

NOTICE

On the territory of the station the radioactivity level is 0.20-0.25 $\mu\text{Sv}/\text{sec}$, the corresponding radiation dose rate is 720-930 $\mu\text{Sv}/\text{hour}$. In the city of Pripyat, the level of radioactivity is 0.04-0.14 $\mu\text{Sv}/\text{sec}$, which equals to 144-504 $\mu\text{Sv}/\text{hour}$.

Radiation safety standards are set for two categories of individuals:

- Category A – workers
- Category B – a limited part of the population *[critical group]*
- Category C – the population of the region/republic

There are three groups of critical organs, which are, in the order of decreasing radiological sensitivity:

- Group I – whole body, gonads, red bone marrow;
- Group II – muscles, thyroid, fatty tissue, liver, kidney, gastrointestinal tract, lungs;
- Group III – epidermis, bone tissue, hands, forearms, and ankles.

The maximum allowable levels of exposure to external and internal radiation are:

Category of Individual		Organ Group		
		I	II	III
Category A	per year	50 mSv	150 mSv	300 mSv
Category B	per year	5 mSv	15 mSv	30 mSv

In the process of the liquidation of the consequences of an accident, the external exposure at the level that is two times higher than the annual exposure limit is permitted in each separate case. However, this is allowed to occur only five times during the working life of the individual. Each worker is specifically warned of the elevated level of hazard and the work is permitted only after a written permission from the management and with the personal agreement of the worker.

Workers who have been exposed to radiation at the level exceeding the annual dose limit by five times, or women aged less than 40 years are prohibited to participate in this work.

For Category B individuals *[critical group]*, the equivalent dose of radiation should not exceed the annual exposure limit.

Permissible levels are established for each of the radionuclides.

At a level of radioactivity of 720 $\mu\text{Sv}/\text{hour}$, the dose received in a year is around 6,800 mSv. *[950 working hours per year were assumed]*

The information above is stipulated in the relevant radiation safety standard, NRB-76.

Subdivision Director
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