

## **Cancer Risk in Affected by Chernobyl Accident Groups of Ukrainian Population.**

*SI "Research Center for Radiation Medicine" of Academy of Medical  
Sciences of Ukraine, Kyiv , Ukraine  
E-mail: anatoly.prysyazh@mail.ru*

Current study was started in 1987 to investigate the frequency of malignancies in affected group of Ukrainian population. By the end of 2007 investigated groups comprised accounted 186,790 residents of contaminated territories, 103,395 recovery operation workers (ROW) of 1986-1987 years of participation and 53,661 evacuees from 30-km zone. During 1994-2007 there were 7,190 new cancers cases in ROW 1986-1987, 2,718 – in evacuees (1990-2007) and 21,671 in residents (1980-2007). The study showed that only in ROW 1986-1987 all cancers incidence rate was higher than the national level. Among specific forms significant increase of thyroid cancer incidence was registered in all population groups under study. In ROW 1986-1987 national level was exceeded in 5.6 times, in evacuees – in 4.4 times, in residents of contaminated areas – in 1.4 times. It may be associated with fallout of radioactive iodine after the catastrophe. This increase was found not only in children but also in adolescents and adults. Occurrence of extra thyroid cancer cases as an effect of exposure to radioiodine tends to increase with time. Some tendency to increase was identified for female breast cancer. Frequency of this pathology exceeds national level only in female-ROW 1986-1987 – in 1.5 times. Because latency period of different forms of radiation induced cancers significantly varies special attention should be drawn also to lung, stomach, colon, ovary, bladder, liver cancers and multiple myeloma. The information about accumulated doses would be very important to evaluate risk of malignant tumors after irradiation.