

BIOLOGICAL INDICATION OF HIGH RISK GROUPS OF POPULATION BY MECHANOEMISSION METHOD

V. E. Orel, I. O. Pavlenko, G. G. Istomina, Yu. G. Melnik, N. M. Dzyatkovska, V. M. Tereschenko

Physical dosimetry and biological indication are carried out in conditions of harmful factors after the ChNPP disaster in the Ovruch state forestry in Zhytomyr region, Ukraine. Biological indication was determined by means of mechanoemission method, which is based on the particularities of exhaled air condensate to irradiate light quantum during the mechanical activation. After ChNPP disaster in 1987 – 1989 the index of cesium in the forestry workers' organisms exceeded on the average in 13,9 times the similar showing of the population in Ukrainian Polesye before the disaster. The received results show that the largest contribution to the middle effective equivalent doze between the representatives of various professional groups of Ovruch state forestry make foresters and woodcutters. The highest probabilistic factor of carcinogenic risk, received on the grounds of mechanoemission condense of exhaled air measurements are registered between them.