

Bathing water results 2009 – Hungary

1. Introduction

This report gives a general overview of bathing water quality in Hungary during the 2009 bathing season. Hungary reported under the Directive 2006/7/EC in 2008 and 2009 bathing season.

Before the necessary data set for assessment of bathing water quality under the Directive 2006/7/EC is compiled (data for three or four consecutive years) the rules for transition period assessment is done. This means that the classification of bathing waters is defined on the basis of concentrations of intestinal enterococci and *Escherichia coli* that are reported under the Directive 2006/7/EC. The limit values for the classification are taken from the Directive 76/160/EEC. For the conversion of reported parameters under the Directive 2006/7/EC, Article 13.3 of the Directive 2006/7/EC foresees that the parameter *Escherichia coli*, reported under the Directive 2006/7/EC, is assumed to be equivalent to the parameter faecal coliforms of the Directive 76/160/EEC. The parameter intestinal enterococci reported under the Directive 2006/7/EC is assumed to be equivalent to the parameter faecal streptococci.

The results are classified in the following categories:

- Compliant with the mandatory value of the Directive 76/160/EEC for *Escherichia coli* and not compliant with the guide values of the Directive 76/160/EEC for *Escherichia coli* or intestinal enterococci (class CI);
- Compliant with the mandatory value of the Directive 76/160/EEC for *Escherichia coli* and the more stringent guide values for the *Escherichia coli* and intestinal enterococci (class CG);
- Not compliant with the mandatory value of the Directive 76/160/EEC for *Escherichia coli* (class NC);
- Banned or closed (temporarily or throughout the season) (class B).

This year the interval between two samples during the bathing season should not be larger than 41 days. The interval is longer than 31 days as defined in the Directive 2006/7/EC, since we are approaching the year 2012 only when the assessment rules will be in full compliance with the rules of this Directive. Furthermore, the first sample that should be taken shortly before the start of the bathing season could be taken even 10 days after the start of the bathing season.

Since Hungary grouped their bathing waters (125 bathing waters in 42 groups) with bathing water profiles in preparation, two assessments of bathing water quality are done. In the first case, the assessment is done by groups and other not grouped bathing waters (177). Each group is represented by “representative” bathing water. In the second case, all reported bathing waters are assessed separately (260).

2. Length of bathing season and number of bathing waters

The bathing season started from 1 May to 1 July 2009 and ended from 15 August to 30 September 2009. One bathing water was opened the whole year.

A total of 260 freshwater bathing waters (27 on rivers; 233 on lakes) were reported in Hungary during the 2009 bathing season. Hungary has no coastal bathing waters.

125 bathing waters were grouped into 42 groups (42 representatives and 83 associated bathing waters, of which 40 were not monitored). Representative and associated bathing waters in the groups account for 48% of bathing waters. Six bathing waters in groups (two representative and four associated bathing waters) and five ungrouped bathing waters were insufficiently sampled. In addition, 15 ungrouped bathing waters were not sampled since they were not operated (closed).

With 260 bathing waters Hungary accounts for about 1.2% of the reported bathing waters of the European Union. With 42 groups and 135 ungrouped bathing waters (177) Hungary accounts for about 0.8% of the reported bathing waters of the European Union.

The evolution of the reported number of bathing waters since monitoring of the water quality began under the Directive 76/160/EEC and the Directive 2006/7/EC is presented in Table 1. The number of freshwater bathing waters increased since the start of the reporting from 232 in 2004 to 260 in 2009. There were four more freshwater bathing waters in 2009 than in the previous year: five new bathing waters were added to the list and one was de-listed. In addition, two bathing waters were re-opened in 2009 after a closure in 2008.

3. Results of bathing water quality

The results of the bathing water quality in Hungary for the period 2004-2008 as reported in the past reporting years and for the bathing season of 2009 are presented in Figure 1a and Figure 1b. The previous reports are available on the European Commission's bathing water quality website (http://ec.europa.eu/environment/water/water-bathing/index_en.html; Water and Health/Bathing Water/2005-2009 reports) and the European Environment Agency's bathing water website (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>; reports for 2008 bathing season).

The graph shows, for freshwater bathing waters:

- The percentage of bathing waters that comply with the guide values (class CG, blue line);
- The percentage of bathing waters that comply with the mandatory values (class CI, green line);
- The percentage of bathing waters that do not comply with the mandatory values (class NC, red line);
- The percentage of bathing waters that are banned or closed (temporarily or throughout the season) (class B, grey line).

In Figure 1a, the results of bathing water quality are presented for 42 groups as reported and 135 ungrouped bathing waters (177).

In Figure 1b, the results are presented for all bathing waters (260). Groups as reported are not considered.

Table 1 shows the same information in absolute numbers and in percentages for freshwater bathing waters.

Map 1 and Map 2 show the location of the reported bathing waters in Hungary. Map 1 show bathing waters in groups as reported and other ungrouped bathing waters. Associated bathing waters in groups that have no samples are presented with the status category of the representative bathing water of a group, while associated bathing waters with samples are presented with their own status category. Map 2 shows all bathing waters. Groups as reported are not considered. The location of the bathing waters is based on the geographic coordinates reported by the Hungarian authorities.

Figure 1a: Results of bathing water quality in Hungary from 2004 to 2009. Bathing waters grouped as reported.

Freshwater bathing waters (HU)

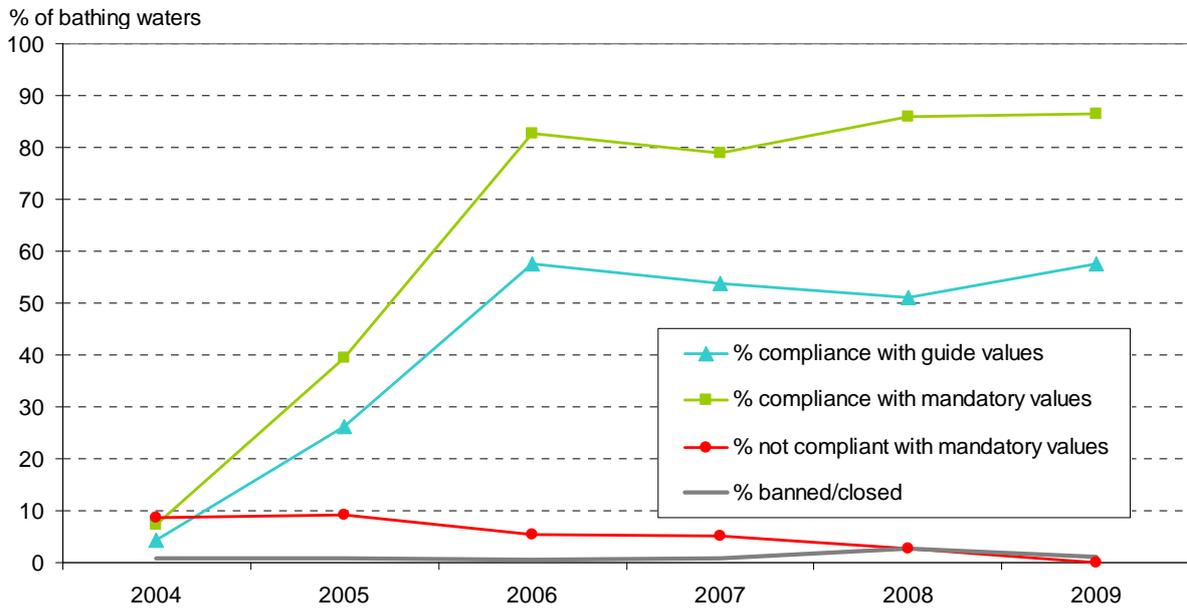


Figure 1b: Results of bathing water quality in Hungary from 2004 to 2009 for all bathing waters. Groups as reported are not considered in this figure.

Freshwater bathing waters (HU)

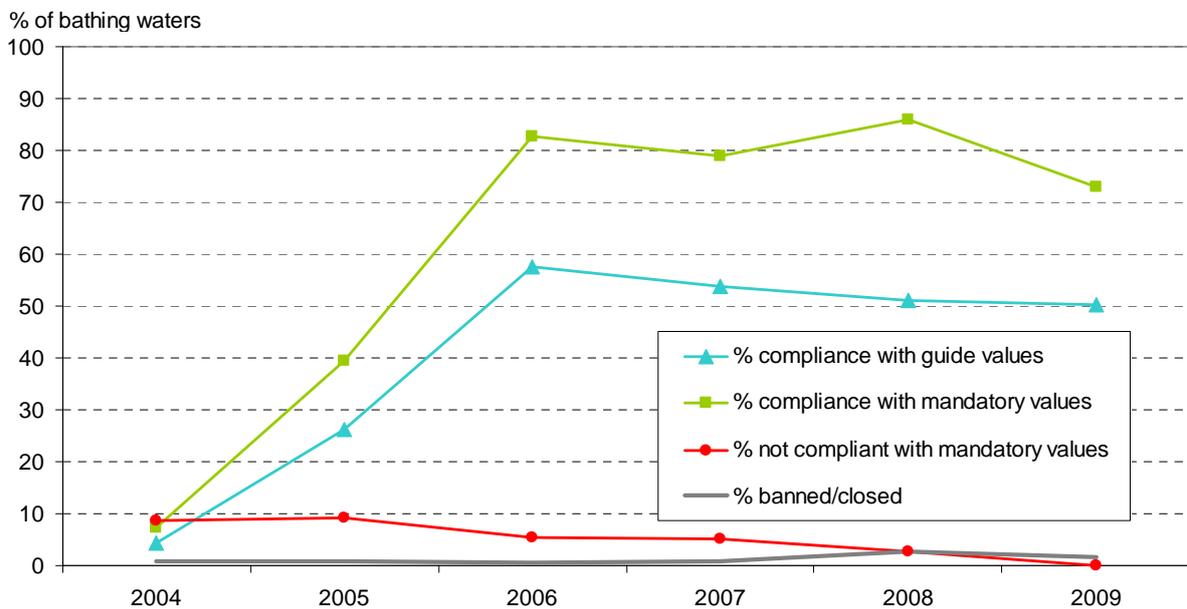


Table 1: Results of bathing water quality in Hungary from 2004 to 2009

HU										
		Total number of bathing waters	Compliance with guide values		Compliance with mandatory values		Not compliant		Banned/closed temporarily or throughout the season	
			Number	%	Number	%	Number	%	Number	%
Freshwater bathing waters	2004	232	10	4.3	17	7.3	20	8.6	2	0.9
	2005	259	68	26.3	102	39.4	24	9.3	2	0.8
	2006	241	139	57.7	199	82.6	13	5.4	1	0.4
	2007	238	128	53.8	188	79.0	12	5.0	2	0.8
	2008	256	131	51.2	220	85.9	7	2.7	7	2.7
	2009 (1)	177	102	57.6	153	86.4	0	0.0	2	1.1
	2009 (2)	260	131	50.4	190	73.1	0	0.0	4	1.5

Note: Bathing waters which were insufficiently sampled or not sampled according to the Bathing Water Directive or the New Bathing Water Directive were not included in this table. Therefore, in some cases, the sum of the different categories will not be equal to the total number of bathing waters. Bathing waters which were compliant with the guide values were also compliant with the mandatory values for five parameters under the Directive 76/160/EEC (2004-2007) or the mandatory value for *Escherichia coli* (2008, 2009).

(1) : Bathing waters grouped as reported are included in assessment (taken into account in assessment on the EU level - EU report).

(2) : All bathing waters are included in assessment. Bathing waters with no data are classified as not sampled.

Remark: If a bathing water that is reported as part of a group and has no data, is classified as a representative bathing water of a group, the results of bathing water quality for 2009 is the following: total number: 260, compliance with the guide values: 164, compliance with the mandatory values: 225, not compliant: 0, closed: 4 (shown in the WISE Bathing Water Quality data viewer and WISE map viewer).

4. Development of bathing water quality

As shown in Figure 1a, 86.4% of the freshwater bathing waters met the mandatory water quality in 2009. This is a slight increase of 0.5% compared to the previous year. The rate of compliance with the guide values was 57.6%, which is an increase of 6.4%. No bathing water was non-compliant with the mandatory value for *Escherichia coli* compared to seven (2.7%) in 2008. Two bathing waters (1.1%) were closed during the season compared to seven (2.7%) in 2008.

As shown in Figure 1b, 73.1% of the freshwater bathing waters met the mandatory water quality in 2009. This is a decrease of 12.8 % compared to the previous year. 50.4% of the bathing waters met the more stringent guide values, which is a slight decrease of 0.8%. No bathing water was non-compliant with the mandatory value for *Escherichia coli*. Four bathing waters (1.5%) were closed during the season.

The low compliance rate in 2004 and 2005 is due to the large number of insufficiently sampled bathing waters (more than 50% in 2004). As shown in Figure 1a, there was an improvement in compliance with the mandatory values since 2006 with a drop in 2007. After a decrease in compliance rate with the guide values since 2006 the same rate was reached in 2009 as in 2006. If all bathing waters are considered instead of groups for 2009, a dip in mandatory water quality was also recorded in 2009 and the guide water quality decreased further in 2009 due to a high percentage of not sampled (21.2%) and insufficiently sampled bathing waters (4.2%) (Figure 1b). It took Hungary till the 2008 bathing season to reach a low level of non-compliant freshwater bathing waters below 5%, reaching zero in 2009. The percentage of closed bathing waters was below 1.5%, except in 2008 (2.7%).

5. General information as provided by the Hungarian authorities

The designation, quality and monitoring of bathing waters (BWs) is regulated by the Government Decree No. 78/2008. (IV. 3.) which is harmonized with Directive 2006/7/EC.

The monitoring and examination of the BWs is only performed by accredited laboratories which are requested to observe the relevant ISO and EN standards. *E. coli* is tested acc. to EN ISO 9308:3 and intestinal enterococci acc. to EN ISO 7899:1 or :2.

The owner or operator of the BW is obliged to have it monitored. Supervision of BWs is in the competence of the public health authorities of the small regions. A lot of BWs belongs to privately owned or leased establishments and public access is restricted. The use by the public and the length of the bathing season are subject to the decision of the owner or the renter. Bathing water Heviz, tofurdo (HUBW_02007) was opened all year round and tested monthly. It is a lake fed by a warm karst spring.

In regard to public participation, amendment of the relevant legal ordinance is underway but not yet published. A more prompt access to BW information and locally available possibilities to intervene in BW matters are foreseen.

BW profiles are underway by making use of the officially published guidance. There are some BW profiles that were prepared in Hungary to serve as sample for the rest. They can be seen on the site: www.standinformacio.hu.

The assessment of the BWs was performed for the first time according to the requirements of Art 4 and 5 of the new Directive using data for four bathing seasons.

125 BWs have been grouped into 42 groups on the basis of Art. 4 (5) of the Directive. Their contiguity and similar or lacking risk of water pollution is evidenced in their BW-profile (link to its website to be provided soon). Some of the grouped BWs (HUBW_01557, HUBW_01586, HUBW_01587, HUBW_01588 and HUBW_01590) are very small beaches not even being of the size of a bathing water as defined in Art. 2 of the Directive. They have not been monitored but are nevertheless included in the report as members of groups of BWs in favour of the completeness of information of the public.

Abnormal situation was reported in two cases in connection to flood at five bathing waters. No short term pollution was reported.

Three bathing waters (Kamaras-Duna, Gazgyar-oboli szabad strand (HUBW_00301), Kamaras-Duna, Poszto-oboli szabad strand (HUBW_00302) and Kamaras-Duna, Venuszdombi szabad strand (HUBW_00303)) were temporarily closed for 15 days because of abnormal situation. Bathing water Budakalasz, Omszki-to, strand (HUBW_01402) was closed for the entire season and monitored.

Bathing water Balaton Kemping (HUBW_01908) was de-listed in 2009 bathing season because of having been sold and not being operated as bathing water any more. The new owner decided to close up.

6. More information on bathing water quality in the European Union

More information on bathing water quality in the European Member States, including the EU summary report, the reports for 27 Member States, Croatia and Switzerland, can be found on the European Commission's bathing water quality website (http://ec.europa.eu/environment/water/water-bathing/index_en.html) and the European Environment Agency's bathing water website (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>). The reports for the bathing seasons of 2008 and 2009 have been produced by the Institute for Water of the Republic of Slovenia (IWRs), a partner in the EEA European Topic Centre on Water (ETC/W). Countries have collaborated in the assessment of bathing water quality and supplied additional information when needed.

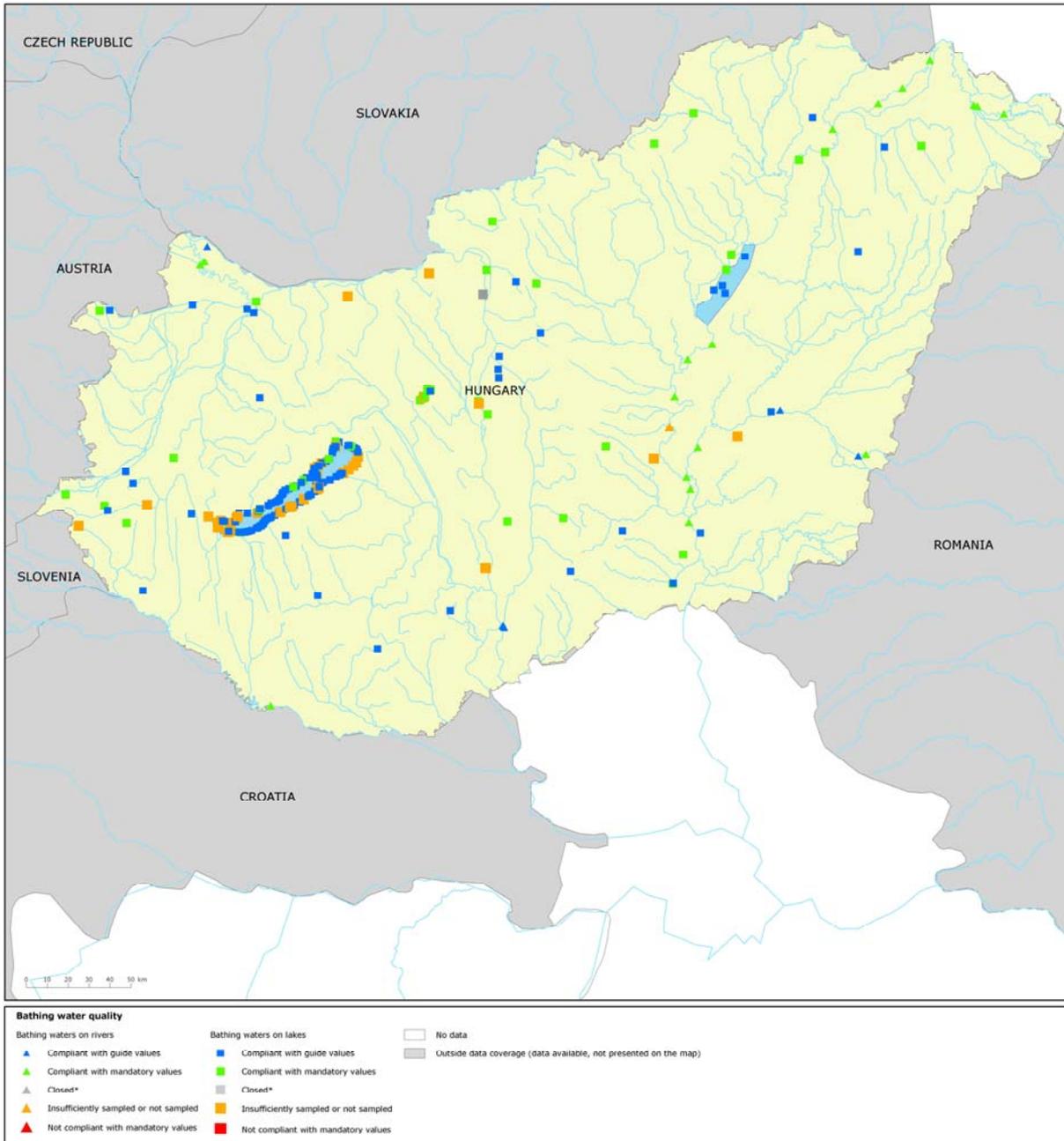
By 2015, Member States will have to comply with the stricter and more ambitious requirements laid out in the New Bathing Water Directive (Directive 2006/7/EC). This Directive requires more effective monitoring and management of bathing waters, greater public participation and improved information. More information on the new Directive can be found on the bathing water quality website and on <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:064:0037:0051:EN:PDF>.

Cyprus, Denmark, Estonia, Finland, Germany, Hungary, Latvia, Lithuania, Slovakia, Spain and Sweden started to report according to more stringent new requirements in 2008 bathing season. Malta and the Netherlands started to report in 2009 bathing season under the new requirements. Sweden and Malta also sent data for three previous bathing seasons under the new requirements.

Luxembourg started to monitor under the new requirements in 2006 bathing season, while reported for the first time in 2007 bathing season.

WISE - Water Information System for Europe (www.water.europa.eu) is a gateway to all water related information. Among other water related data, information on individual bathing water quality can be found in the WISE map viewer and WISE Bathing Water Quality data viewer through interactive maps and graphs (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>).

Map 1: Bathing waters reported during the 2009 bathing season in Hungary



Map 2: Bathing waters reported during the 2009 bathing season in Hungary

