# Portuguese bathing water quality in 2019





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#### Bathing water quality in the 2019 season

# **Portugal**

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 European countries. These are then assessed for the annual European Bathing water report (European Bathing Water Briefing by 2020), published by the EEA, and more detailed national reports.

### 1. Bathing Water Directive reporting in the 2019 season

Bathing waters in the 2019 season		Bathing water quality in the 2019 season				
Total reported	614	Excellent	562 (91.5%)			
Coastal	481	Good	31 (5%)			
Inland	133	Sufficient	6 (1%)			
		Poor	1 (0.2%)			
First identified in 2019	11	Not classified	14 (2.3%)			
Delisted in 2019	6					
Total reported samples	3968					

Bathing waters are quality classified according to two microbiological parameters (Escherichia coli and Intestinal enterococci) defined in the Bathing Water Directive. Taking into account all reported bathing waters (including those that cannot be quality-classified), 97.6% of bathing waters are in line with the minimum quality standards of the Directive and are thus classified as 'sufficient' or better. One bathing water is classified 'poor'.

More information is available at the national bathing water portals:

http://www.apambiente.pt/index.php?ref=19&subref=906 (Mainland Portugal)

http://www.azores.gov.pt/Gra/SRMCT-MAR/menus/secundario/Zonas+Balneares/ (Azores)

https://www.madeira.gov.pt//Portals/12/Documentos/Noticias/Aguas Balneares Perfis 2019.pdf (Balneares)

#### 2. Bathing Water Directive monitoring

Each bathing water identified by the reporting country must 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 in specific cases) samples are to be taken and analysed per bathing season; and (3) an interval between sampling dates must never exceed one month.

From the reported data, the assessment also designates effective implementation of the monitoring calendar (Table 1).

Table 1: Bathing waters in 2019 according to implementation of the monitoring calendar

	Count	Share of total (%)	
Monitoring calendar implemented A bathing water satisfies the monitoring calendar conditions listed above.	613	99.84	
Monitoring calendar not implemented  A bathing water does not satisfy the monitoring calendar conditions listed above. It may be quality-classified if enough samples are available in the last assessment period.	1	0.16	

In addition to the monitoring calendar, management specifics of the last assessment period are also assessed. The resulting status primarily indicates whether the complete dataset for the four seasons is available, but also explains why the bathing waters do not have the complete dataset for the last assessment period. The latter may indicate developing conditions at the site — most importantly, whether the bathing water has been newly identified within the period, or whether 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 2016–2019

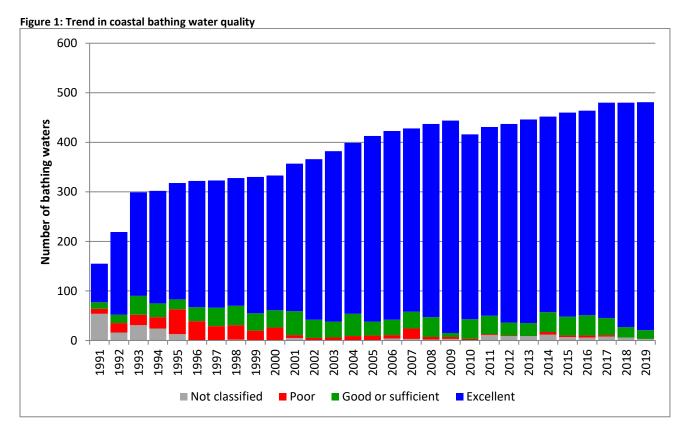
	Count	Share of total (%)
Continuously monitored  A bathing water has been monitored in each bathing season in the last assessment period.	571	93.00
Newly identified  A bathing water was identified for the first time within the last assessment period. Such status is assigned for the full four years after being reported.	41	6.68
Quality changes A bathing water was subject to changes described in Bathing Water Directive Article 4.4 within the last assessment period. Such status is assigned for the full four years after being reported.	0	0
Monitoring gap A bathing water was not monitored for at least one season in the last assessment period. No quality classification is made if not enough samples are reported for the most recent season.	2	0.33



### 3. Bathing water quality

#### 3.1 Coastal bathing waters

Coastal bathing waters are situated on the sea or transitional water coastline, with the respective parameter thresholds defined in Annex I of the Directive. They are subject to more strict thresholds than inland bathing waters. The quality trend for the period 1990–2019 (if historical data are available) is shown in Figure 1. The number of bathing waters by quality class for the last assessment period, 2016–2019, is given in Annex I Bathing water quality, 2016-2019.

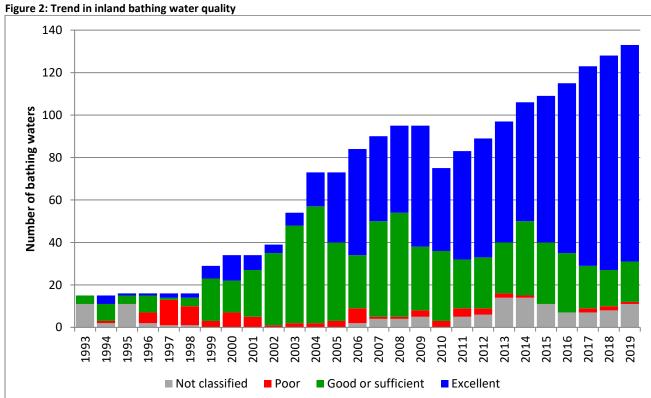


**Notes:** Each column represents an absolute number of bathing waters in the season. The 'good' and 'sufficient' quality classes are merged for comparability with the classifications under the preceding Bathing Water Directive 76/160/EEC.



#### 3.2 Inland bathing waters

Inland bathing waters are situated at fresh water rivers and lakes that have the respective parameter thresholds as defined in Annex I of the Directive. The quality trend for the period 1990–2019 (if historical data are available) is shown in Figure 2. The number of bathing waters by quality class for the last assessment period, 2016–2019, is given in Annex I Bathing water quality, 2016-2019.



Notes: Each column represents an absolute number of bathing waters in the season. The 'good' and 'sufficient' quality classes are

merged for comparability with the classifications under the preceding Bathing Water Directive 76/160/EEC.



## Annex I Bathing water quality, 2016–2019

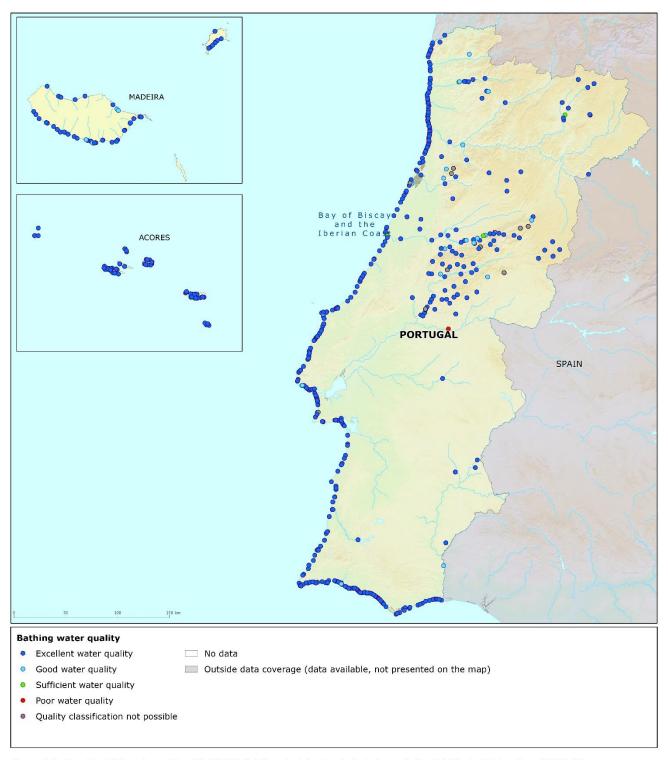
Table 3: Bathing water quality by water category and season

		Total	Exce	llent	Go	od	Suffi	cient	Ро	or	Not cla	ssified
		number of bathing waters	Count	%	Count	%	Count	%	Count	%	Count	%
Coastal	2016	464	413	89.0	35	7.5	6	1.3	4	0.9	6	1.3
	2017	480	435	90.6	29	6.0	5	1.0	3	0.6	8	1.7
	2018	480	453	94.4	16	3.3	5	1.0	0	0.0	6	1.3
	2019	481	460	95.6	16	3.3	2	0.4	0	0.0	3	0.6
Inland	2016	115	80	69.6	21	18.3	7	6.1	0	0.0	7	6.1
	2017	123	94	76.4	17	13.8	3	2.4	2	1.6	7	5.7
	2018	128	101	78.9	13	10.2	4	3.1	2	1.6	8	6.3
	2019	133	102	76.7	15	11.3	4	3.0	1	0.8	11	8.3
Total	2016	579	493	85.1	56	9.7	13	2.2	4	0.7	13	2.2
	2017	603	529	87.7	46	7.6	8	1.3	5	0.8	15	2.5
	2018	608	554	91.1	29	4.8	9	1.5	2	0.3	14	2.3
	2019	614	562	91.5	31	5.0	6	1.0	1	0.2	14	2.3



## **Annex II Bathing water quality map**

Map 1: Bathing waters reported during the 2019 bathing season in Portugal



Source: National boundaries: EEA; Large rivers and lakes: EEA, WFD Article 3; Bathing waters data and coordinates: Portugese authorities; Digital Elevation Model over Europe (EU-DEM): EEA.