PREVIEW –

LESSON

HEAVY RAIN/FLOOD ~大雨・洪水~

Objective Understand vulnerable groups in disasters Learn how to respond to floods

Words and Phrases

大雨	heavy rain
集中豪雨	downpour/torrential rain
記録的大雨	record-making (record-breaking) heavy rain
洪水	flood/flooding
堤防が決壊する	The river embankment breaks.
水による道路などの崩壊	A road is washed out.
水位が上がる	The water level rises
浸水/冠水する	flooded with water
河川の氾濫	overflow
降水	rainfall/precipitation
土のう	sandbags
家屋の損壊	property damage

How would you explain the smartphone emergency alerts in English?

避難準備・高齢者等避難開始: 避難勧告: 避難指示(緊急):

Hurricane in the United States

Like typhoons in Asia, the southern part of the United States is often hit by hurricanes.

Hurricanes don't only bring storms and rain but also expose social problems.

The source: http://www.motherjones.com/environment/2017/08/harvey-has-hit-the-poorest-and-most-vulnerable-texans-the-hardest/ Article

At least five deaths and dozens of injuries have been reported in Hurricane Harvey, as it destroyed parts of the Houston region with 24 inches of rain and swirling winds. The storm has calmed down but catastrophic flooding is expected to intensify as rains continue. Like in Hurricane Katrina and Sandy, the most vulnerable communities are likely to pay the heaviest cost of Harvey's destruction.

While many South Texans evacuated north after the recommendation of the Governor, poorer or disabled residents may not have had the resources or the capability to follow that advice.

Within cities, poor communities of color often live in segregated neighborhoods that are most vulnerable to flooding, or near petrochemical plants that can overflow during the storm.

Catastrophic: 壊滅的な Vulnerable: 被害を受けやすい。弱者 Resource: 財源、資源 Recommendation: 勧告 Petrochemical plant: 石油化学工場 Intensify: 威力を増す Recommendation: 勧告 Capability: 能力 Segregated: 孤立した

• Who are the vulnerable groups in this article?

• What are they vulnerable to?

• Do you think non-English speakers are one of the vulnerable groups?



大雨・洪水

Hurricane in the United States

(和訳)

ヒューストンエリアを24インチの雨と暴風で破壊したハリケーンハー ビーは、少なくとも死者5名と数十人の負傷者を出した。暴風は落ち着 いたものの、雨は降り続き、破壊的な洪水が威力を増すのではないかと の懸念が残る。

ハリケーン・カトリーナやサンディー同様、被害の代償を誰よりも負う ことになるのが、最も弱い立場に立たされている災害弱者だろう。

テキサス南部の住民の多くは、知事の勧告を受けて北部に避難したが、 貧しい住民や障がい者はそのための財力や力を持っていない可能性もあ る。

一方都市部では、貧しい有色人種が特定の地域に集まって居住すること が多く、そうした地域は、洪水の影響を最も受けやすいか、嵐で浸水が 懸念される石油化学工場が近くにある。



DOs & DONTs during and after floods

Answer TRUE or FALSE to the following statements regarding what to do during and after heavy rain or floods. Provide a reason if you can.

True or false?

- 1. Avoid contact with floodwater.
- 2. Let friends and family know you're safe.
- 3. Walk, swim or drive through floodwater to escape as soon as possible.
- 4. Walk on beaches or riverbanks.
- 5. Keep children and pets away from hazardous sites and floodwater.
- 6. Leave the TV or computer on so you can collect information.
- 7. It's okay to eat food that has come into contact with flood water until a supply of food arrives.
- 8. Don't reconnect your power supply until a qualified engineer has checked it.

Answers:

- 1. TRUE / FALSE
- 2. TRUE / FALSE
- 3. TRUE / FALSE
- 4. TRUE / FALSE
- 5. TRUE / FALSE
- 6. TRUE / FALSE
- 7. TRUE / FALSE
- 8. TRUE / FALSE

Source: http://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/flood#During

Answers:

- 1. TRUE: Avoid contact with floodwater. It may be contaminated with sewage, oil, chemicals or other substances or contain dangerous insects or animals.
- 2. TRUE: Let friends and family know you're safe.
- 3. FALSE: You should NOT walk, swim or drive through floodwater. You may not be able to see abrupt drop-offs. Just six inches of fast-flowing water can knock you over and two feet will float a car. Driving through flood water can also cause additional damage to nearby property.
- 4. FALSE: Do not walk on beaches or riverbanks.
- 5. TRUE: Make sure children and pets are away from hazardous sites and floodwater.
- 6. FALSE: Switch off electrical and gas appliances, and turn off services off at the mains!
- 7. FALSE: Don't eat any food that has come into contact with flood water. Food may be contaminated with sewage (toilet!), oil, chemicals, or other hazardous substances.
- 8. TRUE: Don't reconnect your power supply until a qualified engineer has checked it.



Let's practice - take Eric to the evacuation center!

- Pay attention to the hazards on the way.
- Properly explain reasons for evacuation.

Veet Eric **Eric** Tric is visiting his friends in Morioka. When he was out, there was an unexpected downpour like no one has experienced before. The streets are starting to flood. The area you and Eric are at is under evacuation order. Vou are at one of the following spots in downtown Morioka. Take Eric to the evacuation spot from where you are. A. Prefectural Office B. Hotel Higashinihon C. Forum Morioka D. Hotel Route Inn Morioka E. Children's Science Museum

«On his way to the evacuation center, you and Eric saw some people trying to take video of the Kitakami River water level going up to the top of the dike. They seem too close to the river. »

Eric: "Hey guys, you heard about the evacuation order?"

The guys: "Oh, really? It's not raining anymore. We're fine, thank you!"

[What would you tell them?]

2



«Eric reached the evacuation center. The center offers various types of support.

Eric seems relieved. »

3

Eric: "I didn't even know this service exists. Please tell me about the services I can expect from a evacuation center."

Ask a city officer there and communicate that to Eric.

 \bigstar And discuss what sort of disaster service information could be better published from a foreigner's perspective.

