

Bathing water results 2011 – The Czech Republic

1. Reporting and assessment

This report gives a general overview of bathing water quality in the Czech Republic during the 2011 bathing season.

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

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 five parameters (class CI);
- Compliant with mandatory and more stringent guide values of the Directive for the five parameters (class CG);
- Not compliant with mandatory values of the Directive for the five parameters (class NC);
- Banned or closed (temporarily or throughout the season) (class B);
- Insufficiently sampled (class NF);
- Not sampled (class NS).

2. Length of bathing season and number of bathing waters

The bathing season opened between 3 May and 26 July 2011 and closed between 28 June and 19 September 2011.

A total of 183 inland bathing waters (0 on rivers; 183 on lakes) were reported in the Czech Republic during the 2011 bathing season. There are no coastal bathing waters in the Czech Republic. Three bathing waters were reported as de-listed compared to the previous year.

With 183 reported bathing waters the Czech Republic accounts for about 0.9 % of the reported bathing waters of the European Union.

3. Bathing water quality

The results of the bathing water quality in the Czech Republic for the period 2004-2010 as reported in the past reporting years and for the bathing season of 2011 are presented in Figure 1. 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/ Bathing Water/ 2005-2011 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 the 2008, 2009 and 2010 bathing seasons).

The graph shows, for inland 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).

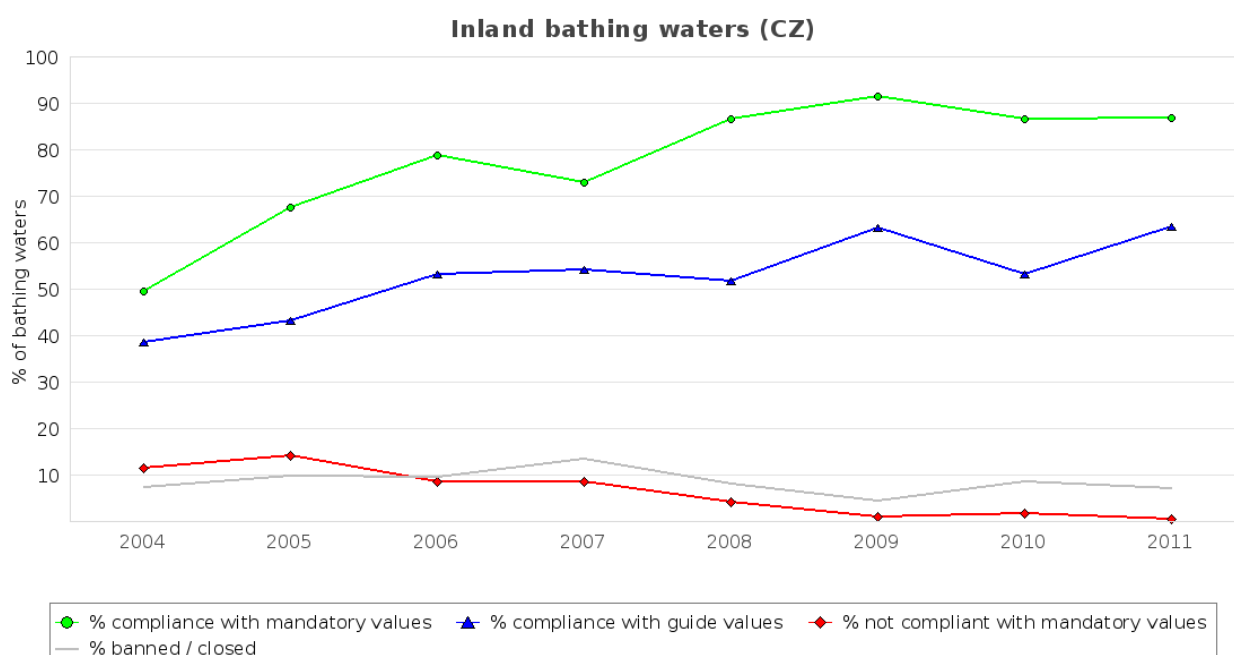
Table 1 shows the same information in absolute numbers and in percentages for inland and all bathing waters from 2008 on. The numbers and percentages of insufficiently sampled or not sampled bathing waters are also presented.

A map given in Appendix 1 shows the location and quality of the bathing waters.

In the Czech Republic, 86.9 % of the inland bathing waters met the mandatory values in 2011. This is an increase of 0.3 % compared to the previous year. The rate of compliance with the guide values increased from 53.2 % to 63.4 %. One bathing water (0.5 %) was non-compliant with the mandatory values compared to three in 2010, which is a decrease of 1.1 %. A total of 13 bathing waters (7.1 %) had to be closed during the bathing season compared to 16 (8.6 %) in 2010. A total of 10 bathing waters (5.5 %) were insufficiently sampled or not sampled compared to six (3.2 %) in 2010.

For comparison since the start of the reporting please see Figure 1.

Figure 1: Results of bathing water quality in the Czech Republic from 2004 to 2011



Note: Data until 2008 is available in the previous reports at http://ec.europa.eu/environment/water/water-bathing/index_en.html; Water/Bathing Water/ 2005-2011 reports.

Table 1: Results of bathing water quality in the Czech Republic from 2008 to 2011

CZ												
		Total number of bathing waters	Compliance with guide and mandatory values*		Compliance with mandatory values		Not compliant		Banned/closed		Insufficiently sampled or not sampled	
			number	%	number	%	number	%	number	%	number	%
Coastal bathing waters	2008											
	2009											
	2010											
	2011											
Inland bathing waters	2008	188	97	51.6	163	86.7	8	4.3	15	8.0	2	1.1
	2009	187	118	63.1	171	91.4	2	1.1	8	4.3	6	3.2
	2010	186	99	53.2	161	86.6	3	1.6	16	8.6	6	3.2
	2011	183	116	63.4	159	86.9	1	0.5	13	7.1	10	5.5
All bathing waters	2008	188	97	51.6	163	86.7	8	4.3	15	8.0	2	1.1
	2009	187	118	63.1	171	91.4	2	1.1	8	4.3	6	3.2
	2010	186	99	53.2	161	86.6	3	1.6	16	8.6	6	3.2
	2011	183	116	63.4	159	86.9	1	0.5	13	7.1	10	5.5

*Bathing waters which were compliant with the guide values were also compliant with the mandatory values.

4. Important information as provided by the Czech authorities

The Czech authorities have reported for some bathing waters additional information (Table 2). Additional information is also provided in a separate document (http://cdr.eionet.europa.eu/cz/eu/bathing/envtxtqg/report_CZ_2011.doc).

A list of bathing waters including reasons for changes has been already reported in accordance with the Directive 2006/7/EC (http://cdr.eionet.europa.eu/cz/eu/bathing/envta2rug/CZ_2011.xls).

Table 2: Information on management measures for the 2011 season as reported by the Czech authorities

Unique Identification Code of Bathing Water	Commune	Name of Bathing Water	Type of Water	Management Measures: temporary closures of bathing waters, other works
CZ0511544337510155	HAMR NA JEZEŘE	HAMERSKÝ RYBNÍK	lake	from 20110616 to 20110825, mass occurrence of Cyanobacteria
CZ0314549681310802	ORLÍK NAD VLTAVOU	VN ORLÍK - VEŘEJNÉ TÁBOŘIŠTĚ VOJNÍKOV	lake	from 20110616 to 20110829, faecal pollution
CZ0412555185410601	HROZNĚTÍN	VELKÝ RYBNÍK	lake	from 20110714 to 20110829, mass occurrence of Cyanobacteria
CZ0322542083320501	HNAČOV	RYBNÍK HNAČOV	lake	from 20110729 to 20110912, mass occurrence of Cyanobacteria
CZ0611568929610202	KRÁSNÁ HORA	RYBNÍK ŘEDKOVEC	lake	from 20110825 to 20110912, mass occurrence of Cyanobacteria
CZ0314549681310801	ORLÍK NAD VLTAVOU	VN ORLÍK - VEŘEJNÉ TÁBOŘIŠTĚ PODOLSKO	lake	from 20110826 to 20110829, mass occurrence of Cyanobacteria
CZ0611568759610401	CHOTĚBOŘ	BŘEVNICKÁ NÁDRŽ	lake	from 20110828 to 20110912, mass occurrence of Cyanobacteria
CZ0523573990520901	ČESKÁ SKALICE	VN ROZKOŠ - U AUTOKEMPINKU	lake	from 20110901 to 20110905, mass occurrence of Cyanobacteria
CZ0611573558610201	BOŇKOV	RYBNÍK KACHLIČKA	lake	from 20110908 to 20110912, mass occurrence of Cyanobacteria
CZ010C547042104052	PRAHA-KUNRATICE	KOUPALIŠTĚ VE VOLNÉ PŘÍRODĚ ŠEBERÁK	lake	from 20110626 to 20110628, mass occurrence of Cyanobacteria
CZ0531572225530401	SEČ	VN SEČ SEMTÍN	lake	from 20110727 to 20110912, mass occurrence of Cyanobacteria
CZ0531572225530402	SEČ	VN SEČ HOJEŠÍN	lake	from 20110727 to 20110912, mass occurrence of Cyanobacteria

Unique Identification Code of Bathing Water	Commune	Name of Bathing Water	Type of Water	Management Measures: temporary closures of bathing waters, other works
CZ0531572225530403	SEČ	VN SEČ ÚSTUPKY	lake	from 20110727 to 20110912, mass occurrence of Cyanobacteria
CZ0724549401720401	POZLOVICE	VN LUHAČOVICE - U HRÁZE	lake	reservoir was empty due to sediment removal
CZ0724549401720402	POZLOVICE	VN LUHAČOVICE - KEMP	lake	reservoir was empty due to sediment removal
CZ0421562882421551	VARNSDORF	PŘÍRODNÍ KOUPALIŠTĚ VARNSDORF	lake	wasn't monitored - reconstruction of bathing water
CZ010F547387110051	PRAHA 15	KOUPALIŠTĚ VE VOLNÉ PŘÍRODĚ HOSTIVAŘ	lake	wasn't monitored - reservoir was empty due to sediment removal
CZ0713589896710801	PLUMLOV	VN PLUMLOV	lake	reservoir was empty due to sediment removal
CZ0423565318421151	MŠENÉ-LÁZNĚ	KOUPALIŠTĚ MŠENÉ LÁZNĚ	lake	wasn't monitored - reconstruction of bathing water
CZ0511561380510156	ČESKÁ LÍPA	KOUPALIŠTĚ DUBICE	lake	wasn't monitored - reconstruction of bathing water
CZ0209538094210352	BRANDÝS NAD LABEM-STARÁ BOLESLAV	PROBOŠŤSKÁ JEZERA	lake	wasn't monitored - the bathing water was closed
CZ0411554481410203	CHEB	VN SKALKA - U ATC PODHOŘÍ	lake	wasn't monitored - the dam was drain (reconstruction of bathing water)

5. More information on bathing water quality in Europe

Of the more than 21 000 bathing areas monitored throughout the European Union in 2011, two thirds were in coastal waters and the rest in rivers and lakes. The largest numbers of coastal bathing waters can be found in Italy, Greece, France and Spain, while Germany and France have the highest numbers of inland bathing waters.

During recent years, including the 2011 bathing season, majority of Member States have adjusted their monitoring programmes to meet the requirements of the new bathing water directive (2006/7/EC). Luxembourg was the first country to report under this Directive in 2007. Cyprus, Denmark, Estonia, Finland, Germany, Hungary, Latvia, Lithuania, Slovakia, Spain and Sweden started to report under the new directive in 2008. Malta and the Netherlands started to report in 2009. Austria, Belgium - Walloon Region, France, Greece, Italy, Portugal and Slovenia reported under the new directive for the first time in 2010, while Belgium - Flemish Region, Bulgaria, Ireland and Poland reported under this Directive for the first time in 2011. Historical data of two microbiological parameters, *Escherichia coli* and intestinal enterococci were sent by Sweden (2005-2007), Luxembourg (2006), Malta (2006-2008), Belgium - Walloon Region (2007-2009), Belgium - Flemish Region (2008-2010), Greece (2007-2009), Hungary (2007) and Portugal (2007-2009).

Three non-EU countries, Croatia, Montenegro and Switzerland have reported monitoring results under the new directive. Croatia and Switzerland started to report in 2009, while Montenegro reported for the first time in 2010. Switzerland sent data on *Escherichia coli* for all bathing waters but only for some data on intestinal enterococci.

For the 2011 season, bathing water quality has been assessed under the new bathing water directive in 16 European countries. This is 13 more than for 2010 bathing season. Only three countries - the Czech Republic, Romania and the United Kingdom - are still assessed under the old bathing water directive. Eleven countries are assessed under the transition period rules.

Overall in 2011, 92.1 % of bathing waters in the EU met the minimum water quality standards set by the bathing water directives. Bathing water quality increased at 0.6 % of sites in 2011 compared to 2010. The proportion of bathing waters with excellent quality (or complying with the more stringent guide values) increased by 3.5 percentage points compared to 2010, reaching 77.1 %. The share of non-compliant bathing waters was 1.8 %, which was a 0.1 percentage point increase from 2010. In 2011, 207 bathing waters were banned or closed (1 %), which was 57 more than in the 2010 bathing season.

More information on bathing water quality in the European Member States, including the EU summary report, the reports for 27 Member States, Croatia, Montenegro 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 Institute for Water of the Republic of Slovenia (IWRS), a partner in the EEA European Topic Centre on Inland, Coastal and Marine Waters (ETC/ICM) has produced the reports for the bathing seasons from the 2008 bathing season on. Countries have collaborated in the assessment of bathing water quality and supplied additional information when needed.

Interactive information on bathing water quality

The bathing water section of the Water Information System for Europe (WISE), which is accessible at the EEA bathing water website, allows users to view the bathing water quality at more than 22 000 coastal beaches and inland sites across Europe. Users can check bathing water quality on an interactive map or can download data for a selected country or region and make comparisons with previous years.

The WISE map viewer (<http://www.eea.europa.eu/themes/water/interactive/bathing>) is an online map viewer for visualising European spatial water data. It includes a lot of interactive layers, allowing water themes to be visualised at different scales. Broad resolutions display the aggregated data by Member State. At finer resolutions the locations of monitoring stations are displayed.

The WISE bathing water quality data viewer (<http://www.eea.europa.eu/themes/water/status-and-monitoring/bathing-water-data-viewer>) combines text and graphical visualisation, providing a quick check on locations and statistics on the quality of coastal and inland bathing waters. It also documents how bathing waters have changed throughout Europe in recent years and provides a full summary of Europe's bathing water quality. Users can search information at three spatial levels - country, region and province - and observe specific bathing water locations on Google Earth, Google maps or Bing maps.

The Eye on Earth - Water Watch application (<http://www.eea.europa.eu/data-and-maps/explore-interactive-maps/eye-on-earth>) allows users to zoom in on a section of the coast, riverbank or lake, both in street map or, where available, bird's eye viewing formats. A 'traffic-light' indicator (red, amber, green) of bathing water quality, based on the official bathing water data, is put alongside the ratings of people who have visited the bathing site, including any comments added by users. For historical data Water Watch uses a simplified index of bathing water quality data. The Czech Republic, Croatia, Denmark, Estonia, Finland (one municipality), Greece, Hungary, Lithuania, Luxembourg, Malta, Slovakia, Slovenia, England and Wales were also sending near real time information on bathing water quality to the Eye on Earth application. The bathing water quality for Austria, Belgium, Bulgaria, France, Germany, Iceland, Italy, Ireland, the Netherlands, Portugal, Sweden, Scotland and Northern Ireland was also presented on the Eye on Earth - Water Watch.

National and local information on bathing water quality

In order to make information to the public more effective, all EU countries have national or local web portals with detailed information for each bathing water. Websites generally include a map search function and public access to the monitoring results both in real time and for previous seasons.

Information on EU bathing water legislation

EU Member States will have to comply with the stricter and more ambitious requirements laid out in Directive 2006/7/EC by 2015 at the latest. The new legislation requires more effective monitoring and management of bathing waters, greater public participation and improved information dissemination. By March 2011 Member States have to have established bathing water profiles. More on the new legislation can be found on the European Commission's websites and on <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:064:0037:0051:EN:PDF>.

Appendix 1

Map 1: Bathing waters reported during the 2011 bathing season in the Czech Republic

