

## DISASTER LECTURE – RADIATION

The correct information of radiation effects

Q1. Can we feel radioactivity in our daily lives?

A1. We cannot smell nor see radioactivity in our daily lives.

Q2. In our daily lives, where may we get affected by radioactivity?

A2. There are two ways we may get affected by radioactivity: one, from air and the soil on the ground, two, from food and drinks we consume.

Q3. Do children have higher risk of getting affected by radioactivity than adults?

A3. Young children are more likely to get affected by radioactivity than adults.

Q4. Why do young children have higher risk of getting affected by radioactivity than adults?

A4. Radiation attacks the DNA. Cell divisions occur frequently in young children. When the radiation attacks the DNA in young children, the DNA tends to create abnormal conditions in the children's body.

Q5. What happens when we are affected by radioactivity?

A5. The risks of getting cancer in the thyroid gland and the blood become higher. The risks of having babies with disabilities and having miscarriage and stillborn babies become higher as well. The ability of the body to fight back illness becomes weaker as well so the possibility of catching illnesses such as pneumonia becomes higher.

Q6. Are there other factors we should worry about other than becoming ill?

A6. There are worries of becoming ill in the future. People who were at areas near the nuclear power plant accident and people who actually got ill from the radioactivity are at high risk of becoming targets of discrimination from the society. In Fukushima, some mothers have undergone abortion, worried that their children may have illnesses. In Hiroshima and Nagasaki, where atomic bombs were dropped in the past, some people who were infected by radioactivity gave up marrying because of discrimination from the society.

Q7. Is there no need to worry in the Kanto area because the accident took place in Fukushima?

A7. Fukushima is not the only area affected by radioactivity. There are effects in the Kanto area as well. The radioactive level is particularly high in Kashiwa and Matsudo in Chiba, and Misato in Saitama.

Q8. Where can we find contamination of radioactive effects?

A8. We can find contamination of radioactive effects in the soil, the air, the rain, and the food we eat. We can slightly lower the level of contamination by removing the top layer of soil on the ground.

Q9. What kinds of food are contaminated by radioactivity?

A8. Vegetables that consumed nutrition from the soil contaminated by radioactivity are dangerous. Cows that ate hays contaminated by radioactivity are also dangerous as well. Fish move around so it is difficult to distinguish fish contaminated by radioactivity from fish that are not.

Q10. How can we remove radioactivity from the food eat?

A11. We may slightly remove radioactivity by washing if the food was contaminated externally but it is difficult to remove radioactivity if the food was contaminated internally from the soil.

Q11. Is there a possibility that radiation transfers from the mother to the baby from breast-feeding?

A11. There is a possibility that radiation transfers from the mother to the baby from breast-feeding. One-fourth of radioactive substance transfers from the mother to the baby.

Q12. People of what age have to worry about radioactive effect?

A12. Young children have to be taken care of the most. People from the 20s to the 40s who are thinking of having a baby should take in consideration the risks caused by radioactivity. There is not much to worry for people above 50.

Q13. How should we live?

A13 It is necessary to accept the fact that Japan is contaminated by radioactivity. It is also necessary to have the correct information about radioactivity.

Q14. How can we get the right information?

A14. We need to get information from all sources around us, not only the information from the government and the media.

Q15. If there is another nuclear power plant accident, how should we react?

A15. If the accident takes place close to your house, the most important reaction is to leave the area. It is also necessary not to consume radioactivity (do not breath in, eat, drink radioactivity). It is important to be cautious to not let in radioactivity in the room, and to make sure to dry the laundry inside the house. It is important not to get wet in the rain.

Q16. Were there other accidents in the world relevant to radioactivity?

A16. In the past, there were accidents in Chernobyl in Russia, the Three Mile Island accident in the United States, and accidents from depleted uranium in Iraq, experiments on nuclear and hydro bombs in the United States, Russia, and India, and disposal of radioactive waste from some parts of the world.