

Bathing water results 2008 – Lithuania

1. Introduction

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

During the transition period, samples of Intestinal enterococci and Escherichia coli are reported under the Directive 2006/7/EC, but assessment is done according to the assessment rules of Directive 76/160/EEC. For the conversion of reported parameters under Directive 2006/7/EC, Article 13.3 of the Directive 2006/7/EC foresees that the parameter Escherichia coli, reported under Directive 2006/7/EC, is assumed to be equivalent to the parameter Faecal coliforms of Directive 76/160/EEC. The parameter Intestinal enterococci reported under Directive 2006/7/EC is assumed to be equivalent to the parameter Faecal streptococci. This means that the parameters Intestinal enterococci and Escherichia coli are evaluated according to the guide and mandatory standards defined in the Annex to Directive 76/160/EEC for the parameters Faecal streptococci and Faecal coliforms respectively.

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 value of the Directive 76/160/EEC for 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 (temporarily closed) or closed throughout the season (class B)

2. Length of bathing season and number of bathing waters

For all bathing waters the bathing season lasted 3.5 months, from 1 June to 15 September 2008.

A total of 99 bathing waters were monitored in Lithuania during the 2008 bathing season, of which 15 were coastal bathing waters and 84 freshwater bathing waters (21 on rivers; 63 on lakes).

With 99 bathing waters Lithuania accounts for about 0.5% 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 Directive 2006/7/EC is presented in Table 1. The number of coastal bathing waters increased since the start of the reporting from 14 in 2004 to 15 in 2005. It remained the same afterwards. The number of freshwater bathing waters increased from 53 in 2004 to 84 in 2008. 15 new bathing waters were added to the list compared to the previous year and one was de-listed.

3. Results of bathing water quality

The results of the bathing water quality in Lithuania for the period 2004-2007 as reported in 2008 report and for the bathing season of 2008 are presented in Figure 1.

The graphs show, for coastal and freshwater bathing waters separately:

- 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 (temporarily closed) or closed throughout the season (class B, grey line)

Table 1 and Table 2 show the same information in absolute numbers and in percentages separately for coastal and freshwater bathing waters. Table 3 shows the bathing water quality results for 2008 season in Lithuania for all bathing waters.

Map 1 shows the location of the reported bathing waters in Lithuania. The location of the bathing waters is based on the geographic coordinates reported by the Lithuanian authorities.

Figure 1: Results of bathing water quality in Lithuania from 2004 to 2008

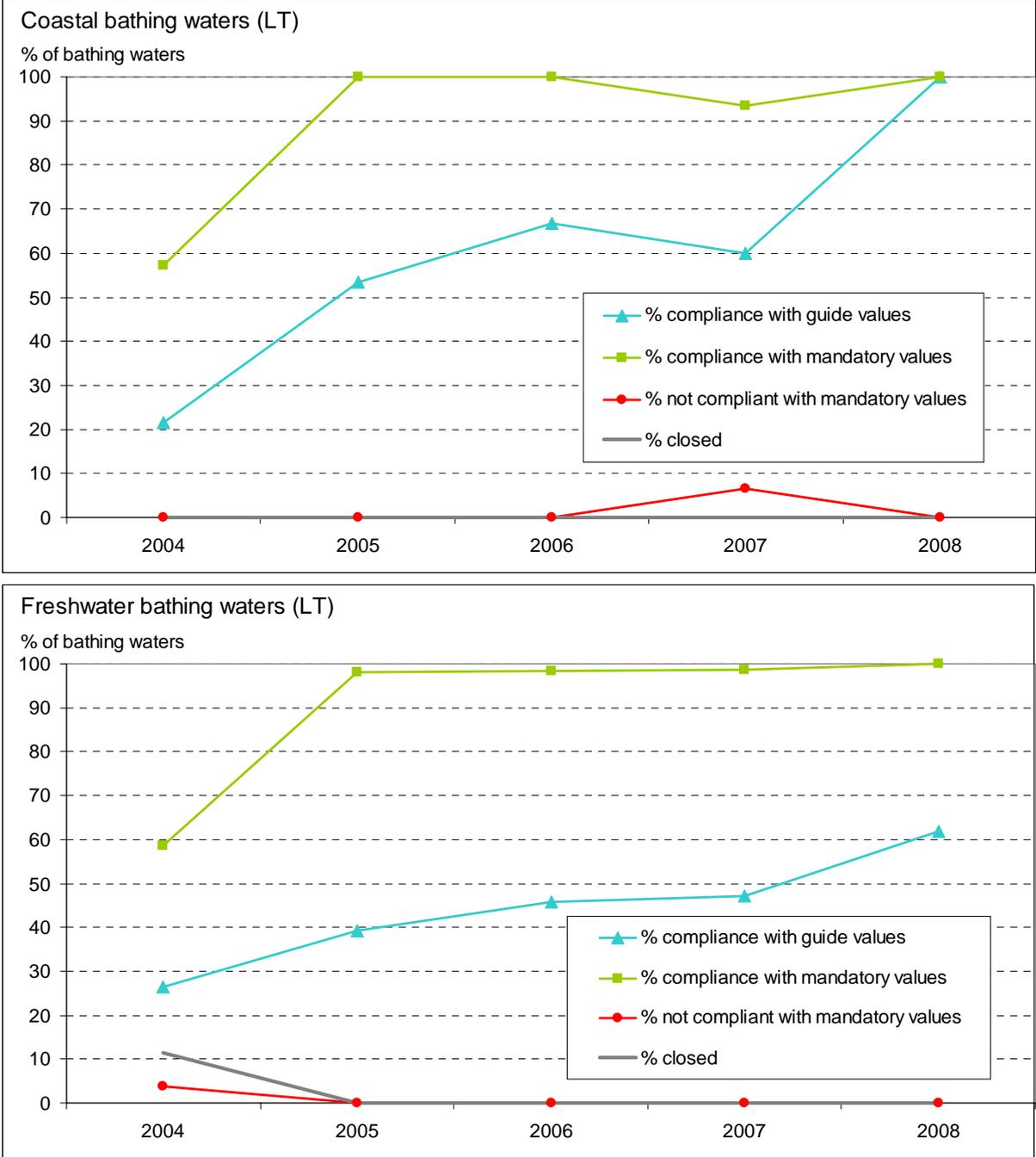


Table 1: Results of bathing water quality in Lithuania from 2004 to 2008 as absolute numbers

	Year	Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/closed throughout the season
LT						
Coastal water bathing waters	2004	14	3	8	0	0
	2005	15	8	15	0	0
	2006	15	10	15	0	0
	2007	15	9	14	1	0
	2008	15	15	15	0	0
Fresh-water bathing waters	2004	53	14	31	2	6
	2005	56	22	55	0	0
	2006	59	27	58	0	0
	2007	70	33	69	0	0
	2008	84	52	84	0	0

Note: Bathing waters which were insufficiently sampled or not sampled according to the 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.

Table 2: Results of bathing water quality in Lithuania from 2004 to 2008 as percentages

	Year	Total number of bathing waters	% compliance with guide values	% compliance with mandatory values	% not compliant	% banned/closed throughout the season
LT						
Coastal water bathing waters	2004	14	21.4	57.1	0.0	0.0
	2005	15	53.3	100.0	0.0	0.0
	2006	15	66.7	100.0	0.0	0.0
	2007	15	60.0	93.3	6.7	0.0
	2008	15	100.0	100.0	0.0	0.0
Fresh-water bathing waters	2004	53	26.4	58.5	3.8	11.3
	2005	56	39.3	98.2	0.0	0.0
	2006	59	45.8	98.3	0.0	0.0
	2007	70	47.1	98.6	0.0	0.0
	2008	84	61.9	100.0	0.0	0.0

Note: Bathing waters which were insufficiently sampled or not sampled according to the Bathing Water Directive are not included in this table. Therefore, in some cases, the sum of the percentages is not equal to 100%.

Table 3: Results of bathing water quality for all bathing waters in Lithuania in 2008

	Year	Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/closed throughout the season
LT						
Bathing waters	2008	99	67	99	0	0

4. Development of bathing water quality

Coastal bathing waters

In Lithuania, 100% of the coastal bathing waters (15) met the mandatory value for *Escherichia coli* and the more stringent guide values in 2008. This is an increase by one bathing water (+ 6.7%) for mandatory water quality and by six bathing waters (+ 40%) for guide limit values compared to the previous year. Since the start of reporting in 2004, no coastal bathing water had to be closed during the season.

In 2004 the compliance rate in coastal bathing waters was relatively low, due to a large number of insufficiently sampled bathing waters. Since 2005, the compliance rate with mandatory values reached 100% with a dip in 2007. The compliance with the guide values improved significantly to reach 100% in 2008.

Freshwater bathing waters

100% of the freshwater bathing waters (84) met the mandatory water quality in 2008. This is an increase compared to the previous year (+ 1.4%). The increase of the rate of the compliance with the guide values was larger (+ 14.8%), reaching 61.9% of the bathing waters (52). There is 38.1% less bathing waters that met the guide values compared to the mandatory value for *Escherichia coli*. Since 2005, no freshwater bathing water had to be closed during the season.

Since 2005, the compliance rate with mandatory values remained above 98%. The compliance rate with the guide values has increased above 60% in 2008 after a moderate increase during the previous years.

5. General information as provided by the Lithuanian authorities

Public information:

An information point for bathers has been installed in a visible location in each bathing area, providing the following information:

- length of bathing season,
- frequency of sampling,
- results of the most recent water analysis,
- information on short-term pollution and recommendations to refrain from bathing.

Information on bathing water quality is provided on a regular basis on the internet, over the radio and in the local press.

Reduction of contamination from diffuse and concentrated sources:

Various methods are used in Lithuania to reduce surface water and groundwater (and bathing water) pollution from point and diffuse sources:

- contamination of waters by urban wastewater is being reduced by building/rebuilding wastewater collection and treatment systems. It is expected that Lithuania's commitment to implement the EU Directive on urban wastewater treatment (91/271/EEC) by 2010 will be fulfilled on time;
- pollution standards are being laid down for the discharge of pollutants into the environment, the points at which wastewater is discharged into the environment are being selected so as to minimise its adverse effects on the environment, and a system of permits which ensures effective monitoring of compliance with requirements etc. is being applied to emissions;
- surface waters are being protected by establishing buffer zones in which farming activity is subject to stringent restrictions (for instance, the use of fertilisers, pesticides, other chemicals, liquid manure, etc. is prohibited);
- farmers are being encouraged to apply the requirements of good agricultural practice (and good environmental practice) by creating conditions enabling farmers who implement such requirements to receive EU aid.

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

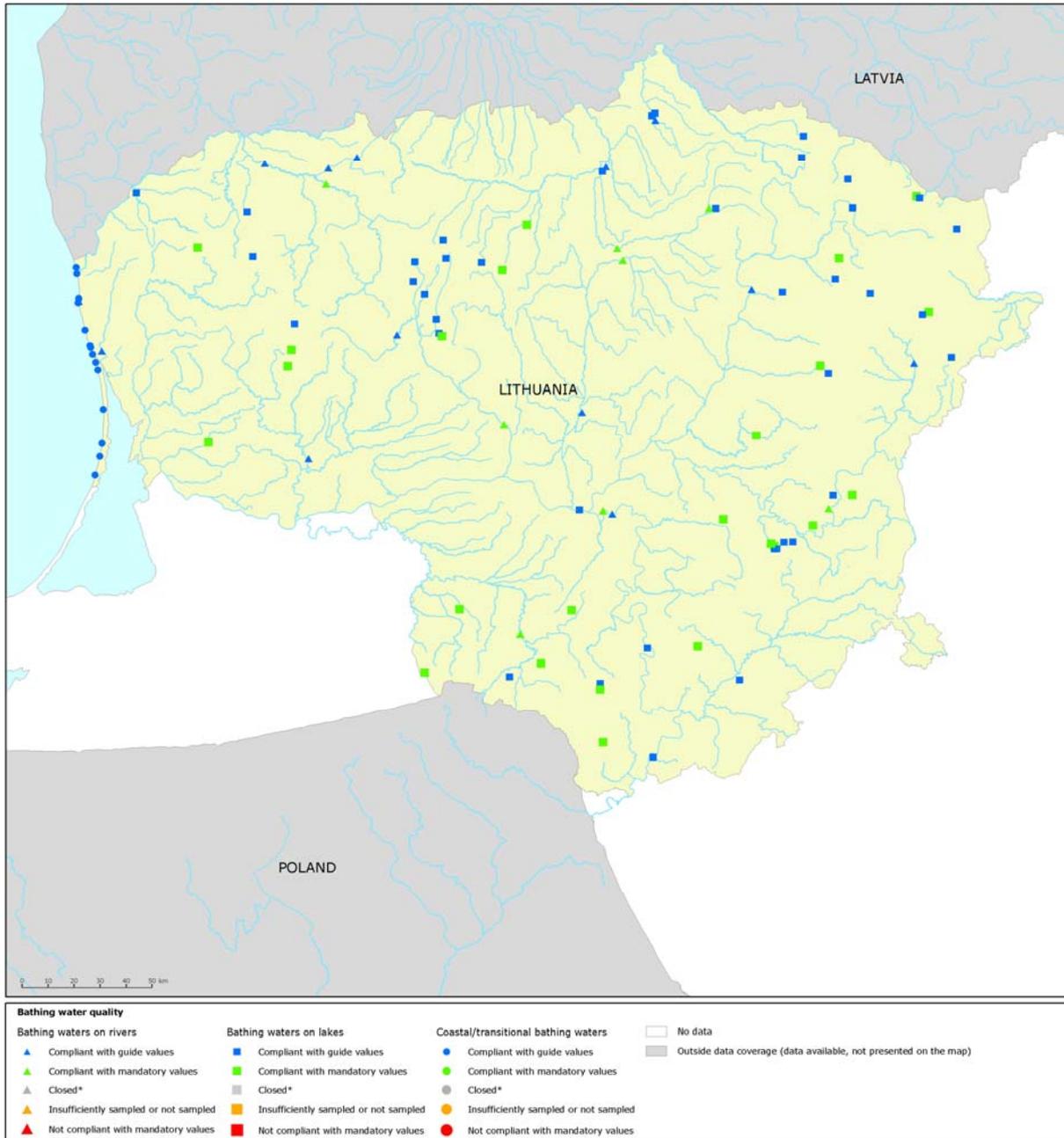
More information on bathing water quality in the European Member States, including the reports for 27 Member States and the EU summary report, can be found on the bathing water quality website (http://ec.europa.eu/environment/water/water-bathing/index_en.html).

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, while Luxembourg already started 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 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 2008 bathing season in Lithuania



Note: * banned (temporarily closed) or closed throughout the season
 More data on bathing water quality on: <http://www.eea.europa.eu/themes/water/mapviewers/bathing>
Source: National boundaries: GISCO
 Large rivers and lakes: ESA, WFD Article 3
 Bathing waters data and coordinates: Lithuanian authorities