# 1 Daily preparation

### Flood disaster

There are two types of flooding caused by heavy rain as shown below.



Flooding caused by rainfall (stormwater) that cannot be drained by waterways and sewers.

Flooding that occurs when an embankment is broken or water overflows an embankment due to a rising river.

Landslide

### Sediment disaster

There are mainly three types of sediment disaster as shown below

### Collapse of a steep slope (slope failur



A phenomenon in which a steep slope suddenly collapses due to moisture that has soaked into the ground. Since this happens suddenly, many people fail to escape when it happens near their homes, and the rate of death increases.

in mountains and rivers are swept

A phenomenon in which stones and sand downstream together with water due to

**Debris flow** 

into the ground due to heavy or long rain, and the ground lifted by the force of the water moves slowly over a wide area.

### For emergencies

Discuss and confirm evacuation methods and procedures with your family in advance. Then, you can act without panicking in case of emergency. It is recommended to actively participate in evacuation drills held by your neighborhood association or other organizations.



 Check the evacuation site and route. When evacuating, there is a possibility that your family members may evacuate separately. So, decide on a meeting place. Decide on the roles of each family member in daily preventive measures and in the event of a disaster.

Walk through your evacuation route

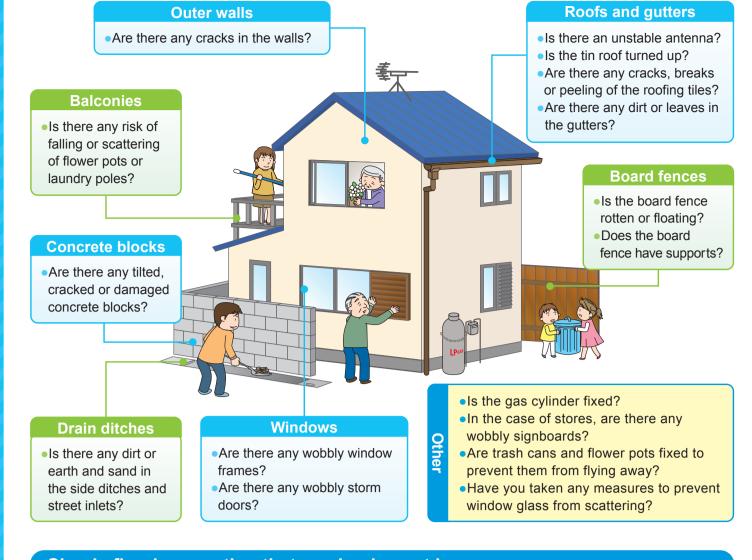
•Walk to the evacuation site to check for areas that may be dangerous during evacuation. Since evacuation at night is more dangerous than evacuation during the day, try to walk through the evacuation route at night. Adjacent school districts may be closer to your home. So, check multiple evacuation

\*Evacuation centers designated by the city are not the only places where you can take shelter in case of emergency.

If you have any relatives or acquaintances who live in a safe place and with whom you can find shelter, consult with them on a regular basis and consider evacuating there.

### To reduce damage to houses

To minimize the damage caused by typhoons and heavy rains, take sufficient measures against storm and flood damage by inspecting, repairing and reinforcing your house and its surroundings on a daily basis.



### Simple flood prevention that can be done at home

If inundation is shallow, you can prevent water from entering a building by laying sandbags (or water bags if there is no sandbag). As a simple measure, you can also wrap planters, plastic containers for oil, long boards (ladders and tables are also acceptable), etc. with plastic sheets, and lay them. If the building is lower than the road or if the building has a basement, laying water stop plates is more effective.



Example of simple flood prevention method 1 Example of simple flood prevention method 2 Planters and plastic sheet

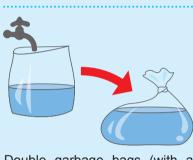
Place planters filled with soil and wrapped in a plastic sheet to prevent inundation.



Simple water bags and water stop plate

Make simple water bags and place them at the entrance in combination with a long plate or the like to prevent inundation.

### How to make a simple water bag



Double garbage bags (with a capacity of about 40 liters) used at home, fill them about half-full with water, and tie the mouth

**Valuables** 

Deposit/savings passbook, seal,

Health insurance card

Individual Number Cards

Other

Cash

passport

Certificate of title

Driver's license

Credit cards and

# 2 Get information

### Rainfall intensity and types of rain (hourly rainfall)

| forecast terms Hourly rainfall       | Slightly strong rain<br>10 mm - less than 20 mm  | Strong rain<br>20 mm - less than 30 mm                      | Heavy rain<br>30 mm - less than 50 mm  | Extremely heavy rain 50 mm -less than 80 mm   | Violent rain<br>80 mm or over   |  |
|--------------------------------------|--|---|--|---|---|--|
| Impression<br>that people<br>receive | It rains hard, and your feet get wet.  | The rain pours down, and you get wet even with an umbrella. | The rain falls as if a bucket filled with water is emptied over your head.     | The rain falls in torrents like a waterfall. Umbrellas are completely useless.  | You have a feeling of oppression that makes you suffocate, and you feel scared. |  |
| Outdoor conditions                   | Puddles form all over the ground.  |   | The road becomes like a river.   | The spray of water turns the whole area white and reduces visibility.   |   |  |
| When riding in a car                 |  | It is difficult to see even if the wipers are moved fast.   | Brakes become less effective (the hydroplaning phenomenon).                    | Driving a car is dangerous.   |   |  |
| Disaster conditions                  | Attention is required if the rain continues for a long time.  Gutters, sewers and small rivers overflow, and small-scale landslides begin. |   | Preparation for evacuation is required. Rainwater overflows from sewage pipes. | Rainwater flows into basements and underground shopping malls. Water gushes out of manholes. Many disasters occur.  There is a risk of se damage due to the Therefore, strict cau required. |   |  |

### Advisories and warnings related to heavy rain and flooding

In the following cases, the Japan Meteorological Agency issues an "advisory" or a "warning." Furthermore, if a heavy rain that far exceeds the criteria for the issuance of a warning is expected and the risk of a serious disaster is significantly increased,

**Heavy Rain Emergency Warning** 

Much higher risk than "warning"

once every few decades.

Issued when it is predicted that

typhoons and torrential rains may

cause heavy rainfall that occurs

an "emergency warning" will be issued to call for maximum caution. \*Even if the "emergency warning" is not issued, immense damage may be caused.

### Disaster may occur. Issued when it is predicted that heavy rains may cause inundation or sediment disaster Issued when it is predicted that swelling or overflowing of rivers or damage or collapse of embankments due to heavy rains, long rains or snowmelt may cause disasters.

Serious disaster may occur. Issued when it is predicted that heavy rains may cause serious inundation or sediment disaster Issued when it is predicted that swelling or

overflowing of rivers or damage or collapse of embankments due to heavy rains, long rains or snowmelt may cause serious disasters.

► Bulletins on Exceptionally Heavy Downpours

When a violent rain occurs over a short period, which occurs only once every several years, the Japan Meteorological Agency issues "Bulletins on Exceptionally Heavy Downpours." If you are in the area where such a bulletin has been issued, pay attention to the surrounding conditions and the way the rain falls, and, if you feel the slightest sense of danger, immediately evacuate to a safe place.

### River water level information

Evacuation information is issued based on situations such as reaching the water level standard set for each river.

|   | Lake<br>Biwa | Kusatsu<br>River | Yasu<br>River | Upstream of<br>Kusatsu River  | Konze<br>River                   |
|---|--------------|------------------|---------------|---|----------------------------------|
| Names of water levels, etc. Types of evacuation information  Guide for  | _            | Nishiyagura      | Yasu          | Yamadera<br>bashi   | Megaw                            |
| Hazardous water level evacuation orders   | 1.15m        | 4.3m             | 4.8m          |   |                                  |
| Water level at which flooding may occur <b>Guide for Evacuation warning water level evacuation of the elderly, etc.</b> Water level as a guide for evacuation | 0.8m         | 3.4m             | 4.3m          | Issued when<br>risk of flood<br>from the spe<br>water level if<br>future rainfa | ng judging<br>eed of<br>rise and |
| Advisory, water-levelNo announcement Water level as a guide to mobilize flood prevention teams  | 0.7m         | 3.1m             | 3.5m          | 1.3m  | 2.6m                             |
| Nater level for flood prevention teams to stand byNorannouncement Water level as a guide for flood prevention teams to prepareNormal water level              | _            | 2.3m             | 2.5m          | 0.55m   | 1.2m                             |

In addition to the above, water level information from river disaster prevention cameras (Juzenji River, Ookami River, Kusatsu River and Hayama River) and crisis management type water level gauges (Isasa River, Oba River, Minogo River) available on the Internet is also effective as a guide for evacuation behavior. You can check the river disaster prevention cameras on the website of the Shiga Prefecture Civil Engineering Disaster Prevention Information System and the crisis management type water gauges on the website, "Disaster Information for River".

City-wide simultaneous emergency broadcasting system

(Outdoor speakers, FM Kusatsu, and toll-free number 0120-119-932)

City of Kusatsu website, Kusatsu City Hall Facebook page,

and City of Kusatsu Safety and Security Email Distribution Service

Emergency alert email, early warning area mail service,

Patrol by publicity vehicles

President of neighborhood association, and voluntary disaster prevention organization

News media (TV, radio, and newspapers)

and Yahoo! JAPAN's emergency alert app

Communication routes for evacuation information, etc.

# When it's time to evacuate

### Alert levels and evacuation actions

We will inform you when to evacuate based on five alert levels. Please take appropriate evacuation actions according to the alert level. Your life is in danger. Secure your safety immediately! (issued by the city)

Be sure to evacuate when the alert level is still below 4!

**Everyone evacuates from hazardous places** High risk Evacuate immediately. If it is considered dangerous to move to Evacuation order Information of disaster the evacuation site, evacuate to a safe place in the neighborhood (issued by the city) The elderly and those with disabilities evacuate from hazardous places. Evacuation of the Heavy Rain Warn Those who take time to evacuate, such as the elderly, children, and people with disabilities and their helpers, should evacuate. For other people, if necessary, it is time to voluntarily evacuate if they begin to (issued by the city) Check how to evacuate. Flood Advisory Flood Advisory Check which areas have a risk of disaster, evacuation sites and routes, and (announced by the Japan Information

Check the latest disaster prevention and weather information. Meteorological Agency) \*The alert level 5 is not always issued because the municipalities cannot surely grasp situations of disaster

| Weather conditions | Increase your preparedness for disasters.

### cautions for evacuation: Early



may worsen in the

During a disaster, some information can be erroneous. Try to get accurate information through TV, radio, the Internet, and local



Bring emergency supplies in your backpack so as to leave both hands free.



It is very dangerous to evacuate after a flood occurs. Evacuate early. Especially for citizens staying near levees, try to evacuate quickly. The reference depth for walking in water is about knee deep (about 50cm.) Also, it is dangerous to walk in fast flowing water even if the water depth is low. Do not take chances



Evacuating by car causes traffic jams and blocks emergency vehicles. Moreover, since you may get stuck in water-covered roads, it is not safe. Evacuate on foot except in some areas such as mountainous areas.

If you cannot see your steps under muddy

water and there is a risk of falling into a ditch,

use a long bar in place of a stick and evacuate

wearing your walking shoes and checking that

Evacuate in a group of two or more.

Hold hands firmly especially with little

children and, if there are two or more

children, move with adults in front of

and behind the children to prevent

them from getting separated.

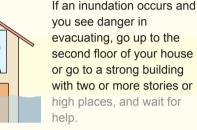
Water flows faste

houses may

collapse into the

t is safe. Moreover, evacuating barefoot or

earing rubber boots is dangerous.



# evacuate taking a safe route.



Avoid narrow passages, passages near fences, or riverside areas and evacuate taking a wide passage that is as safe as possible. It is dangerous to pass under railroads or levees. Avoid places where there is a lot of glass or

Carry the elderly or sick

on your back and have

children put on lifebuoys

to ensure safety.

When evacuating at night, there is

a risk of falling down or into a ditch

measures such as taking a bright

due to poor visibility. Be

and wide route.

particularly careful and take

## Types of evacuation centers designated by the city



### temporarily live for a certain period of time and that can accept a large number of disaster victims.

support facility A facility, with which the City of Kusatsu has an agreement, to be used as an evacuation site where

nearby residents and passersby who fail to escape

in the event of a flood can temporarily take shelter.

# **Emergency evacuation**

### **↑** Welfare evacuation center

then, evacuation centers will be opened depending on the local situation.

**Evacuation center** 

An evacuation center for those who need assistance in the event of a disaster (including elderly people, people with disabilities, and expectant and nursing mothers). People who require special attention should first evacuate to the nearest wide-area evacuation center, and then to the welfare evacuation center after the city official makes arrangements to accept them.

A relatively small city facility that complements wide-area evacuation centers. In the

event of a large-scale disaster, wide-area evacuation centers will be opened first, and

### People who require special attention

People should cooperate with neighbors in the community to confirm the safety of those who need some kind of assistance in the event of a disaster, such as elderly people, people with disabilities, infants, expectant and nursing mothers, and foreigners who cannot fully understand Japanese, and help them move to evacuation facilities.

### Elderly and sick

back to evacuate to a safe Assist the elderly/sick with



Carry the elderly/sick on your • More than one person is required to assist persons with physical disabilities on stairs. In the case of stairs, move with the wheelchair facing forward when going up and backward when going down.

with physical disabilities on your back

to evacuate.

helping wheelchair-bound persons on If there is only one caregiver, prepare a strap or the like and carry persons

slowly half a step ahead of

 Talk to the visually impaired and give information to them. When guiding the visually impaired, do not touch the hand of one holding a cane. Ask him/her to hold the area around your elbow, and walk

When speaking, move your mouth clearly so that the hearing impaired can easily understand what you are saving. Give accurate information using sign language, writing, gestures, or other methods.







### Try to keep a "rolling stockpile".

"Rolling stockpile" refers to a method of always stockpiling a certain amount of food at home by buying more foodstuffs and processed foods than you normally use and buying more as you use them. By using this stockpile method, you can maintain a diet that is close to your daily diet even in times of



## store it in a place where you can take it out at any time. The standard weight is about 10-15 kg.

**Checklist for emergency bag items** 

Prepare items to put in an emergency bag in case you need to evacuate. It is recommended to pack them in a rucksack or the like and

First-aid- and safety-related items

Hard hat (protective hood)

☐ First-aid kit and medicines

☐ Face masks

☐ Sanitary items

Antiseptic solution

(band-aids, ointments, bandages)

Household medicines for sick or elderly persons

Clinical thermometer

## Food and drinking water

Drinking water ☐ Food that can be eaten without cooking, such as hard biscuits,

crackers and canned food

## ep seven days worth of food and drinking water as an emergency

☐ Tissue paper

☐ Plastic bags

Portable radio

☐ Batteries, atteries, etc.

☐ Flashlight

# Daily necessities

### Clothes, etc. ☐ Clothes (underwear and outerwear) ─ Writing tools and notebooks ☐ Candle and lighter ☐ Portable ☐ Towels ☐ Knife and can opener battery charger

Raincoats ☐ Sleeping bags

## Blankets 🗌 Gloves, work gloves 🥕 ☐ Eyeglasses

### Powdered milk, liquid milk, etc. Nursing care products "Stockpile" o "Consumption" o "Replenishment

紙おむミル

### Toiletries (including toothbrush and soap) Baby feeding bottle Disposable diapers

City of Kusatsu official website Kusatsu City Hall Facebook page Shira Shiga Mai

Where to get information



Disaster Information for River

Hikone Local Meteorological Office

Risk Maps (hazard distribution)

Nowcasts (precipitation, thunder, and tornado

Shiga Prefecture Disaster Prevention Information Map

Shira Shiga LINE (information notification LINE message)

Shira Shiga Mail (information notification email)

Shiga Prefecture Civil Engineering Disaster Prevention Information System







**Susatsu City Hall's** 

**Facebook** 

https://www.river.go.jp/

https://www.jma.go.jp/bosai/nowo

https://www.jma-net.go.jp/hikone/

https://www.jma.go.jp/bosai/risk/

https://shiga-bousai.jp/index.php

http://www.pref.shiga-info.jp

https://www.city.kusatsu.shiga.jp

https://www.facebook.com/KusatsuCity

https://service.sugumail.com/kusatsu/member

https://shiga-bousai.jp/dmap/top/index

https://www.pref.shiga-info.jp/ShiraLineWeb/service/inde



ısatsu City email

### wooden houses may collapse. Near the river banks, the ground may be eroded and the entire

📄 Is your home far enough

away from the river?



0.5m - less than 3m

inundation above 1st floor level to inundation under the eaves of 1st flo

Less than 0.5m inundation be

Is your habitable room higher

than the depth of flooding?

Those who live in strong buildings and/or high-rise buildings such as apartment buildings and other buildings

If you can confirm the following three things, you can stay in your home and ensure safety even if there is a risk of flooding.



Can you put up with flood

water until the water recedes?

# Contact information in case of emergency

|                        | Name                            | Address              | Phone number |  |
|------------------------|---------------------------------|----------------------|--------------|--|
| Kusatsu C              | ty Hall                         | 3-13-30 Kusatsu      | 077-563-1234 |  |
|                        | Kusatsu Police Station          | 2-11-16 Oji          | 077-563-0110 |  |
|                        | Minamikusatsu Ekimae Police Box | 1-15-1 Noji          | 077-562-7360 |  |
| Police<br>stations     | Kusatsu Ekimae Police Box       | 1-1-16 Shibukawa     | 077-562-6565 |  |
|                        | Nomura Police Box               | 2-20-1 Nomura        | 077-564-5511 |  |
|                        | Shizu Police Box                | 785-7 Aoji-cho       | 077-564-6600 |  |
| and<br>police<br>boxes | Yamada Police Box               | 58 Kitayamada-cho    | 077-562-6564 |  |
|                        | Yabase Police Box               | 470-5 Yabase-cho     | 077-563-6121 |  |
|                        | Kasanui Residential Police Box  | 3021-3 Shimogasa-cho | 077-568-1078 |  |
|                        | Tokiwa Residential Police Box   | 201-3 Kataoka-cho    | 077-568-0058 |  |
|                        | Railway Police Force            | 1-1-6 Nishishibukawa | 077-564-1116 |  |

|   | Name   | Address               | Phone numbe  |
|---|--|-----------------------|--------------|
| Emergency                                     | Kusatsu General Hospital                                   | 1660 Yabase-cho       | 077-563-8866 |
| designated hospital                           | Omikusatsu Tokushukai Hospital                             | 3-34-52 Higashiyagura | 077-567-3610 |
| Fire station<br>or<br>volunteer<br>fire corps | Nishi Fire Station   | 477-1 Kamigasa-cho    | 077-568-0119 |
|   | Minami Fire Station  | 9-1-46 Noji           | 077-564-4951 |
|   | First Squad Fire Station of Kusatsu-Volunteer Fire Corps   | 3-13-64 Kusatsu       | 077-562-3500 |
|   | Second Squad Fire Station of Kusatsu-Volunteer Fire Corps  | 764-8 Aoji-cho        | 077-565-9560 |
|   | Third Squad Fire Station of Kusatsu-Volunteer Fire Corps   | 515-1 Noji-cho        | 077-564-4969 |
|   | Fourth Squad Fire Station of Kusatsu-Volunteer Fire Corps  | 60-3 Kitayamada-cho   | 077-563-1277 |
|   | Fifth Squad Fire Station of Kusatsu-Volunteer Fire Corps   | 288-9 Kawara-cho      | 077-566-3616 |
|   | Sixth Squad Fire Station of Kusatsu-Volunteer Fire Corps   | 202-1 Kataoka-cho     | 077-568-0457 |
|   | Seventh Squad Fire Station of Kusatsu-Volunteer Fire Corps | 2-9-11 Oji            | 077-563-6119 |
|   | Eighth Squad Fire Station of Kusatsu-Volunteer Fire Corps  | 9-6-4 Noji            | 077-566-0119 |
|   | KFFL Squad Fire Station of Kusatsu-Volunteer Fire Corps    | 477-1 Kamigasa-cho    | 077-568-0119 |

Saigai Dengon Service (disaster emergency message service)

In the event of a major disaster, telephone usage may increase sharply and connection difficulties may continue for several days. In such cases, the following services will be established.

▶ Disaster Emergency Message Dial 171 You can register and confirm safety information (messages) by entering the phone numbers of people in the

disaster area from a landline or cell phone.



▶ Disaster Message Board (web171) https://www.web171.jp/

and confirm safety information (messages) in text form. \*In addition to the above, each cell phone company will provide a "Disaster Message Board Service." For how to use it, please check

By accessing Disaster Message Board (web171) from your smartphone, cell phone or PC, you can register

## Disaster prevention memo for my family

Evacuation site of my family (relative's home, evacuation center, etc.)

family gets separated

Meeting place in case the

| Name of family member | Blood type | Phone number of company or school | Cell phone number |
|-----------------------|------------|-----------------------------------|-------------------|
|                       |            |                                   |                   |
|                       |            |                                   |                   |
|                       |            |                                   |                   |
|                       |            |                                   |                   |
|                       |            |                                   |                   |