



# **BIOWASTE MANAGEMENT IN HEALTH CARE AND VETERINARY FACILITIES IN GEORGIA**

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# Georgian Biosafety Association (GeBSA)

- Established in 2009
- Association has more than 80 members from various institutions in Georgia.
- Member of the International federation of Biosafety Associations (IFBA)
- Affiliated with American Biosafety Association (ABSA)
- Partner organization for European Biosafety Association (EBSA)

## Overall goal

development and implementation of integral requirements on all aspects of biosafety in conformity with international rules and norms; promotion to organization and development of biosafety as priority direction in assurance of safety of population and environment.



# Georgian Biosafety Association (GeBSA)

## **Mission:**

- Coordinates development of modern rules of biosafety;
- Assists members of Association in expertise and other assessments, development of standards, regulations, methods, recommendations, etc.;
- Promotes development of research and science and technology potential of facilities and methods used in biosafety and biosecurity in various areas;
- Promotes the implementation of modern rules of biosafety in microbiology, virology, parasitology, epidemiology, medical zoology, and clinical presentations of infectious diseases;
- Develops integral programs for training of specialists on a basis of international standards of biosafety; etc.



In and 2010 and 2012 Georgian **Biosafety Association** (GeBSA) carried out survey on compliance of existing practices with biosafety/biosecurity norm and regulations in health care and veterinary clinics and facilities in Georgia. The survey was held by questionnaires, and observing existing practices.



- Number of clinics in Georgia – 276 (total number of beds – 13378)  
Among them – infectious disease units - in  $\approx 50$ .
- Index of general supply of the population with hospital beds – 300.4/100000.

Almost all of hospitals and veterinary clinics are privatized, some owned by insurance companies, some – by private entities (real owner often is unknown).





# The situation was catastrophic...



We had provided leaflets and brochures on waste handling, distributed the Decree of the Minister of MoLHSA and MoA

# Waste Management

- Though the waste from the labs is collected separately, all the waste from the hospital goes together with household refuse collection vehicles



# During last years the number of TB cases significantly increased in Georgia

		2010 Cohort																	
#	Region	Pulmonary TB								Extrapulmonary TB		Total number			Population	per 100 000 population			
		All registered Cases				New cases				All registered cases	New cases	All registered cases	New cases	Re-treated cases		All registered cases	New cases	New cases	
		AFB(+)	AFB(-)	AFB(NA)	Total	AFB(+)	AFB(-)	AFB(NA)	Total										
1	Tbilisi	679	403	12	1094	524	325	10	859	329	299	1423	1158	265	1157500	122.9	100.0	45.3	
2	Mtskheta-Mtianeti	61	28	2	91	46	17	1	64	37	34	128	98	30	109100	117.3	89.8	42.2	
3	Kakheti	139	75	4	218	118	54	2	174	71	64	289	238	51	405300	71.3	58.7	29.1	
4	Shida Kartli	128	86	3	217	91	57	2	150	60	56	277	206	71	311800	88.8	66.1	29.2	
5	Kvemo Kartli	205	107	9	321	158	65	7	230	123	112	444	342	102	502800	88.3	68.0	31.4	
6	Imereti	274	122	6	402	201	84	6	291	100	92	502	383	119	702400	71.5	54.5	28.6	
7	Guria	63	50	0	113	44	42	0	86	28	28	141	114	27	140100	100.6	81.4	31.4	
8	Samegrelo	278	140	7	425	206	83	5	294	128	116	553	410	143	475600	116.3	86.2	43.3	
9	Samckhe-Javakheti	28	53	4	85	17	22	3	42	29	22	114	64	50	212000	53.8	30.2	8.0	
10	Adjara	247	223	17	487	190	125	13	328	144	137	631	465	166	388700	162.3	119.6	48.9	
11	Racha-Lechkhumi	7	5	1	13	5	2	1	8	4	4	17	12	5	47500	35.8	25.3	10.5	
12	prisons	795	258	7	1060	541	158	5	704	219	191	1279	895	384	23684	5.4%	3.8%	2.3%	
	<b>Total</b>	<b>2904</b>	<b>1550</b>	<b>72</b>	<b>4526</b>	<b>2141</b>	<b>1034</b>	<b>55</b>	<b>3230</b>	<b>1272</b>	<b>1155</b>	<b>5798</b>	<b>4385</b>	<b>1413</b>	<b>4452800</b>	<b>130.2</b>	<b>98.5</b>	<b>48.1</b>	
	Civil	2109	1292	65	3466	1600	876	50	2526	1053	964	4519	3490	1029	4452800	101.5	78.4	35.9	



# In 2012 the Nurse was Infected with TB in Abastumani TB Hospital



# Georgian Legislation dealing with Biosafety/Waste Management

- Law of Georgia "on Environmental Protection" (22.01.1996)
- Law of Georgia "on Licensing and permits" (24.06.2005)
- Law of Georgia "on Transit and Import of Hazardous Waste on the Territory of Georgia" (08.02.1995)
- Law of Georgia "on State Control over Environmental Protection" (23.06.2005)
- Law of Georgia "on Hazardous Chemical Materials" (12.06.1998)
- "Georgian Sanitary Code" (08.05.2003)
- "Georgian Code of Administrative Trespasses" (15.12.1984)
- Law of Georgia "on Public Health" (27.06.2007), etc.
- "On Approval of Rules of Collection, Storing and Disposal of Waste from Medical – Prophylaxis Institutions of Georgia" - Decree of the Minister of Labor, Health and Social Affairs of Georgia (No. 300/N, 16.08.2001)

# Problems Encountered

- Decree No. 300/N of the MoLHSA “On Approval of Rules of Collection, Storing and Disposal of Waste from Medical – Prophylaxis Institutions of Georgia” has no supplementary regulations and instructions, misunderstanding
- Lack of oversight procedures
- Lack of knowledge on biosafety
- Lack of Incinerators

- Significant difference between facilities and clinics collaborating with western institutions, National Center for Disease Control and Public Health (NCDC) and the Laboratory of the Ministry of Agriculture (LMA) and those which are acting only locally



# Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

## CATEGORIES OF WASTES TO BE CONTROLLED:

- Y1 - Clinical wastes from medical care in hospitals, medical centers and clinics



# The situation has changed in 2012

- Several private companies started commercial medical and veterinary waste disposal
- Not all facilities and clinics use their services

# Some Statistics...

- About 300 health care and veterinary facilities in Tbilisi, capital of Georgia
- Daily these facilities produce about 1.5 - 2,0 tones of medical waste (monthly - 50 - 60 tones)
- the types of waste - bandages, nutrition media (both solid and liquid), anatomic waste - after surgery, morphological studies, etc.

## To conclude:

- Recommendations for MoLHSA and MoA were prepared
- Biosafety association can provide help to medical and veterinary practitioners in proper waste management, and in reducing biosafety/biosecurity risks in general.



Strength is in unity

**Thank you!**

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