- ✓ Participate in community activities and help neighbors
- ✓ Other (let people from flooded areas move cars )
- □ No specifics

After selecting one, what are the specific details and what do you need to do in advance?

I am elderly and need help from the community.
I have a role in communicating the situation to the head of the community.

If you need to evacuate to a friend's house or vice versa, you may need to consult with them. You may need to ask for help from the elderly in your community, or vice versa. Make sure you know what you need to do in advance.

This also varies from person to person.

## 17:00 PM

When you finished helping with the evacuation and settled in at the shelter, four hours had passed since the evacuation order was given. The area was flooded and a landslide had occurred in the mountains. It was a close call. You felt that you should have decided well in advance when to evacuate.

So far, we have organized what you need to do to create your evacuation switch. Now it is time to put it all together on your evacuation switch card. The colors of the cards correspond to the colors of the sheets you have considered so far. Please complete your evacuation switch card by checking the contents on the same color.



### Finally, let's summarize on the "Your Switch" card

### Your evacuation switch

#### When to evacuate without hesitation.

Necessity of early evacuation: Yes / No

- Waterway next to house overflows
- Request for cooperation to call for evacuation
- Warning Level 4 Evacuation Order
- XX River floods with 2m remaining

Please organize your situation according to your circumstances based on what you have written.

#### What to do before evacuation

Just call your great-grandfather.
Tell the head of the community
association about the situation

Disasters requiring evacuation	
Flood	Landslide
Storm Surge	Other Black out

#### **Evacuation Destination**

Early evacuation destination: Miya junior high school

Urgent evacuation destination:

Use the switch to act without hesitation.

When in danger, take the safest actions you can take at that time.

### Reorganize information by color

## FINALLY

How was it? It is quite difficult to think about evacuation switches carefully, isn't it? But in the past, people evacuated by checking the situation in the community themselves, calling for evacuation and helping each other.

We now have convenient access to a lot of information, such as evacuation and weather information, but at the same time, we no longer think about "when and how to evacuate," which we used to take for granted in the past.

However, "when and how to act" is extremely important in the event of huge rainfall. Please make "your evacuation switch" better by discussing it with those around you.

If an emergency occurs, consult your evacuation switch so that you will be able to act properly.

### **Notes:**

- i. Having only one switch can be dangerous.
- ii. It's impossible to make perfect switches.
- iii. Discuss and decide with as many people as possible.
- iv. It is also important to divide roles, such as within a community or a group.
- v. Check the situation around you and the amount of rainfall during heavy rainfall.

Be prepared for unprecedented downpours due to climate change

### **Reference Site**

### (1) Ame-Commu

https://bosaiswitch.net/disastersharing/

This page introduces various evacuation switches throughout Japan. Please refer to them to find out what kind of things can be used as evacuation switches.

### (2) Explanation of evacuation switches

https://www.nhk.or.jp/ashitanavi/article/1864.html

The evacuation switch is introduced in an easy-to-understand manner.

### (3) Ame-tore

https://bosaiswitch.net/disasterdrill2/

This tool allows you to simulate a disaster. Some of them are open to the public, so please try them to prepare for the real disaster.