

Bathing water results 2008 – Estonia

1. Introduction

This report gives a general overview of bathing water quality in Estonia during the 2008 bathing season. Estonia 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 three months, from 1 June to 31 August 2008

A total of 56 bathing waters were monitored in Estonia during the 2008 bathing season, of which 28 were coastal bathing waters and 28 freshwater bathing waters (5 on rivers; 23 on lakes).

With 56 bathing waters Estonia accounts for about 0.3% 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. Both the number of coastal bathing waters and the number of freshwater bathing waters from 2005 to 2007 remained the same (34 coastal bathing waters; 38 freshwater bathing waters). It increased since the start of the reporting from 8 coastal and 15 freshwater bathing waters in 2004. In 2008, 16 bathing waters were de-listed: 6 of the coastal and 10 of the freshwater bathing waters.

3. Results of bathing water quality

The results of the bathing water quality in Estonia 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 Estonia for all bathing waters.

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

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

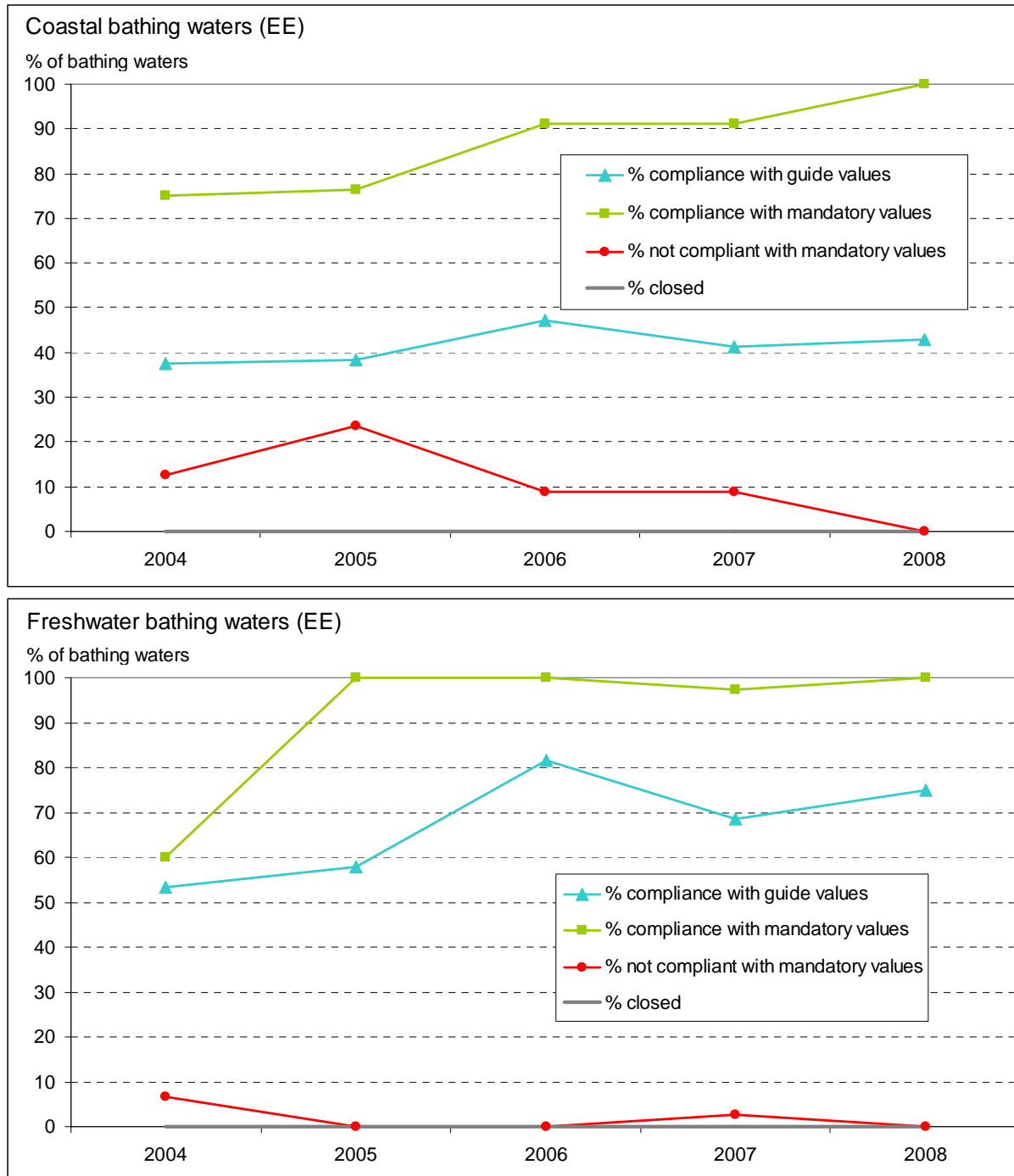


Table 1: Results of bathing water quality in Estonia from 2004 to 2008 as absolute numbers

	Year	EE				
		Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/closed throughout the season
Coastal bathing waters	2004	8	3	6	1	0
	2005	34	13	26	8	0
	2006	34	16	31	3	0
	2007	34	14	31	3	0
	2008	28	12	28	0	0
Freshwater bathing waters	2004	15	8	9	1	0
	2005	38	22	38	0	0
	2006	38	31	38	0	0
	2007	38	26	37	1	0
	2008	28	21	28	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 Estonia from 2004 to 2008 as percentages

	Year	EE				
		Total number of bathing waters	% compliance with guide values	% compliance with mandatory values	% not compliant	% banned/closed throughout the season
Coastal bathing waters	2004	8	37.5	75.0	12.5	0.0
	2005	34	38.2	76.5	23.5	0.0
	2006	34	47.1	91.2	8.8	0.0
	2007	34	41.2	91.2	8.8	0.0
	2008	28	42.9	100.0	0.0	0.0
Freshwater bathing waters	2004	15	53.3	60.0	6.7	0.0
	2005	38	57.9	100.0	0.0	0.0
	2006	38	81.6	100.0	0.0	0.0
	2007	38	68.4	97.4	2.6	0.0
	2008	28	75.0	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 Estonia in 2008

		EE				
		Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/closed throughout the season
Bathing Waters	2008	56	33	56	0	0

4. Development of bathing water quality

Coastal bathing waters

In Estonia, 100% of the coastal bathing waters (28) met the mandatory water quality in 2008. This is an increase compared to the previous year (+ 8.8%). The rate of compliance with the guide values was 42.9% of the bathing waters (12) after a slight increase from 2007 to 2008 by 1.7%. The percentage of the bathing waters that met the mandatory value for Escherichia coli is much larger as for the more stringent guide values (57.1%). Since the start of reporting in 2004, no coastal bathing water had to be closed during the season.

From 2004 on, there is an improvement of the percentage of bathing waters that comply with mandatory values. In 2008, all bathing waters were in compliance for the first time. The percentages of bathing waters that complied with the more stringent guide values fluctuated around 40%.

Freshwater bathing waters

100% of the freshwater bathing waters met the mandatory water quality in 2008, the same as for the coastal bathing waters. This is an increase compared to the previous year (+ 2.6%). The rate of compliance with the guide values increased by 6.6%, reaching 75% of the bathing waters (21). This is higher increase as for the coastal bathing waters. Consequently, the difference between the percentage of bathing waters that met the mandatory values and the more stringent guide values became lower (25%). Since 2004, no freshwater bathing had to be closed during the season.

After 2004, there was an improvement in the quality of the freshwater bathing waters, both in terms of compliance with the mandatory values as with the guide values. 100% compliance rate with the mandatory values was reached in the 2005, 2006 and 2008 season. The rate of compliance with the guide values was the highest in 2006 (75%).

5. General information as provided by the Estonian authorities

Information for the public

During bathing season information about quality of bathing water is available at the bigger beaches, on the web site of Health Protection Inspectorate: <http://www.tervisekaitse.ee/> as well as it is posted to counties and central newspapers and occasionally in TV or radio.

Water quality

Bathing water quality is responsibility of two Ministries: the Ministry of the Environment and the Ministry of Social Affairs. Surveillance of quality of bathing water is under the responsibility of the Ministry of Social Affairs and its institution Health Protection Inspectorate.

Quality of bathing waters complied with the requirements in all places in this bathing season. During the last decade, significant changes have occurred in wastewater treatment. Based on large volume investments, the level of treatment has increased by today and a significant decrease is observed in the pollution load. Since 1990, lot of new wastewater treatment plants have been built and old ones renovated. But there are still settlements which need new sewerage or wastewater treatment plants. So there are several development and investment plans for water networks and sewerage. More information is available at the web site of Ministry of Environment: <http://www.envir.ee/67388>.

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

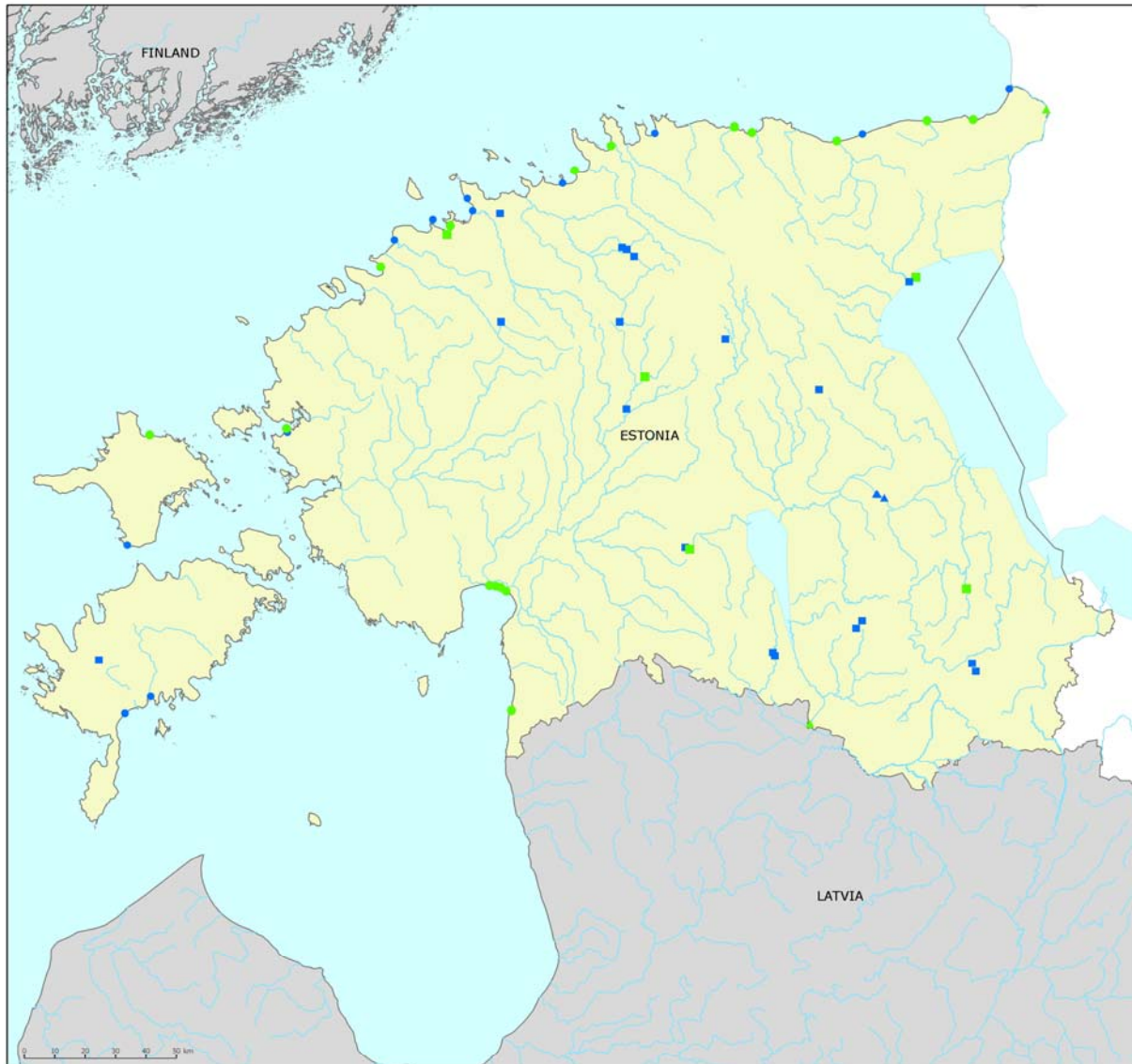
More information on bathing water quality in the European Member States, including the reports for 27 Member States and the EU summary report, can be found on the bathing water quality website (http://ec.europa.eu/environment/water/water-bathing/index_en.html).

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 Estonia



Bathing water quality			No data
Bathing waters on rivers	Bathing waters on lakes	Coastal/transitional bathing waters	☐ No data
▲ Compliant with guide values	■ Compliant with guide values	● Compliant with guide values	☐ Outside data coverage (data available, not presented on the map)
▲ Compliant with mandatory values	■ Compliant with mandatory values	● Compliant with mandatory values	
▲ Closed*	■ Closed*	● Closed*	
▲ Insufficiently sampled or not sampled	■ Insufficiently sampled or not sampled	● Insufficiently sampled or not sampled	
▲ Not compliant with mandatory values	■ Not compliant with mandatory values	● Not compliant with mandatory values	

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: Estonian authorities