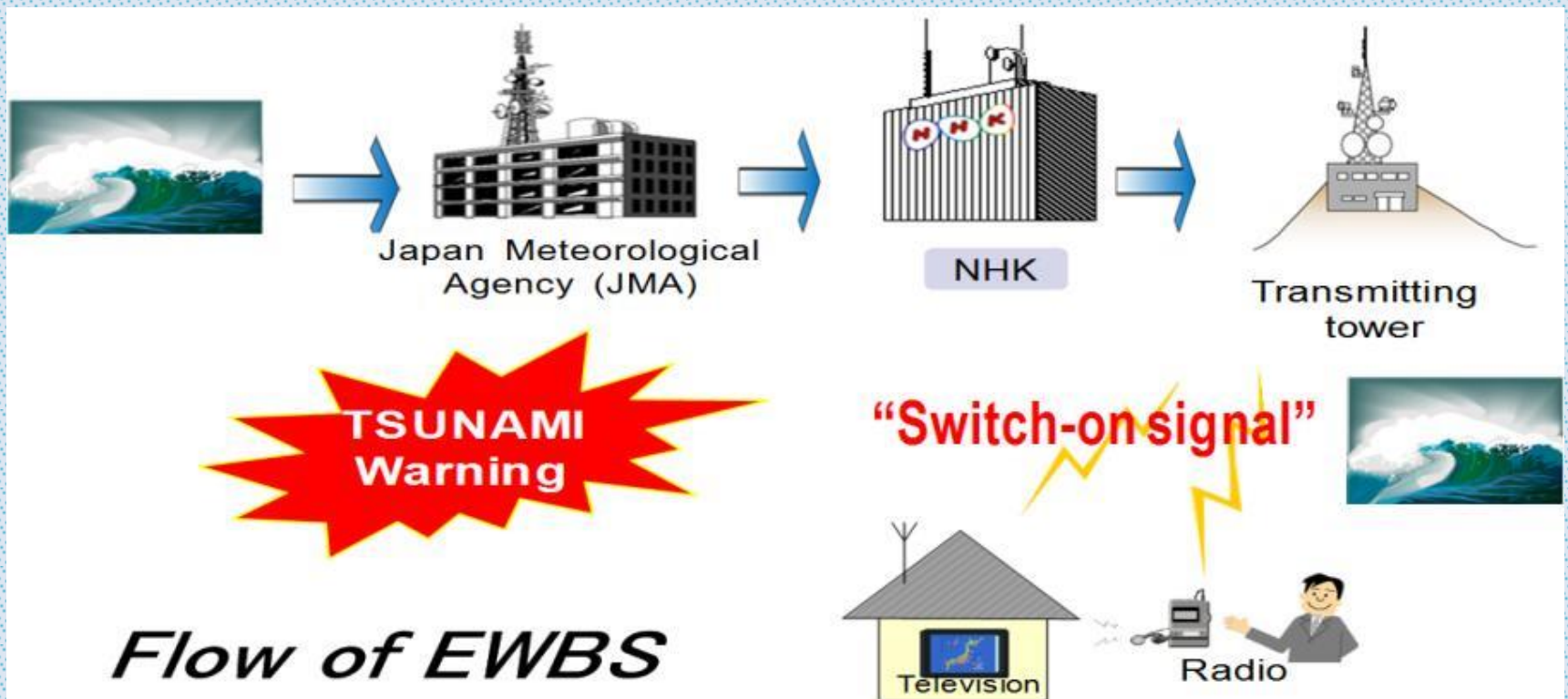
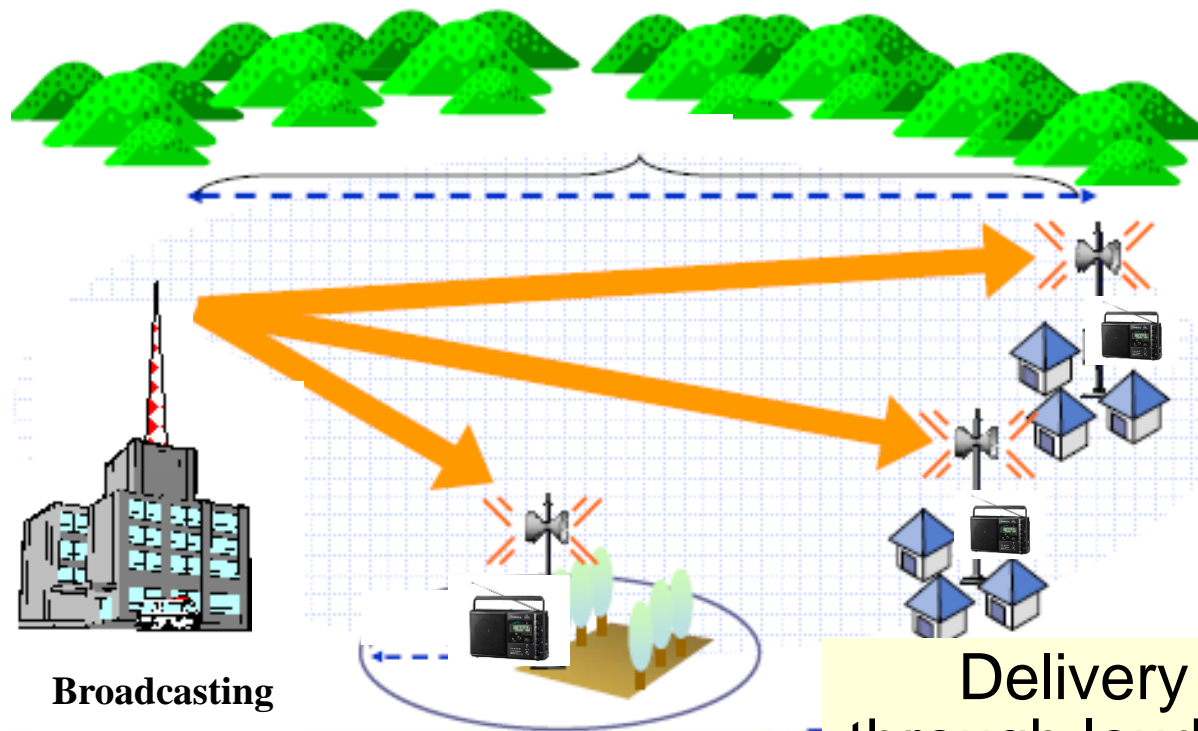


Lessons learned

Japanese experience

- NHK and JMA has a setup that works automatically in early warnings, specially EEW





Effectively warn to people **without receivers in the field**

Broadcasting Station

Delivery of the warning through loud speakers (Image)



Loud speakers

EWBS Receiver

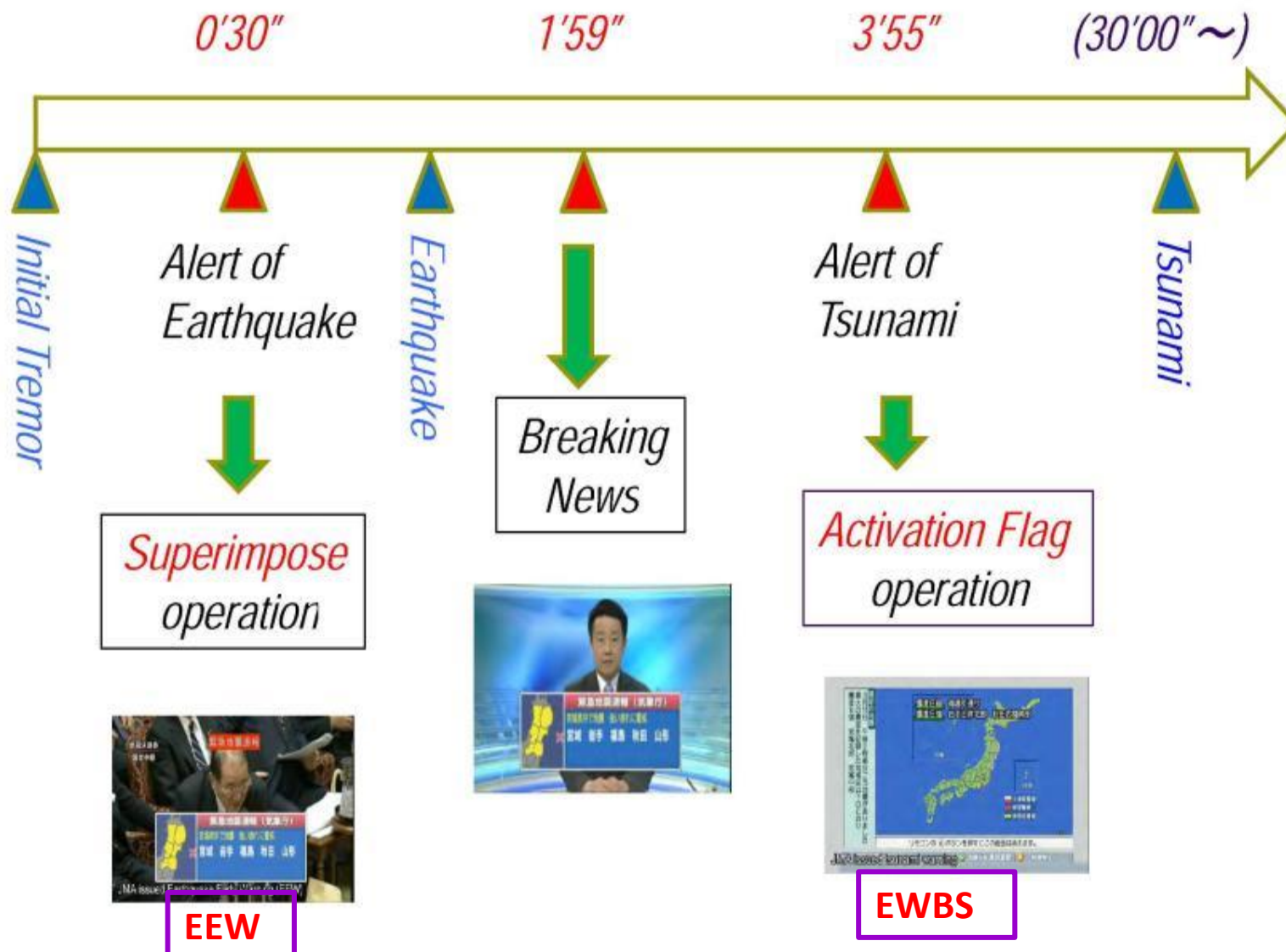
Solar panel Battery

Japanese experience

- The Great Eastern Earthquake and Tsunami of March 2011
- NHK relayed the earthquake early warning 1-3sec after the earthquake was felt
- Followed with seismic information in 30-60sec
- Started breaking news within 2mins of the first warning
- Issued the first Tsunami warning within 4mins



NHK's Broadcasting on 11th March, 2011



One of the surveys conducted

- Asked how they got tsunami information

Answers	Kamaishi	Natori
Radio	12%	39%
Fire station's or municipal information vans	10%	25%
Families or neighbors	3%	25%
Television	5%	10%
One-Seg (mobile TV)	3%	6%
Anti-disaster wireless (loud speaker)	78%	4%

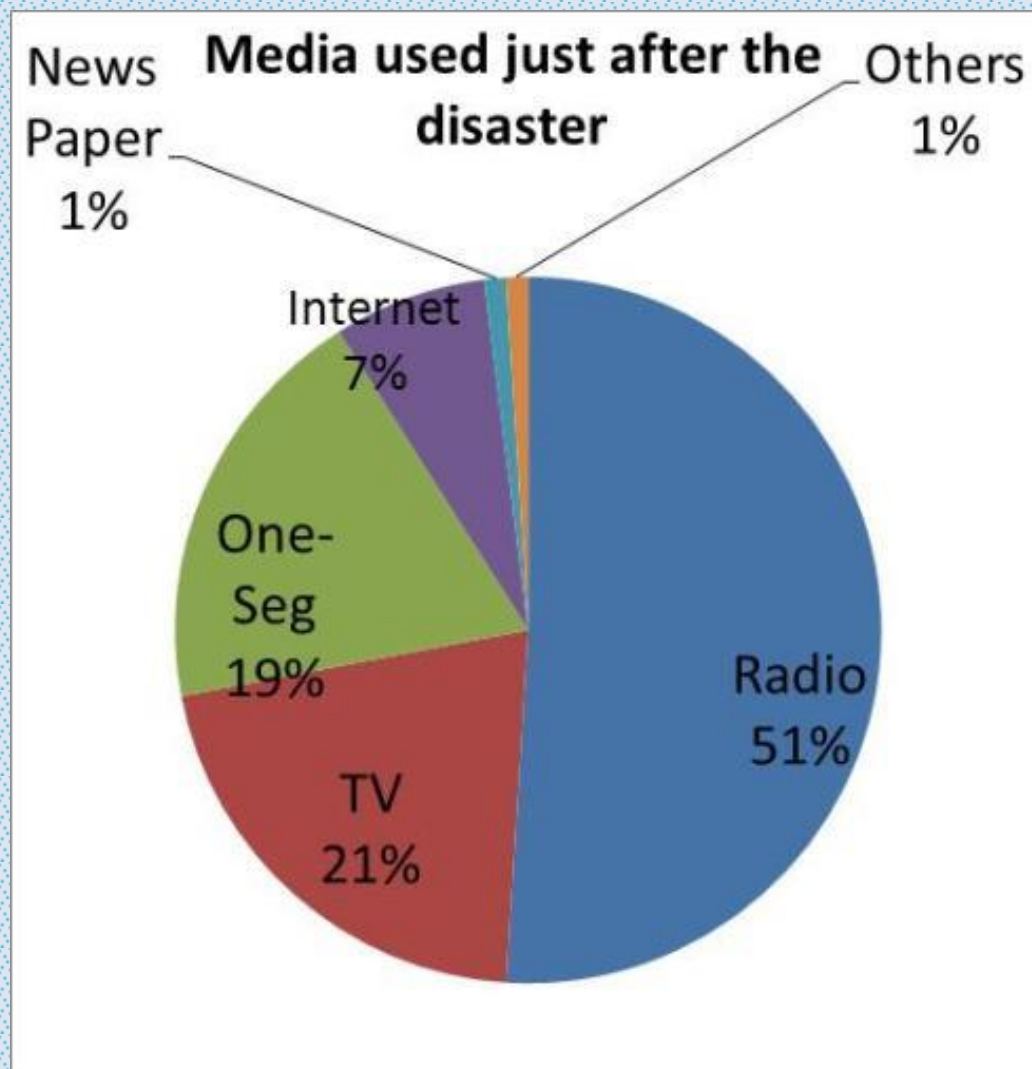
(Multiple answers allowed)

One of the surveys conducted

- **Asked what they should do to save them from tsunami**
 - Take refuge on higher hilltop as soon as possible after experiencing any big quake near coast.
 - Make any ways to get tsunami alert, disaster information or the like more promptly in any situation such as losing electricity.
 - Construct facilities such as breakwaters able to resist tsunami.
 - Build shelters enough to be able to accommodate refugees.
 - Make it more accurate to predict or forecast tsunami.
 -

(The majority answers when multiple answers allowed)

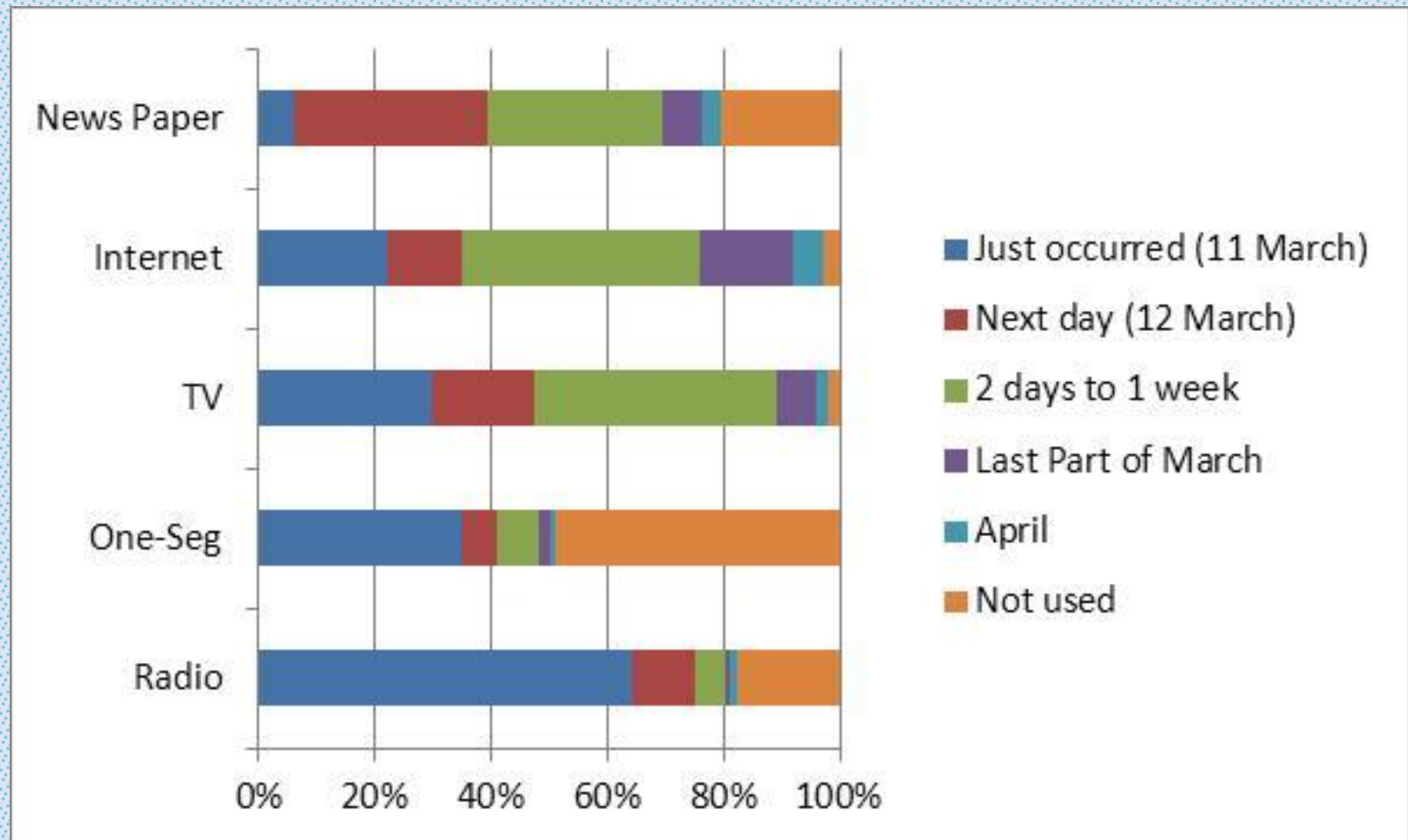
Survey Results by NHK Broadcasting Culture Research Institute



* From more than 3000 respondents

Survey Results by NHK Broadcasting Culture Research Institute

How they used media after the disaster



* From more than 3000 respondents

Did a sense of crisis reach to audience?



- Urged to evacuate 21 times during the 30 min. before tsunami waves arrived.

“please evacuate to higher ground quickly...”

⇒ Was it able to urge a more critical feeling to the viewers than past tsunamis?

- Efforts to report the facts objectively.

“Change of a tide level cannot be checked yet”

“For the moment, there is no information on damage”

⇒ “Normality bias” had been intensified?

- Was the graphics effective enough?



Improvement of tsunami warning broadcast

● Wording of **major tsunami warnings**

1) More **assertive**

“Major tsunami is coming!”

2) More **imperative**

“Evacuate immediately!”

3) Sense of **urgency**

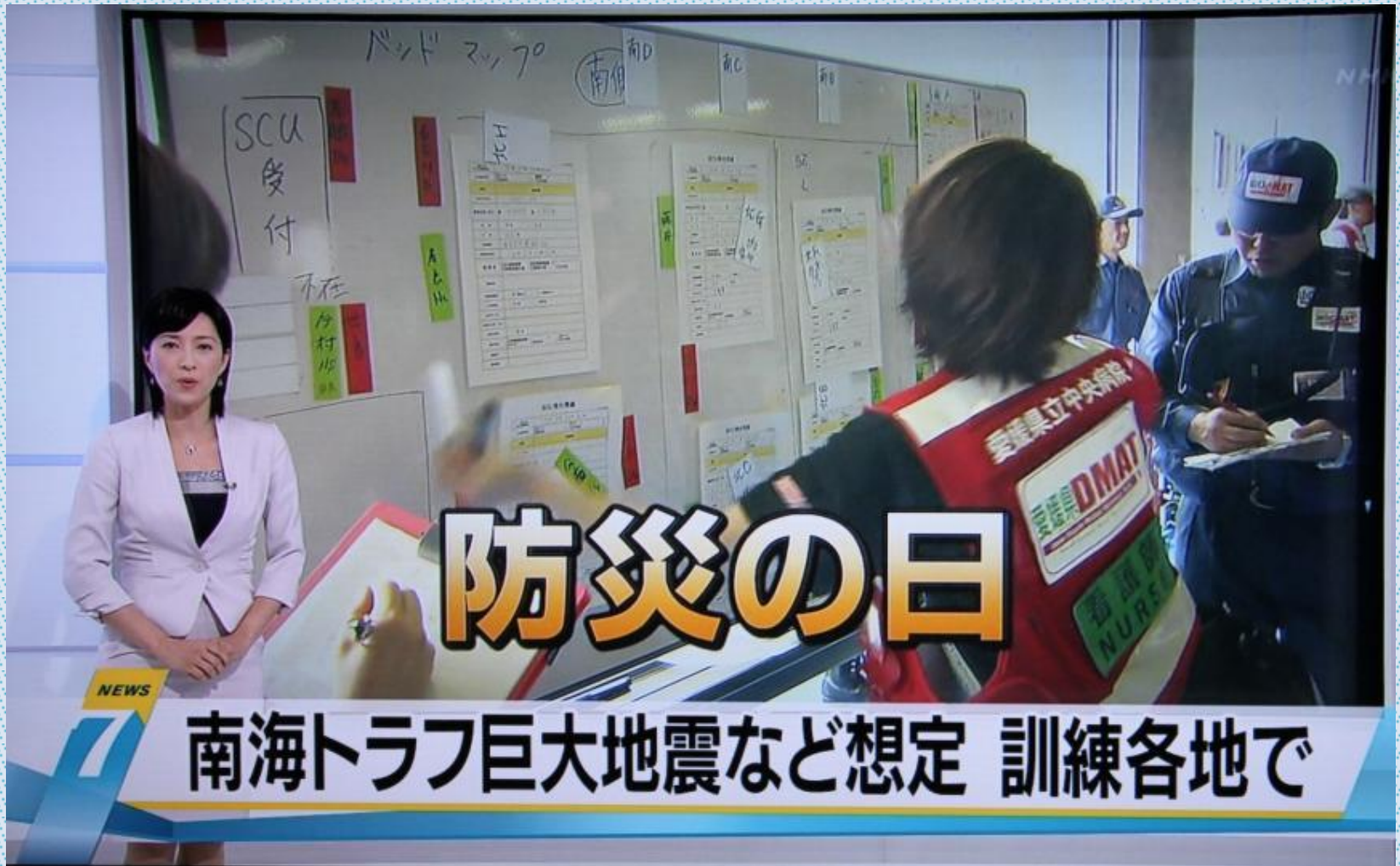
“Evacuate to save your lives!”





Disaster-Prevention Day

(NHK News, Sep. 1)



訓練各地で

訓練



心臓
搬送訓練

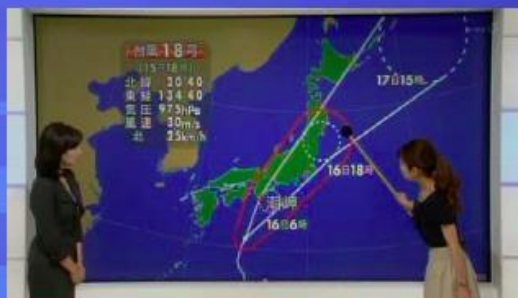
帰宅困難者
誘導



トラフ
地震想定

Improving weather reporting

- **NHK spends 80 min. a day in total for weather information**
- **We allocate more time when severe weather is expected**
- **Weather caster call for attentions and preparedness.**



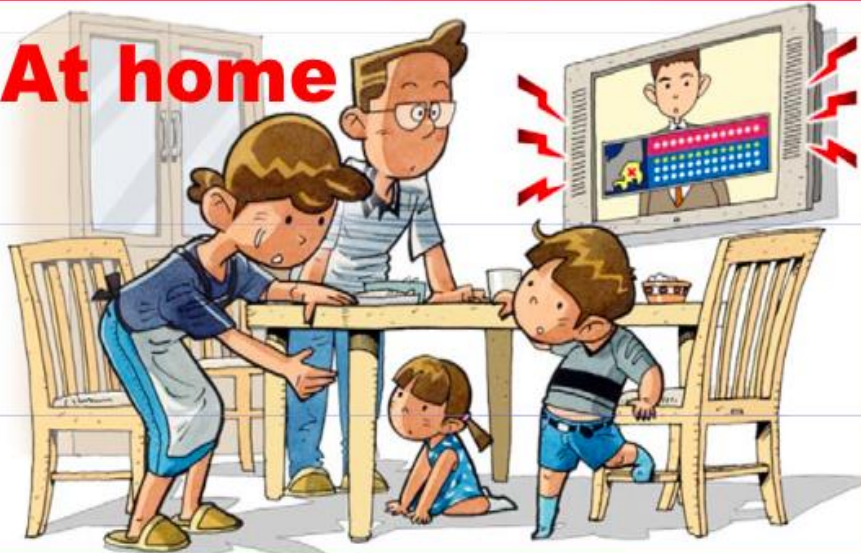


Every Night Drill, NHK Broadcast Center

- Overnight-shift news and engineering staff, conduct routine exercise every midnight according to the manual.
- The fundamentals of disaster-prevention reports include delivering information from JMA accurately and promptly and to urge the audience to remain calm.

Educating the public

At home



Outdoors



Driving a car



Philippines experience



Media integration

- Media integration is key to improving the disaster preparedness of societies
- We need to work more closely with other stakeholders
- Someone has to take the lead in integrating the SOPs
- Some sort of regulation needs to be in place from the authorities



Thank you