

# **PROTECTIVE MEASURES AND RULES FOR CONDUCT OF POPULATION IN CASE OF INCREASED RADIOACTIVITY**

**Emergency planning means being prepared. To be aware that people can be exposed in a situation of radioactive contamination: externally – by being in contaminated area, and internally – by inhaling radioactive air or by having foodstuffs or water. Emergency planning does not mean actual danger but the preparedness of government institutions and emergency teams to perform organizational, engineering, radiation, hygienic, therapeutic and preventive measures. Though people are endangered in case of increased radioactivity, it is possible to protect against exposure. Specialized state authorities provide for measures to mitigate the harmful effects for population - in order to better follow the instructions for each specific situation you need to have some preliminary knowledge.**

## **Conduct of population in the 30-km zone of Kozloduy NPP in the first hours of radiation accident**

You will be duly informed in case of radiation accident occurrence and danger for population.

The alarm is sent by the Kozloduy NPP local early warning and notification system, the siren system within the 30-km zone, Bulgarian National Radio, Bulgarian National Television, local radio relay centres and other means.

### **On the receipt of an alarm for radiation accident**

- Keep to the specific instructions of the Ministry of Interior authorities – Directorate General Fire Safety and Civil Protection and the Police.
- Comply with the Ministry of Health recommendations. If decision is made for iodine prophylaxis, take the iodine pills according to the prescribed scheme.
- Be prepared for evacuation and watch for respective alarm. Put your ID, money, medicines, portable valuables, a set of outer clothing, food for two or three days, and drinking water in plastic bags.
- If your home has a room suitable for sheltering, immediately go there - if not, take measures to seal the doors and the windows.
- Eat only durable or tinned foodstuffs.
- Do not leave your home unless absolutely necessary. Use respirators, dust masks, gauze dressings.
- After being in the open, take off your shoes and outer clothes and pack them separately.
- Observe the rules for good personal hygiene.
- Follow the information about the situation on the radio and television.

### **On the receipt of an alarm for evacuation**

- Switch off electric, gas and water-supply systems, switch off the cookers and heaters. Close the doors and windows and pull the curtains. Take only essentials.
- Evacuation with personal transport to the muster point for special treatment shall be allowed only if you have a preliminary issued evacuation permit.
- Do not take any domestic animals, close the livestock in their premises and leave food and water for two or three days. If necessary, animals shall be additionally evacuated by respective authorities.

- You shall receive instructions for your place and procedure of lodging at the muster points at the border of the 30-km zone.

### **Conduct of population out of the 30-km zone of Kozloduy NPP and of the population within this zone in case evacuation is not necessary**

#### **Practice good personal hygiene**

Thoroughly wash your hands, especially before meals, take a bath every day. Breathe through the nose and when going out – through a mask or dampened handkerchief. You need to take your shoes and outer clothing off before entering your home. Keep them separately packed.

#### **Avoid contaminating your home**

Children shall remain at home until situation is clarified. Close the windows and seal them well. Air only in calm weather through a window on which you have put a 3-4-ply-cheesecloth or other piece of cloth. Do not sweep or beat. Wipe daily with wet cloth. When using a vacuum cleaner, the outgoing air flow shall be additionally filtered through a wet piece of cloth. Often wash clothes and bed linen and do not dry the washing in the open. Keep foodstuffs in tightly closed containers; follow the instructions for their culinary treatment.

#### **When you are in the open**

Do not go on picnics or for walks in the open. Limit your travelling, especially on dirt and dusty roads. Streets and sidewalks need to be often rinsed. Do not sweep the yard. Irrigate grass plots with water jets and hose the paths around your house. Do not sit on the grass or on other green areas. Do not swim in open reservoirs.

#### **Foodstuffs and water processing**

Do not eat foodstuffs that are announced to be temporary forbidden. It is preferable to eat available tinned or other durable goods. If food needs to be carried, put it in plastic bags.

Foodstuffs shall be kept in cellars, dark rooms, alcoves or hermetically sealed pots. Food is to be treated and cooked in closed premises.

Exclude leaf vegetables and milk from your menu. Fruit and vegetables grown in greenhouses, carrots, potatoes, chicken, pork and ocean fish are comparatively much safer. Use powdered milk for the daily menu of the children. Contaminated foodstuffs that are not subject to heat treatment shall be eaten only after thorough rinsing with water and additional soaking for 24 hours. When cooking, bone the meat and cut it in pieces of 70 g, soak it for 24 hours in water (1:4) and throw the water away. Boil the meat and throw the first consommé away.

Take water for drinking or household needs only from sheltered, controlled and permitted for usage water sources. It is recommendable for children to drink primarily mineral water of low radon level.

#### **Measures to protect livestock and agricultural produce**

Livestock shall not be taken out of the cattle sheds during the first period of high activity contamination. Stop taking them out to pasture and feed them with wet concentrated fodder or provender. Box-rooms or other indoor rooms shall be rinsed with water every day. Hay or other fodder left in the open shall be used only upon removal of the top layer (10-15 cm). The fodder gathered during this period shall be kept in stock for about 2 months. Crops are gathered at the latest agricultural periods. To decrease the level of contamination of plant raw materials, follow the specific instructions of the competent authorities for processing of products and periods for their usage.