

THE DANGEROUS WASTES AND HEALTH RISK IN ROMANIA - NATIONAL REPORT

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The residues' problem is significant in many countries. Any civilized country should have national policies for managing solid domestic wastes. The application will achieve some major objectives:

- to reduce the residues' quantity and therefore the pollution emanation
- to recycle the reconvertable materials
- to promote hygienic situation of environment

The deficient organization and lack of technical and material possibilities created wastes' accumulations: thus the domestic wastes were blocked in dwellings and garbage gathering places ensuring appropriate conditions for multiplying the beads, the flies and the rats. The aim of this work is to study the relationship between producing solid wastes and general population health. The data were achieved by testing population around gathering and stocking wastes, the distance between platforms and habitations, claims of population about dumped garbage and eventually correlated diseases. Our questionnaire includes references to liquid, solid and potentially toxic wastes resulted from domestic, urban and industrial activities.

The test includes 9 108 913 inhabitants from 209 towns. In our country wastes are sorted in 7 towns having a total of 795 389 inhabitants (8.73 % of 9 108 913 inhabitants), and not sorted in 202 towns representing 9 126 % of the whole population (Table 1).

Table 1. Wastes collection and storage

	Total	Wastes collection		Wastes storage	
		sorted	not sorted	separated	unseparated
Number of towns	209	7	202	10	199
Number of inhabitants	9 108 913	795 389 8.73 %	8 313 524 91.26 %	975 932 10.7 %	8 132 981 89.28 %

Wastes storage is separated in 10 towns with 975 932 inhabitants and unseparated in 199 towns.

There are 204 wastes platforms:

- 177 open platforms representing 86.7 % of the total, for 7 166 446 inhabitants, 42.15 % of them have health authorizations (the population risk is low), the other 44.6 % of them are used without health authorizations and serve 3 198 454 inhabitants (35.11 %);
- 27 closed platforms for 1 942 467 inhabitants and 13 of them are used without health authorizations. The non-authorized closed platforms serve 817 882 inhabitants (Table 2).

Table 2. The wastes platforms' classification related to served population

	The wastes platforms					
	open			closed		
	health authorized	non-authorized	total	health authorized	non-authorized	Total
Number	86 42.15 %	91 44.60 %	177 86.76 %	14 6.86 %	13 6.37 %	27 13.23 %
Number of inhabitants	3 967 992 43.56 %	3 198 454 35.11 %	7 166 446 78.67 %	1 124 645 12.34 %	817 822 8.97 %	1 942 467 21.32 %

Approximately a half of the towns' inhabitants (4 016 276 representing 44.09 %) live more or less in the vicinity of the wastes platforms that don't correspond to health standards.

The distance between wastes platforms and dwellings vary from 100 m to 500 m.

From the total population investigated, 1 474 653 inhabitants (16.18 %) live at a distance less than 500 m from the wastes platforms. (Table 3).

Table 3. The platforms' placement versus inhabitants

Distance	0 - 500 m	More than 500 m
Number of inhabitants	1 474 653 16.18 %	7 634 260 83.81 %

The solid wastes produce discomfort; their burning produce smoke and because of that it affects the inhabitants' health.

When transporting the waste to the platforms it often disperses and thus it becomes one of the great reasons of the lack of hygiene in many towns.

The wastes' bad smell (stink) produces discomfort in its neighbourhood. The data are shown in Table 4.

Table 4. The discomfort caused by solid wastes

Type of discomfort	Number of towns	Number of inhabitants
Presence of the smoke	10	1 028 544 11.29 %
Lack of hygiene in the town	14	1 059 275 11.62 %
Bad smells	16	1 120 752 12.30 %
Presence of the insects, rats	9	982 852 10.79 %

The discomfort caused by presence of the smoke is mentioned in 10 towns (1 028 544 inhabitants): Pitesti, Cimpulung, Curtea de Arges, Cluj, Turda, Cimpia Turzii, Botosani, Dorohoi, Onesti, Satu-Mare.

The lack of hygiene conditions is found in 14 towns (1 059 275 inhabitants; 11.62 %): Turnu Magurele, Sulina, Babadag, Botosani, Dorohoi, Iasi, Viscul de Sus, Borsa, Tirgu Lapus, Cavnice.

The discomfort caused by the bad smell is registered in 16 towns (12.3 %; 1 120 752 inhabitants): Cimpulung Moldo-