Country report

Italian bathing water quality in 2018







Bathing Water Quality in the Season 2018

Under the provisions of the <u>Bathing Water Directive</u>, more than 21 000 bathing waters are monitored in Europe each season. The monitoring data and other information regarding bathing water management are reported to the European Environment Agency by 30 reporting countries in Europe, to be assessed for the annual European report and more detailed national reports.

1. BWD reporting in the season 2018

In the season 2018, Italy identified and reported **5539 bathing waters**, which is 25.0% of all bathing waters in Europe. 14 bathing waters in Italy have been newly identified for the season 2018. Seven bathing waters reported in the preceding seasons have not been reported any more in 2018.

Bathing waters of Italy in the season	2018	Bathing water quality in the season 2018			
Total reported	5539	Excellent	4987 (90%)		
Coastal	4871	Good	279 (5%)		
Inland	668	Sufficient	116 (2.1%)		
		Poor	89 (1.6%)		
Total reported samples	37050	Not classified	68 (1.2%)		

The bathing waters are quality classified according to the two microbiological parameters (Escherichia coli and Intestinal enterococci) defined in the Bathing Water Directive. 97.2% of reported bathing waters are in line with the minimum quality standards of the Directive, thus classified "sufficient" or better. 89 bathing waters are of "poor" quality.

More detailed information on bathing waters of Italy is available at the national bathing water portal http://www.portaleacque.salute.gov.it/PortaleAcquePubblico/homeBalneazione.do.

2. BWD monitoring

Each bathing water that is identified by the reporting country needs to have a monitoring calendar established before the bathing season. The monitoring calendar requirements can be summarised as follows: (1) a pre-season sample is to be taken shortly before the start of each bathing season; (2) no fewer than four (alternatively, three for specific cases) samples are to be taken and analysed per bathing season; and (3) an interval between sampling dates never exceeds one month.

From the reported data, the assessment also designates effective implementation of the monitoring calendar. In Italy, monitoring calendar for 2018 was not implemented at 140 bathing waters.

Table 1: Bathing waters in 2018 according to implementation of the monitoring calendar

	Count	Share of total [%]
Monitoring calendar implemented A bathing water satisfies monitoring calendar conditions listed above.	5399	97.50%
Monitoring calendar not implemented A bathing water does not satisfy monitoring calendar conditions listed above. They may be quality-classified if enough samples are available in the last assessment period.	140	2.50%

In addition to the monitoring calendar, management specifics of the last assessment period of four years are also assessed. The status primarily indicates whether the complete dataset of four seasons is available, but also points out the reasons as to why the bathing waters do not have the complete last assessment period dataset. The latter may indicate developing conditions at the site – most importantly, whether the bathing water has been newly identified within the period, or any changes have occurred that are likely to affect the classification of the bathing water.

Table 2: Management specifics in the last assessment period of 2015–2018

	Count	Share of total [%]
Continuously monitored A bathing water has been monitored in each bathing season in the last assessment period.	5442	98.20%
Newly identified A bathing water was identified for the first time within the last assessment period. Such status is assigned until the complete four-year dataset is available, i.e. for three years after the first reporting.	56	1%
Quality changes A bathing water was subject to changes described in BWD Art. 4.4 within the last assessment period. Such status is assigned until the complete four-year dataset of samples taken after changes took effect is available.	11	0.20%
Monitoring gap A bathing water was not monitored for at least one season in the last assessment period. No quality	30	0.50%



3. Bathing water quality

3.1 Coastal bathing waters

Coastal bathing waters are situated on the sea or transitional water coastline, with respective parameter thresholds defined in Annex I of the Directive. They are subject to more strict thresholds than the inland bathing waters. Quality trend in Italy for the period 1990–2018 if historical data are available is shown in Figure 1. Count of bathing waters by quality class for the last assessment period 2015–2018 is given in Annex I.



Figure 1: Trend of coastal bathing water quality in Italy. Notes: Each column represents an absolute count of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.



3.2 Inland bathing waters

Inland bathing waters are situated at rivers and lakes, featuring fresh water and with respective parameter thresholds defined in Annex I of the Directive. Quality trend in Italy for the period 1990–2018 if historical data are available is shown in Figure 2. Count of bathing waters by quality class for the last assessment period 2015–2018 is given in Annex I.



Figure 2: Trend of inland bathing water quality in Italy. Notes: Each column represents an absolute count of bathing waters in the season. Quality classes "good" and "sufficient" are merged for comparability with classification of the preceding Bathing Water Directive 76/160/EEC.

4. Bathing water management in Italy

In addition to monitoring data, reporting countries also provide information on bathing water management in the country. The information is used to exchange good practices, discuss issues on the European level, and understand the specifics of implementation of the Directive.

In line with Bathing Water Directive, the Ministry of Health has developed the "Water Portal" (<u>http://www.portaleacque.salute.gov.it</u>). The aim of the portal is to improve information system through network building, ensure easily accessible and searchable tool for public and provide real-time information on water quality (art. 4.1, Ministerial Decree March 30th, 2010). In addition, in the back-end section, the regional and ARPA referents may include all the data required by the Commission, standardized with European formats, as well as extract from the database all the information needed.

Other management measure tools include Temporary Prohibition Ordinances by the Mayor of the municipality, following bad results delivered by Regional Environmental Protection Agencies (ARPA), and a withdrawal ordinance once the bathing water quality is restored (art 2.4, letter a, Ministerial Decree March 30th, 2010). Municipalities are in charge to put a prohibition signage to the bathing site according to the Directive 2006/7/EC and put in action recovering plans in areas with poor bathing water quality. According to Art. 6.4 of the DM 3/30/2010 the municipalities send the ordinances of prohibition (explaining the reasons of prohibition) promptly to the Ministry of Health which publishes it in the Water Portal website.

During 2018 season, 327 short-term pollution events have been reported for 274 bathing waters, of which have been temporarily closed during the bathing season.

Annex I Bathing water quality in Italy in 2015–2018

		Total	Exce	llent	Go	od	Suffi	cient	Ро	or	Not cla	ssified
		count of bathing waters	Count	%	Count	%	Count	%	Count	%	Count	%
Coastal	2015	4866	4399	90.4	239	4.9	91	1.9	94	1.9	43	0.9
	2016	4864	4414	90.7	237	4.9	75	1.5	95	2.0	43	0.9
	2017	4864	4373	89.9	253	5.2	88	1.8	75	1.5	75	1.5
	2018	4871	4382	90.0	251	5.2	102	2.1	79	1.6	57	1.2
Inland	2015	652	596	91.4	30	4.6	13	2.0	1	0.2	12	1.8
	2016	654	599	91.6	31	4.7	9	1.4	5	0.8	10	1.5
	2017	667	599	89.8	31	4.6	16	2.4	4	0.6	17	2.5
	2018	668	605	90.6	28	4.2	14	2.1	10	1.5	11	1.6
Total	2015	5518	4995	90.5	269	4.9	104	1.9	95	1.7	55	1.0
	2016	5518	5013	90.8	268	4.9	84	1.5	100	1.8	53	1.0
	2017	5531	4972	89.9	284	5.1	104	1.9	79	1.4	92	1.7
	2018	5539	4987	90.0	279	5.0	116	2.1	89	1.6	68	1.2

Table 3: Bathing water quality by water category and season



Annex II Bathing water quality map



Map 1: Bathing waters reported during the 2018 bathing season in Italy

Source: National boundaries: EEA; Large rivers and lakes: EEA, WFD Article 3; Rivers in Western Balkan: TC Vode; Bathing waters data and coordinates: Italian authorities; Digital Elevation Model over Europe (EU-DEM): EEA.