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The experience and results in dose and risk assessment for Ukraine population after the Chernobyl accident are generalized. Four affected groups are considered: (i) clean-up worker (liquidators), (ii) population of the contaminated territories, (iii) people had been evacuated from Prip'jt and 30-km zone, (iv) children with exposed thyroid gland. Main results are follow:

- (i) The exposure of *liquidators* (130 thousands persons worked in Chernobyl NPP in 1986) were estimated as 0.02-6 Sv; 6-15% of them received the doses higher than 0.25 Sv. Average individual dose of liquidators (in 1986) is 0.12 Sv.
- (ii) Average ten-years individual doses of general population from contaminated territories are 10-160 mSv. Levels and relations of internal and external exposure pathways strongly depend on the initial radioactive deposition, type of soil, agriculture practice and diet traditions.
- (iii) Doses of evacuated people (before the evacuation) are 1-50 mSv.
- (iv) Radioiodine thyroid exposure of children had been reconstructed based on the some thousands of direct thyroid activity measurements made in 1986. The interval of estimated dose ranges from less than 10 mSv to more than 10 Sv. The map with the different children thyroid dose zones within Ukraine is demonstrated.

The calculations of the late health effects induced by different exposure sources for different age-groups were made. These estimations are compared with the really observed levels of oncomorbidity and mortality. The only statistically significant radioinduced effect is thyroid cancer among children exposed in 1986. All the results are presented in form of tables and maps.