

Bathing water results 2008 – Czech Republic

1. Introduction

This report gives a general overview of bathing water quality in the Czech Republic during the 2008 bathing season.

The Czech Republic reported 13 parameters under the Directive 76/160/EEC (1 Total coliforms, 2 Faecal coliforms, 3 Faecal streptococci, 4 Salmonella, 5 Enteroviruses, 6 pH, 7 Colour, 8 Mineral oils, 9 Surface-active substances reacting with methylene blue, 10 Phenols (phenol indices), 11 Transparency, 12 Dissolved oxygen, 13 Tarry residues and floating materials).

The parameters to be taken into account for assessment according to the assessment rules of the Directive 76/160/EEC are microbiological (1 Total coliforms, 2 Faecal coliforms) and physico-chemical (8 Mineral oils, 9 Surface-active substances reacting with methylene blue, 10 Phenols (phenol indices)).

The bathing waters are classified in the following categories:

- Compliant with mandatory values of the Directive for the 5 parameters (class CI)
- Compliant with mandatory and more stringent guide values of the Directive for the 5 parameters (class CG)
- Not compliant with mandatory values of the Directive for the 5 parameters (class NC)
- Banned (temporarily closed) or closed throughout the season (class B)

2. Length of bathing season and number of bathing waters

Most bathing waters opened in May or June and closed in August or September 2008.

A total of 188 bathing waters were reported in the Czech Republic during the 2008 bathing season. All of these bathing waters are freshwater bathing waters on lakes. Two bathing waters were not monitored. The frequency of sampling was reduced for seven freshwater bathing waters.

With 188 bathing waters the Czech Republic accounts for about 0.9% 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 is presented in Table 1. The number of freshwater bathing waters in 2008 is the same as in two previous years (188). It has increased since the start of the reporting from 176 freshwater bathing waters in 2004. In 2008, seven new bathing waters were added to the list compared to the previous year and the same number of bathing waters was de-listed.

3. Results of bathing water quality

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

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 (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 freshwater bathing waters.

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

Figure 1: Results of bathing water quality in the Czech Republic from 2004 to 2008

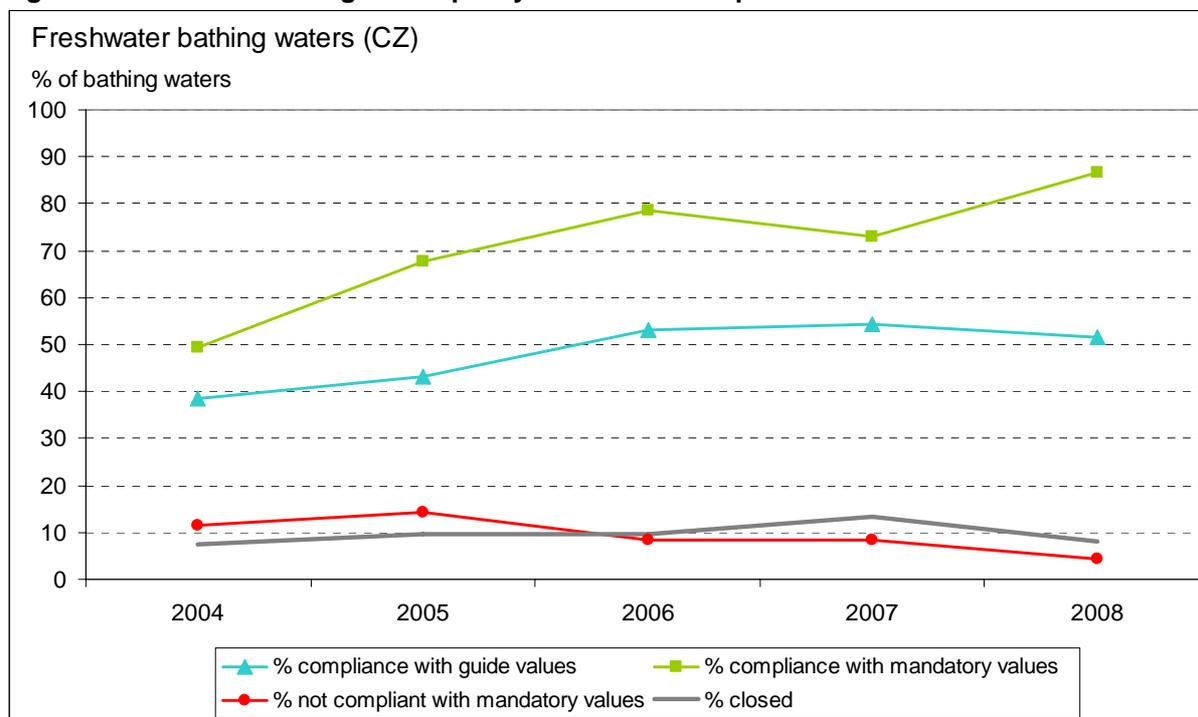


Table 1: Results of bathing water quality in the Czech Republic from 2004 to 2008 as absolute numbers

		CZ				
		Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/closed throughout the season
Fresh water bathing waters	2004	176	68	87	20	13
	2005	176	76	119	25	17
	2006	188	100	148	16	18
	2007	188	102	137	16	25
	2008	188	97	163	8	15

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 the Czech Republic from 2004 to 2008 as percentages

		CZ				
		Total number of bathing waters	% compliance with guide values	% compliance with mandatory values	% not compliant	% banned/closed throughout the season
Fresh water bathing waters	2004	176	38.6	49.4	11.4	7.4
	2005	176	43.2	67.6	14.2	9.7
	2006	188	53.2	78.7	8.5	9.6
	2007	188	54.3	72.9	8.5	13.3
	2008	188	51.6	86.7	4.3	8.0

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%.

4. Development of bathing water quality

In the Czech Republic, 86.7% of the freshwater bathing waters (163) met the mandatory values in 2008. This is a significant increase compared to the previous year (+ 13.8%). The rate of compliance with the guide values, however, decreased slightly by 2.7 %, reaching 51.6% (97 bathing waters). The percentage of bathing waters that met the mandatory values is quite larger as in case of more stringent guide values (+ 35.1%). The percentage of non-compliant bathing waters was 4.3% (eight bathing waters) after a decreased by 4.3%. The number of closed bathing waters was 15 (8%). The majority of them (13) were temporarily closed (banned) for several weeks or a month due to mass proliferation of cyanobacteria. Only two of them were closed for the entire season.

At the beginning of the monitoring in 2004, the number of freshwater bathing waters that complied with the mandatory values was rather low due to the high number of insufficiently sampled bathing waters. Since 2004, the compliance with both the mandatory values and the more stringent guide values increased. The highest compliance rate with the guide values was reached in 2007. The percentage of closed bathing waters varied from 7.4% in 2004 to 13.3% in 2007.

5. General information as provided by the Czech Republic authorities

Communication to the public

Central web pages (<http://www.szu.cz/chzp/koupani/>, <http://www.mzcr.cz/>; so far only in Czech) were created to keep the public informed about water quality, offering general information focused mostly on potential health risks of bathing in natural water bodies, as well as recommendations on how to limit those risks. The pages also contain links to web pages of the relevant regional Public Health Authorities where information about the current quality of water on particular sites is published. Moreover, current information about water quality of bathing places is displayed at the map server of the Portal of the Public Administration (<http://geoportal.cenia.cz>).

A set of symbols was designed for simple and clear communication with the public. Information concerning water quality is also published in press (mostly regional) and occasionally in other media (radio and TV stations), and in the summer bathing season, were sent in regular week intervals by the Ministry of Health to the Czech Press Agency a summary of actual water quality report for every bathing place.

Water quality

Water quality problems were most frequently related to mass proliferation of cyanobacteria. The WHO recommendation was adopted for the limit value of the "cyanobacteria" indicator, i.e. a three-level water quality assessment with the ban imposed if a visual inspection reveals the presence of water bloom. In the 2008 bathing season were 15 bathing bans (mostly due to cyanobacteria).

Corrective measures

Unsatisfactory water quality was identified on certain bathing sites and during certain part of the bathing season. This was mostly due to cyanobacteria. Measures to reduce eutrophication of waters in the Czech Republic, including bathing waters, are adopted under the programs implementing the Directive 91/271/EEC concerning urban waste-water treatment and the Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources. On the basis of the previous bathing seasons, fifteen bathing sites have been included into the operational monitoring programs. Corrective measures will be adopted, in the frame of management plan of the concerned river basin, after collecting of the data and their evaluation.

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

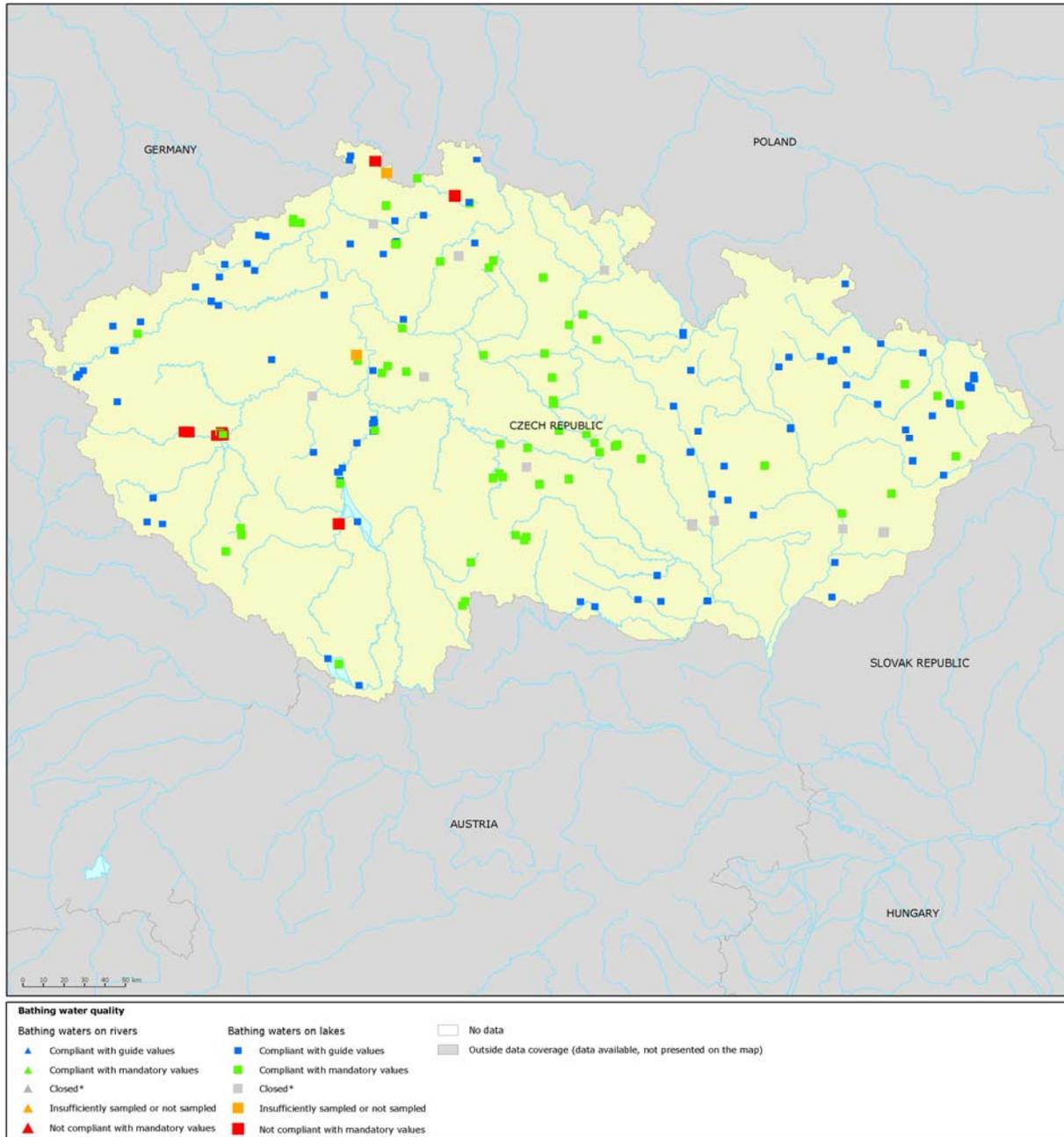
More information on bathing water quality in the European Member States, including the reports for 27 Member States and the EU summary report, can be found on the bathing water quality website (http://ec.europa.eu/environment/water/water-bathing/index_en.html).

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 the Czech Republic



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: Czech authorities