

Lessons Learned from Two Nuclear Accidents Taken Place in Japan (TOKAIMURA and FUKUSHIMA) in Terms of Publicity of Data and Information

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We discuss problems in public presentation of data and information which were exposed in two nuclear accidents taken place in Japan (the TOKAIMURA criticality accident in 1999 and the FUKUSHIMA nuclear power plant accident in 2011). In the first case, no hazard about environmental radioactive pollution was announced in the initial stage. The presence of low-level environmental pollution was only announced after the end of three days restricted period in which residents within 10 km were asked to stay indoors. Although this event illuminated the presence of many problems in publication of data and information, this experience was not employed efficiently in the second case, FUKUSHIMA. Although residents living in the region close to the power plant were asked to evacuate quickly in this case, no reliable and useful information on radioactive pollutions were announced. A system of numerical simulation to predict movement of radioactive plumes (SPEEDI) was already developed by a governmental ministry, but the prediction was completely ignored when the route of evacuation was assigned to residents. In addition, various views on radioactive hazard, which were disorderly announced by scientists and journalists, brought much confusion among the public. Very limited information and data were restrainedly opened from governmental offices but always accompanied by a sentence such as “no immediate hazard to your health”. Such an announcement only promoted residents' uneasiness. From these two events, it should be stressed from the point-of-view of the public that “full and open access” of data and information accompanied by proper scientific explanations by specialists are very important to reduce damages and social confusions caused by disasters.