March 12, 2012

One Year Anniversary of the North-eastern Japan Earthquake, Tsunami and Fukushima Dai-ichi Nuclear Accident

On March 11, 2011, an earthquake off the eastern coast of Japan, and the resulting tsunami, resulted in massive devastation along the coastline and the tragic loss of approximately 20,000 lives. The Fukushima Dai-ichi nuclear power plant was struck by the tsunami, leading to the release of radioactive materials into the environment.

One year later it is fitting to pause to reflect on the events on and since that day, to remember the great losses suffered by the Japanese, and to take stock of the current situation.

At the moment there are many people who have not been able to return to their homes, schools, and places of work as evacuation orders are still in place. Although there have been no acute deaths due to radiation, many people in Japan and abroad are worried about the long term health effects of living in areas affected by the release of radioactive materials, about eating food or using other products from Fukushima prefecture, and about the potentially long-lasting social, psychological, and economic effects of the accident.

Work is underway within the evacuated area to prepare, where possible, for people to return to their homes. Clean-up efforts in the affected areas beyond the evacuated area are resulting in significantly improved living conditions there. Much of this work has prioritised the protection of children, which is only natural given the special place they hold in society. Many other initiatives are focusing on the broader question of recovery including a multi-partner Fukushima dialogue initiative in which ICRP is playing an important role, helping to bring people with expertise and experience in this area from Belarus, Norway and France to share their knowledge directly with residents of Fukushima prefecture.

For protection of people living in the affected areas, ICRP continues to recommend that a reference level in the lower part of the 1 – 20 mSv/year band be used to guide optimisation of protection in the recovery phase during which many operations will continue to improve the situation. A reference level of 1 mSv/year, corresponding to a level of exposure considered "normal", is appropriate in the long term. Where doses are kept below these levels there should be no undue health concerns.
Similarly, eating food and using other commodities where the radionuclide concentrations are below internationally acceptable levels should be considered safe.

ICRP has also looked at its own work in light of events over the last year. We are preparing a set of initial lessons learned that will help us improve our own recommendations. These should be finalised later this year. In addition, we are beginning to examine how, over the course of the next few years, we will be able to improve our recommendations related to emergency exposure situations and recovery in the long term after a nuclear accident.

We are optimistic that, while 2011 was an extremely difficult year, 2012 will be a year of recovery. There is no doubt that this recovery will continue for many years to come, and ICRP will continue to be actively involved.

On behalf of the International Commission on Radiological Protection,

Claire Cousins  
ICRP Chair

Christopher Clement  
ICRP Scientific Secretary