

Republic of Bulgaria National Audit Office



Audit on Hazardous Medical Waste

(Performance audit, 2005)

Status at the beginning of the audited period:

- # Insufficient capacity for treatment and disposal of the hazardous hospital waste;
- # Hazardous hospital waste disinfected in autoclaves or incinerated in facilities that didn't meet the environmental requirements;
- # The only facility for pyrolytic incineration often braking down;
- # Huge amounts of hazardous waste heaped and inadequately stored in hospitals.

Status at the end of the audited period :

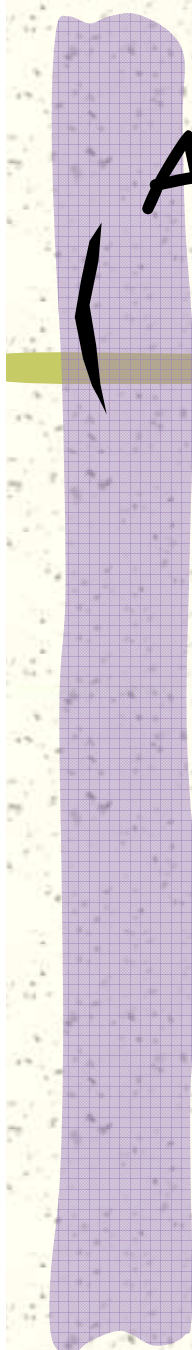
- # Sofia possesses hazardous hospital waste treatment facilities with a capacity of 3500 tonnes per year;
- # Two pyrolytic incinerators are in use and adequate monitoring over emissions is in place;
- # Alternative technologies for autoclave and microwave treatment of infectious waste are in use;
- # The segregation of waste at the source is improved;
- # Conditions for on-site storing of waste in healthcare facilities are also improved.

Main question



Is the management of hazardous medical waste in Sofia efficient?

AUDIT QUESTIONS



- # Do regulations, strategic and programming documents on the national level provide for safe and environmentally conscious management of hazardous medical waste?

AUDIT QUESTIONS (2)

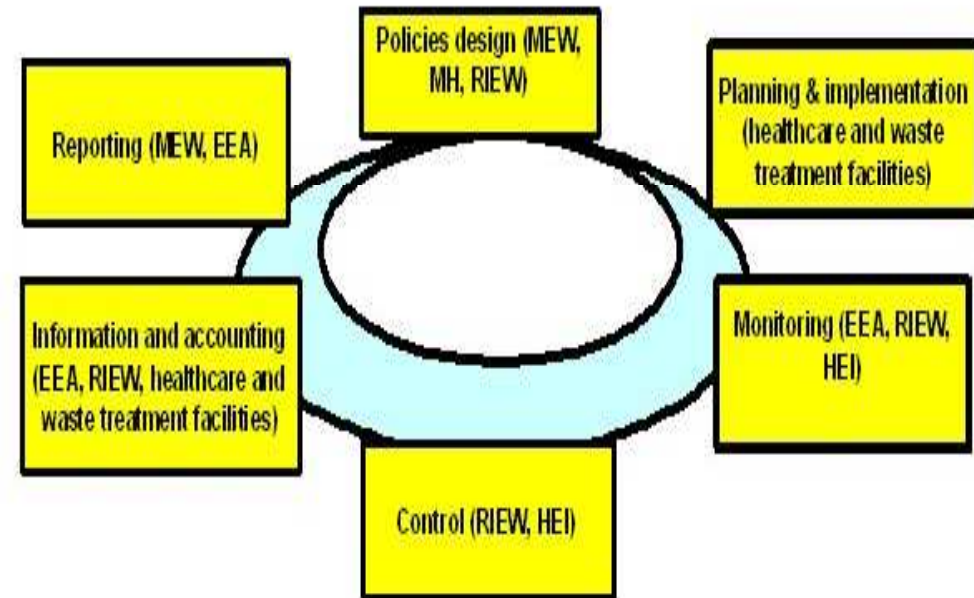
- # Is the management of hazardous medical waste in hospitals efficient (eco-friendly and safe) and effective?
- # Do the operators carry out an ecological and safe treatment of medical waste?

AUDIT QUESTIONS (3)

- # Is the Executive Environment Agency (EEA) effectively carrying out its regulatory, information, coordination and control functions effectively?
- # Is the Regional Inspectorate on Environment and Water (RIEW) effective in its regulatory, information and control functions?
- # Is the Hygiene Inspectorate's (HEI) ex-ante and on-going control effective?

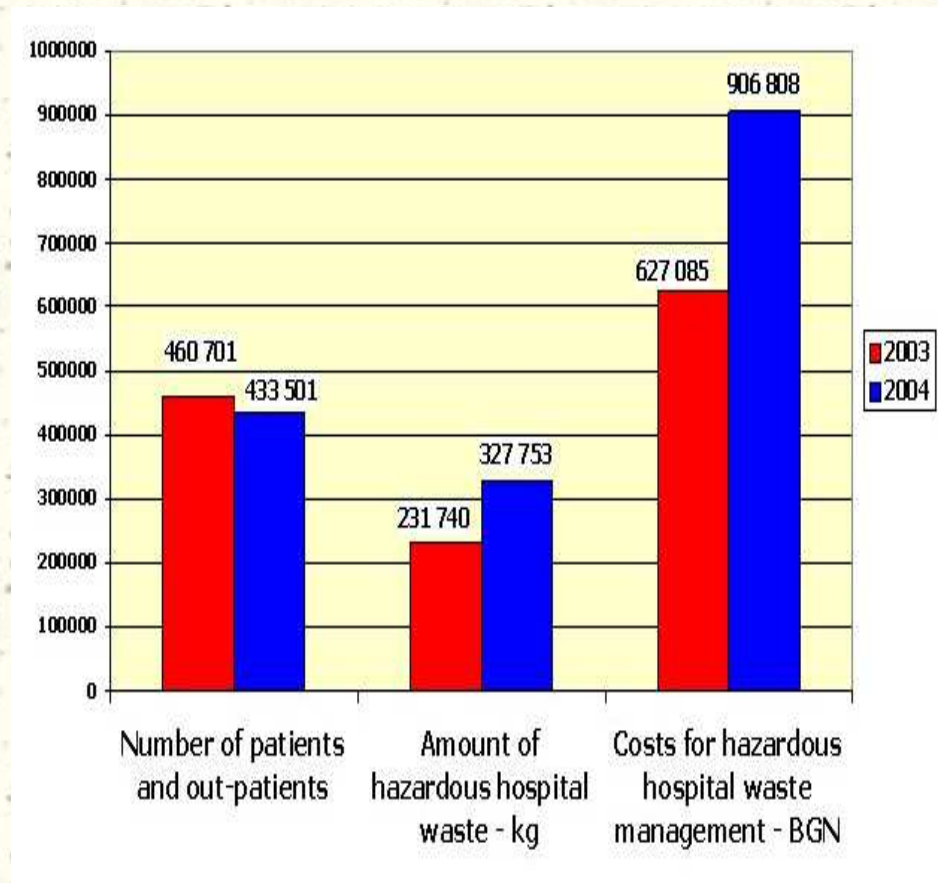
Scope of the audit:

- # Two ministries;
- # One agency;
- # Two control institutions;
- # Five hospitals;
- # One research centre;
- # Two treatment facilities.



Basic data for audited hospitals:

- # Number of patients (including out-patients) - 433,501 persons/y
- # Total amount of generated hospital waste - 467 t/y;
- # Amount of generated hazardous hospital waste - 0,652 kg/bed/daily;
- # Weight of the disposed waste - 327 t/y;
- # Number of employees handling hazardous hospital waste - 356 persons.



Methodology:

- # Observations on hazardous healthcare waste management activities in hospitals and incineration facilities;
- # Observation how the control checks are carried out;
- # Structured questionnaires to all of auditees and other 20 hospitals;
- # Interviews.

Challenges:



- # Clear definition of hazardous healthcare waste;
- # Development of comprehensive guidelines;
- # Improvement of planning;
- # Reduction of waste generation;
- # Waste recycling and reuse;

Challenges (cont.):

- # Efficient use of treatment facilities capacity;
- # Sufficient and reliable information on the amount, composition and features of healthcare waste;
- # Effectiveness of the controls.

Audit outcomes:

- # Improvement of the waste at source segregation practices in healthcare facilities;
- # Development of measures for improvement of conditions for proper on-site storing of hazardous waste in hospitals;
- # Waste classification;

Audit outcomes (cont.):

- # Improvement of accounting in hospitals and in waste treatment facilities;
- # Better quality of the collected and generalized information on national level;
- # Utilization of energy from waste incineration in one of the facilities;
- # More secure work conditions.