Communicating Natural Disasters, Man-made Hazards and Risks
Natural disasters

By NASA

By U.S. Navy

By C.G. Newhall

By Geospatial Information Authority of Japan
Man-made hazards

By Fukushima Central Television Co. Ltd. & NNN

By Alex Hofford/AAP

By Nils Fretwurst

By Eric Hensley
What we should do?

1. Be aware that there are hidden risks.
2. Understand the nature of hazards and risks.
3. Take measures to avoid or reduce damages.

How can we, science centers, do that?
Speakers

Yasushi Ikebe  
(Miraikan/Japan)  
Earthquakes, Nuclear disaster

Daegil Hong  
(Daegu National Science Museum /Korea)  
Ferry boat disaster, Earthquakes

Szu-yi Lo  
(National Science and Technology Museum /Taiwan)  
Typhoon, Earthquakes, Infectious Diseases

Norio Ohmagari  
(Center Hospital of National Center for Global Health and Medicine)  
Infectious Diseases
Lessons learned: The 3.11 disaster

Yasushi Ikebe
Seismic Intensity Map

2011.3.11 14:46

M=9 earthquake & Tsunami

Nuclear reactor melt down

By Fukushima Central Television Co. Ltd. & NNN
One lesson learned:

“Imagine hidden risks and prepare for them”

1. “Unexpected”

2. Fundamental

3. What we should know? Miraikan’s activities
“Unexpected”: earthquake
We thought we knew
“Unexpected”: nuclear power plant

Absolutely safe?
"Unexpected" on radiation
We were confident

Hiroshima atomic bombing
on August 6, 1945.

Nagasaki atomic bombing
on August 9, 1945.

By Charles Levy

Fukushima on March 14, 2011

By Charles Levy
Fundamental problems

We naively believed

We relied on someone else
"Imagine hidden risks and prepare for them"

Risk literacy

(1) Be aware that there are hidden risks.
(2) Understand the nature of hazards and risks.
(3) Take measures to avoid or reduce damages.

**Our activities**
(Permanent Exhibitions, Special Exhibitions, Workshops, School Programs)
Permanent exhibition: “Mission Survival: 10 billion”
(1) Be aware that there are hidden risks.
Special exhibition: “Lesson #3.11”

2) Understand nature of hazards and risks.

In front of Coffee shop on the 5th floor

- Data-based
- Quantitative
Workshops: “Radiation”

(2) Understand the nature of hazards and risks.
School programs: “Make your own manual”

(3) Take measures to avoid or reduce damages.
School programs: “Make your own manual”

(3) Take measures to avoid or reduce damages.
Lesson learned from the 3.11 disaster

“Imagine hidden risks and prepare for them”

“To imagine the unimaginable is the highest use of the imagination”.

Cynthia Ozick
Speakers

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(Miraikan/Japan)  
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Infectious Diseases
Discussion

What should we do?

1. Be aware that there are hidden risks.
2. Understand nature of hazards and risks.
3. Take measures to avoid or reduce damage.

How can we do?

• Exhibition
• Workshop
• School program
• Drill
• Cooperation
Share your ideas: