



Eco-friendly disposal of hazardous medical waste in the cross-border region

Medical Waste

Priority 2 Common challenges

Measure 2.1 Joint actions aimed at protection of environment and natural resources



IDA-VIRU KESKHAIGLA



Short summary of the project

Medical waste must be subject to mandatory processing in both participated countries. As they differ significantly from other types of waste and require special attention. They pose danger to humans, primarily caused by the constant presence of agents of various infectious diseases, toxic and even. The duration of survival of pathogenic microorganisms in such waste is quite high. The amount of waste "produced" by medical institutions has a tendency towards intensive growth. As a result of the increasing range of the substances used, the variability of the waste composition is expected to grow as well.

The project involves a detailed study of existing treatment systems, determining the most appropriate cost-effective solution for each of the partners, creation and launch of two regional centres for decontamination in Slantsy and Kohtla-Järve, which will operate at local hospitals. These centres will cater as well to the needs of all surrounding institutions which also produce medical waste: dental surgeries, private clinics, drug treatment centres, veterinary clinics, etc. The equipment and waste treatment technology in these new centres need to be modern, the process should be energy efficient and include reduction of the volume of waste being treated by way of it shredding. This will allow to process a greater volume of waste in one load, thus the final volume to be transported to the waste depository will be smaller.

Serious consideration will be given to the standards of handling and separating the materials used in medical facilities. Permanent appearance of new materials and packages requires constant perfection of methods of handling medical waste. Special training courses and site visits are intended for this purpose. Cooperation between two regions in the framework of this project helps to raise awareness of medical personnel and to solve the problem of medical waste polluting the environment on both sides of the border.

Overall objective

To decrease environmental risks in the cross-border region of North-West Russia and North-East Estonia by way of ensuring effective separation, neutralization and disposal of hazardous and infectious medical waste.

Specific objective

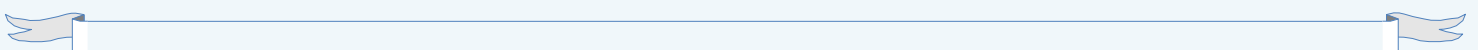
- ✚ Collection of potentially infectious waste originating from hospitals and satellite medical institutions, e.g. private clinics, dental surgeries, centres of drug prevention, veterinary clinics, etc.;
- ✚ Establishment and start-up of economically effective non-earning sterilization centres in two hospitals, located on both sides of the trans-border region;
- ✚ Education and popularization of the need for separation of materials used by medical institutions to create an effective system of neutralization and disposal of medical waste.

Beneficiary

Kohtla-Järve Town Government (Estonia)

Partners

- ✚ **Ida-Viru Central Hospital** (Estonia)
- ✚ **Administration of Municipal Formation Slantsy Municipal District** (Russia)
- ✚ **Municipal public health institution Slantsy central regional hospital** (Russia)





Expected results

- **Investigation and selection of appropriate innovative technology:**
 - the most appropriate cost-effective technologies complying with each partner's requirements are determined;
 - 2 medical waste treatment and processing sets of equipment are purchased and installed in Slantsy and Kohtla-Jarve hospitals;
 - processing lines are put in operation; manuals are provided and staff is trained;
- **Launch of two centres for processing hazardous medical waste:**
 - 2 regional non-earning centres – one **in Kohtla-Jarve**, in Ida-Viry Central Hospital (Estonia), and one **in Slantsy** Regional central hospital (Russia) – have been prepared and put in operation. For each hospital partners have jointly developed own logistic system of separation, collection, intermediate storage, and transportation of hazardous medical waste, and have started using them; **premises** in 2 buildings required for the centres' operation have been **renovated**
- **Elaboration of Waste Management Plan and training:**
 - 80 specialists of medical institutions have undergone **training in Kohtla-Jarve and Slantsy**. 60 specialists have attended local seminars in Slantsy; **study visit to health care institutions of St. Petersburg is organized for target group members**;
 - newly designed instructions have been studied and are being executed.

Final beneficiaries

- **G**eneral population of the cross-border region, especially in areas located directly adjacent to hospitals and landfill sites
- **M**unicipal governments responsible for waste disposal
- **A**ministrations of hospitals, private medical institutions, veterinary clinics etc., responsible for decontamination of medical waste

Duration

20 months

Budget

Total budget: **456 000,00** EUR

Programme co-financing: 410 400, 00 EUR (90%)

Project co-financing: 45 600, 00 EUR (10%)

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