

## **Reconsider Mandatory Evacuation Zone Designation**

Yoshiko Sakurai

Evacuees from the government-designated no-entry zone within 20-kilometers of the radiation-leaking Fukushima Daiichi nuclear plant will briefly return home beginning May 10. Evacuation life is severe for elderly people. People in their productive years stay unable to work and concern about their future weighs heavily on their mind.. Evacuees had a good reason to shout with pleasure when they were told they could make home visits, though limited to only two hours stay.

### **Freeing evacuees from hardship should be sought**

The government now should consider freeing evacuees from hardship of evacuation life and allowing them to return home, says radiation therapy expert Ken Yamaguchi, who heads the Shizuoka Cancer Center.

The present maximum permissible radiation exposure for ordinary people is as low as 3.4 millisieverts per year including 2.4 mSvs in natural radiation exposure. But that for nuclear plant and radiation therapy workers is far higher at 100 mSvs per five years (20 mSvs per year on average) or 50 mSvs per year. There is a double standard. The far higher level has been set for these workers because it is viewed as safe.

### **Scientific ground for maximum permissible radiation exposure**

Human beings have already been exposed to radiation naturally, or through nuclear bomb explosion tests and medical checkups. A computed tomography scan exposes a person to 6.9 mSvs of radiation. This means that three CT scans in a year expose a person to radiation beyond the annual limit of 20 mSvs. Radiation from a positron emission tomography scan stands at 3.5 mSvs and that from a PET/CT scan comes to more than 10 mSvs.

Nevertheless, the government has imposed the tough standard of 1 mSv plus natural radiation of 2.4 mSvs, which resulted in the death at evacuation centers of elderly residents close to the Fukushima nuclear plant and deprived people at most productive ages of their jobs. This is unreasonable. Since many past case studies and knowledge indicate that the higher standard of 20 mSvs for radiation therapy workers can be applied to the evacuees without causing problems, the government should make a policy switch to allow them to live at home more

healthily if they hope to do so, says Yamaguchi, whose expertise as the radiation therapy expert is very persuasive.

### **Specific responses**

But the government should (1) lead relevant residents to carry the same badges with radiation measurement data as those held by radiation therapy experts, (2) force them to have radiation dosimeters and (3) take special actions for children. The first measure is indispensable for these residents to manage their health. In order to prevent their radiation exposure from exceeding the 20 mSvs cap, they may have to leave their home for one month with relevant costs shouldered by Tokyo Electric Power Co. or the government. The third is important for children, although no special actions may be required for adults aged 40 or older. Based on regional radiation data, fine-tuned actions should be taken for children. If necessary, younger people may have to move to safer regions.

While no specific standard has been established on radiation's impact on human health, we should listen to radiation therapy experts backed by their case studies and experiences.

*Yoshiko Sakurai is President, Japan Institute for National Fundamentals.*