The Chernobyl NPP (ChNPP) radioecologic Accident of 26 April 1986 led to radioactive contamination of large territories of the Ukraine, Byelarus and Russia. The population resident in radionuclides contaminated territories irradiation doses forming peculiarity is the prolonged external and internal radiation exposure from the long-living Caesium, Strontium, Plutonium and other elements isotopes in addition to the doses formed in 1986, including the thyroid gland irradiation. The most high general irradiation doses were registered in Accident consequences cleaning up participants (ACCP), the comparable doses were absorbed by the evacuated population of the strangement zone. Recognition of the Chernobyl Accident as the National disaster is reflected in Ukrainian Laws. Among the affected population the four categories are separated. The main factors responsible for affected population health quality Worsening are the social-psychologic and medico-biologic ones. The Chernobyl social-psychologic syndrome development is determined by: the Accident technogenic origin, it's consequences globality, massiveness of effection, the post-accidental radiation risk estimation difficulties, the accident consequences direction to the future both with the stability of ionising radiation negative acceptation in masses opinion; the delayed consequences adding to the severe economic situation in the state, the Chernobyl Community formal separation. The affected by the Chernobyl population of the Ukraine health changes are characterised by stable negative tendencies. The progredient growth of post-Chernobyl morbidity is the integral result of Accident multifuctorial effection both with population morbidity strong tendencies to the growth in whole country. From the numeric factors effecting the population health condition the most significant and the most long-acting are divided - the radiogenic and psychogenic ones. The thyroid irradiation with the doses of 0.1 - 9.8 Sv and more combined with the external irradiation and other factors complex (chemical, stressogenious ones, feeding regime and quality changes, immune and metabolic deficiency, goiter endemy etc.) allows to prognose the stochastic and non-stochastic effects progredient growth. The genome-level alterations obviously describe the pathologic findings on all the levels of organism functioning in ACCP, irradiated with 25 cSv and more. That is why the psychosomatic effects are to be studied more profoundly as their growth leads to work-unable persons number increase.