

Bathing water results 2008 – Italy

1. Introduction

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

Italy reported 12 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).

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

For all bathing waters the bathing season lasted 5 months, from 1 May to 30 September 2008.

A total of 5,684 bathing waters were reported in Italy during the 2008 bathing season, of which 4,917 were coastal bathing waters and 767 freshwater bathing waters (55 on rivers; 712 on lakes). 10 coastal bathing waters and six freshwater bathing waters were not monitored. The frequency of sampling was reduced for 1,486 coastal and 21 freshwater bathing waters.

With 5,684 bathing waters Italy accounts for about 26.5% 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 is presented in Table 1. The number of coastal bathing waters increased since the start of the reporting from 3,791 in 1990 to 4,929 in 2007. There were 12 less coastal bathing waters in 2008 than in the previous year: one bathing water was added to the list and 13 were de-listed. Similarly, the number of freshwater bathing waters increased slightly from 614 in 1990 to 777 in 2007. There were 10 less freshwater bathing waters in 2008 than in the previous year: one bathing water was added to the list and 11 were de-listed.

3. Results of bathing water quality

The results of the bathing water quality in Italy for the period 1990-2007 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 Italy for all bathing waters.

Map 1 shows the locations of the reported bathing waters in Italy. The location of the bathing waters is based on the geographic coordinates reported by the Italian authorities.

Figure 1: Results of bathing water quality in Italy from 1990 to 2008

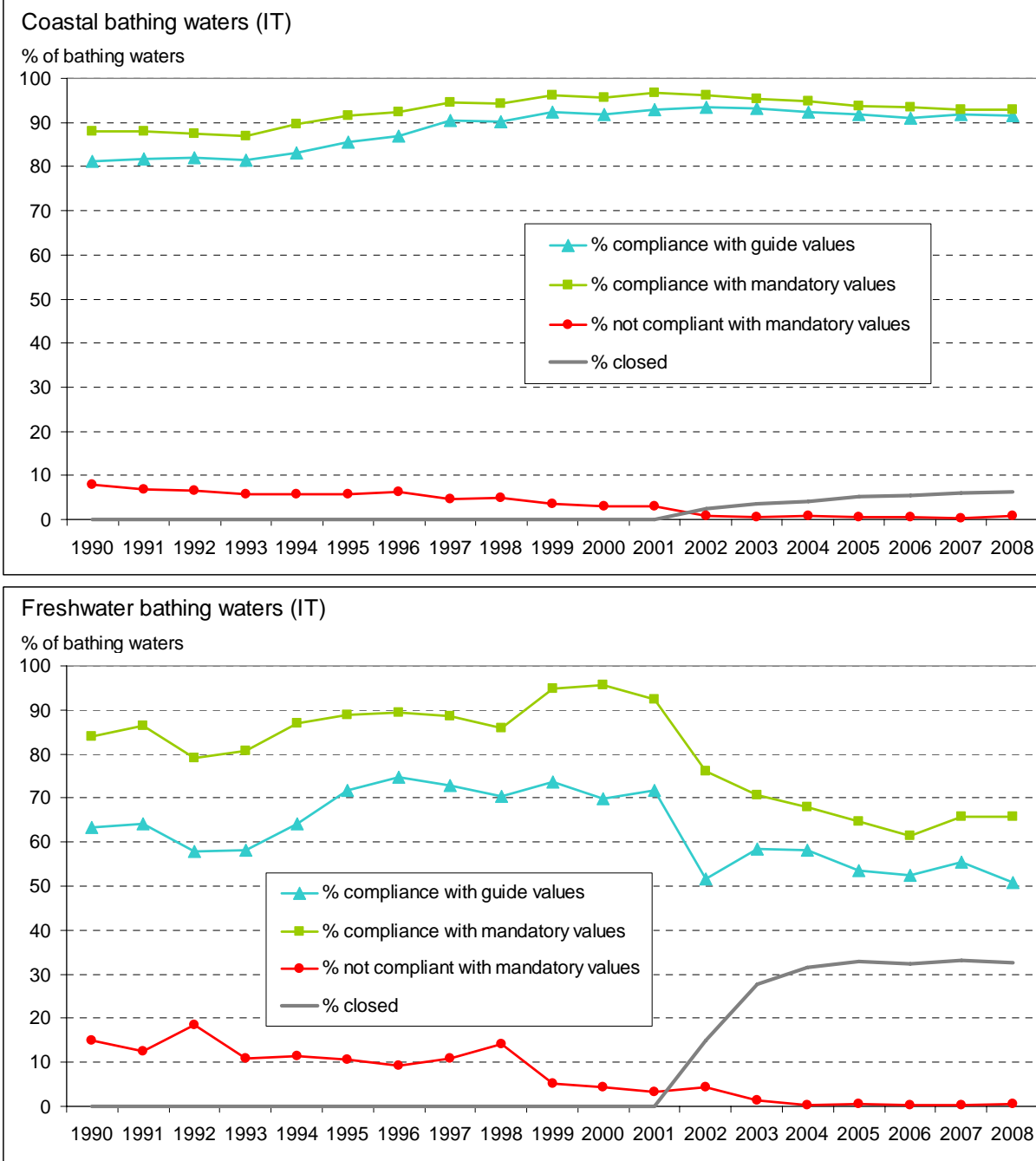


Table 1: Results of bathing water quality in Italy from 1990 to 2008 as absolute numbers

		IT				
		Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/closed throughout the season
Coastal bathing water	1990	3791	3083	3340	300	0
	1991	3823	3128	3367	257	0
	1992	4034	3311	3533	265	0
	1993	4286	3493	3729	246	0
	1994	4541	3775	4073	263	0
	1995	4592	3924	4200	257	0
	1996	4688	4077	4333	297	0
	1997	4836	4369	4576	225	0
	1998	4868	4396	4593	240	0
	1999	4811	4445	4623	169	0
	2000	4819	4427	4607	138	0
	2001	4824	4481	4662	145	0
	2002	4850	4534	4663	39	125
	2003	4853	4527	4630	30	173
	2004	4884	4510	4627	35	196
	2005	4918	4521	4616	24	256
	2006	4929	4491	4605	22	262
	2007	4929	4521	4580	18	300
2008	4917	4496	4563	42	302	
Fresh water bathing water	1990	614	388	515	92	0
	1991	614	394	530	76	0
	1992	621	360	491	114	0
	1993	667	387	538	73	0
	1994	681	437	592	77	0
	1995	695	498	618	74	0
	1996	697	520	624	65	0
	1997	740	538	655	81	0
	1998	737	518	632	104	0
	1999	724	534	686	38	0
	2000	711	497	681	30	0
	2001	726	521	671	24	0
	2002	762	393	580	34	113
	2003	775	452	547	10	215
	2004	779	454	529	2	245
	2005	766	411	496	5	252
	2006	776	408	477	3	251
	2007	777	430	510	2	258
2008	767	390	505	5	251	

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 Italy from 1990 to 2008 as percentages

		IT				
		Total number of bathing waters	% compliance with guide values	% compliance with mandatory values	% not compliant	% banned/closed throughout the season
Coastal bathing water	1990	3791	81.3	88.1	7.9	0.0
	1991	3823	81.8	88.1	6.7	0.0
	1992	4034	82.1	87.6	6.6	0.0
	1993	4286	81.5	87.0	5.7	0.0
	1994	4541	83.1	89.7	5.8	0.0
	1995	4592	85.5	91.5	5.6	0.0
	1996	4688	87.0	92.4	6.3	0.0
	1997	4836	90.3	94.6	4.7	0.0
	1998	4868	90.3	94.4	4.9	0.0
	1999	4811	92.4	96.1	3.5	0.0
	2000	4819	91.9	95.6	2.9	0.0
	2001	4824	92.9	96.6	3.0	0.0
	2002	4850	93.5	96.1	0.8	2.6
	2003	4853	93.3	95.4	0.6	3.6
	2004	4884	92.3	94.7	0.7	4.0
	2005	4918	91.9	93.9	0.5	5.2
	2006	4929	91.1	93.4	0.4	5.3
	2007	4929	91.7	92.9	0.4	6.1
2008	4917	91.4	92.8	0.9	6.1	
Fresh water bathing water	1990	614	63.2	83.9	15.0	0.0
	1991	614	64.2	86.3	12.4	0.0
	1992	621	58.0	79.1	18.4	0.0
	1993	667	58.0	80.7	10.9	0.0
	1994	681	64.2	86.9	11.3	0.0
	1995	695	71.7	88.9	10.6	0.0
	1996	697	74.6	89.5	9.3	0.0
	1997	740	72.7	88.5	10.9	0.0
	1998	737	70.3	85.8	14.1	0.0
	1999	724	73.8	94.8	5.2	0.0
	2000	711	69.9	95.8	4.2	0.0
	2001	726	71.8	92.4	3.3	0.0
	2002	762	51.6	76.1	4.5	14.8
	2003	775	58.3	70.6	1.3	27.7
	2004	779	58.3	67.9	0.3	31.5
	2005	766	53.7	64.8	0.7	32.9
	2006	776	52.6	61.5	0.4	32.3
	2007	777	55.3	65.6	0.3	33.2
2008	767	50.8	65.8	0.7	32.7	

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 Italy in 2008

		IT				
		Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/closed throughout the season
Bathing Waters	2008	5684	4886	5068	47	553

Note: Bathing waters which were not sampled according to the Bathing Water Directive were not included in this table. Therefore the sum of the different categories is not equal to the total number of bathing waters.

4. Development of bathing water quality

Coastal bathing waters

In Italy, 92.8% of the coastal bathing waters (4563) met the mandatory values in 2008. 91.4% of the bathing waters (4496) met the guide values. This is approximately the same as in the previous year (- 0.1% for the mandatory values and - 0.3% for the guide values). The compliance with the guide values almost equals to the compliance with the mandatory values. The difference is 1.4% of bathing waters. The percentage of non-compliant bathing waters increased from 0.4% (18) to 0.9% (42 bathing waters). 6.1% coastal bathing waters (302) had to be closed during the season, the same as in the previous year.

For the coastal bathing waters in Italy, both the compliance rate with the mandatory values and guide values increased from 1990 to 1999, and then stayed relatively stable above 90%. The last four years, the rates stayed approximately the same. Since 2002, the number of bathing waters being closed during the season increased from 125 (2.6%) to 302 (6.1%) in 2008.

Freshwater bathing waters

65.8% of the freshwater bathing waters (505) met the mandatory values in 2008. This is approximately the same as in the previous year (+ 0.2%). The compliance with the guide values decreased by 4.5%, reaching 50.8% of the bathing waters (390). 15% less bathing waters met the guide values compared to the mandatory values. Five bathing waters (0.7%) were not compliant with the mandatory values compared to two bathing waters (0.3%) in the previous year. 251 freshwater bathing waters (32.7%) had to be closed during the season, which is a decrease of 0.5% compared to the previous year.

Overall, the compliance rate of the freshwater bathing waters with the mandatory values and guide values decreased since 1990. The rate of compliance with the mandatory values was the highest (more than 90%) from 1999 to 2001. More than 70% of the bathing waters met the guide values from 1995 to 2001. Since 2002, the compliance rate decreased due to the large percentage of closed bathing waters during the season. Similarly as for the coastal bathing waters, the number of closed freshwater bathing waters increased. There were 113 closed bathing waters (14.8%) in 2002 compared to 251 (32.7%) in 2008. The compliance rate of freshwater bathing waters in Italy can still be improved by reducing the number of prohibited bathing waters.

5. General information as provided by the Italian authorities

Information for the public

The Ministry of Health issues an annual report on bathing water quality, in hard copy and in electronic form, to all public administrations, relevant private organisations, the media and environmental associations. The report was introduced to a press conference during which was also illustrated Directive 2006/7/EC and all of the measures that will be taken for the implementation, among which, the new portal where will be given all of information concerning Directive 2006/7/EC in real time.

The report is also available to the public and is published on the Ministry of Health web site <http://www.ministerosalute.it/balneazione/paginaMenuBalneazione.jsp?menu=controllo&lingua=italiano>. The web site is also used to notify the public of areas where bathing is prohibited.

Wastewater treatment

In compliance with Italian Legislation (Legislative Decree n. 152/2006) and the Water Framework Directive (2000/60/EC), water protection is carried out at the river basin level. The measures for the improvement of bathing waters are not limited to the coastal zone, but also include reduction of the pollution load from catchments area. With the emanation of the decree 152/2006, have been designated several new sensitive areas as zones that need particular measures to prevent pollution with reference to waste water treatment and to nutrients decrement. With particular reference to bathing waters, the Northern Adriatic coast is one of these new areas.

To optimise the improvement measures since 2002 the Italian Ministry of the Environment established an agreement, under the framework programme on the water protection with all the Italian Regions. These measures include wastewater treatment systems and other actions. The agreement provided for 17 billion Euro to be invested in wastewater treatment systems. For the period 2007-2008 these agreements have been integrated with other economic resources for a total of 602 million Euro. At present there are over 3000 interventions, 50% have been completed or have to be tested and the other are in advanced course of action.

Control of diffuse pollution sources

The above-mentioned programme agreements also provide for measures to reduce diffuse pollution sources. For this purpose, all the Italian Regions that designated vulnerable zones on their territories, have implemented action programmes pursuant to article 5 of Directive 91/676/EEC.

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 Italy



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: Italian authorities