

Maltese bathing water quality in 2015



Malta 

May 2016

BWD Report For the Bathing Season 2015

Malta

The report gives a general overview of information acquired from the reported data, based on provisions of the Bathing Water Directive¹. The reporting process is described below, as well as state and trends of bathing water quality in Malta.

1. BWD reporting in the season 2015

In 2015 bathing season, 87 bathing waters have been reported in Malta. For each bathing water, five groups of parameters have been delivered²:

- *identification data* – including name, location, geographic type of bathing water and availability to bathers;
- *seasonal data* – including season start and end, national quality classification in present season, potential management measures and changes in quality;
- *monitoring results* – disaggregated numerical values of two microbiological parameters – intestinal enterococci and Escherichia coli (also known as E. coli), recorded at each water sample taken;
- *abnormal situation periods* – periods of unexpected situations that have, or could reasonably be expected to have, an adverse impact on bathing water quality and on bathers' health; reporting is optional;
- *short-term pollution periods* – identifiable events that adversely affect water quality by faecal contamination; reporting is optional.

Total reported	87
Coastal	87
Inland	0
Max season period	161 days
Coastal	18 May to 25 Oct
Samples taken	8208
Share of bathing waters with good or excellent water quality	100 %
Reporting under Directive 2006/7/EC since	2009

The authorities of Malta report data according to the new BWD (2006/7/EC) since the season 2009. The data for the season 2015 were delivered to the European Commission by **23 December 2015**, with additional deliveries on 20 January 2016.

Altogether, **87 bathing waters** have been reported – 0.4% of all bathing waters in Europe. Out of all bathing waters in Malta, 0.00% have been newly identified in 2015 season. 100% of bathing waters in Malta are of coastal type; the other 0% are inland. **8208 samples** were taken at bathing waters throughout the season – 94 per bathing water on average.

¹ Directive BWD 2006/7/EC, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:064:0037:0051:EN:PDF>

² See the BWD Data Dictionary for detailed explanations: <http://dd.eionet.europa.eu/datasets/3294#tables>

The maximum bathing season period was from 18 May to 25 October, i.e. 161 days altogether.

Detailed information on bathing waters is available from national portal at <http://health.gov.mt/en/environmental/Pages/Health-Inspectorate/Environmental-Health-Risk-Management/Bathing-Water-Programme.aspx>.

2. Assessment methodology³

During the bathing season, water samples are taken and analysed for two bacteria, *Escherichia coli* and intestinal enterococci which may indicate the presence of pollution, usually originating in sewage, livestock waste, bird faeces etc. The results of the analysis are used to assess the quality of the bathing waters concerned and to provide information to the public on the quality of water in the bathing sites concerned.

The monitoring requirements under the Directive are:

- taking a pre-season sample (taken shortly before the start of the bathing season) ⁴;
- a minimum of four samples per season⁵;
- a minimum of one sample per month⁶.

If these rules are satisfied, the bathing water is categorised as 'sampling frequency satisfied'. If not all monitoring requirements are fulfilled the bathing water is categorised as 'not enough samples'. All bathing waters met the described monitoring requirements set by the Directive. Table 1 shows the statistics of bathing waters according to monitoring requirements.

³ The methodology used by the EC and the EEA is described here, while results of assessment by national authorities may differ in individual cases.

⁴ A pre-season sample is taken into a sum of samples per season.

⁵ Three samples are sufficient if the season does not exceed eight weeks or the region is subject to special geographical constraints.

⁶ If, for any reason, it is not possible to take the sample at the scheduled date, a delay of four extra days is allowed. Thus, the interval between two samples should not exceed 31 + 4 days.

Table 1: Bathing waters in 2015 according to compliance with BWD monitoring provisions

	Count	Share of total [%]
BWs with sampling frequency satisfied (and are not new, are not subject to changes or were not closed in 2015) These bathing waters have been monitored according to provisions and have complete dataset from the last assessment period. They have been quality-classified (excellent, good, sufficient, poor).	87	100.0%
BWs with sampling frequency not satisfied (and are not new, are not subject to changes or were not closed in 2015) These bathing waters exist throughout the last assessment period but have not been monitored throughout the period according to provisions for various individual reasons. They may be quality-classified if there is an adequate volume of samples available for credible classification.	0	0.0%
BWs that are new, subject to changes or closed in 2015 These bathing waters do not have complete dataset for the last assessment period because they are new, have been subject to changes (that are likely to affect the classification of the bathing water) or have been closed. They cannot be quality-classified.	0	0.0%
Total number of bathing waters in 2015	87	100%

Bathing waters where sampling frequency was not satisfied can still be quality assessed if at least four samples per season (three samples if the season does not exceed eight weeks or the region is subject to special geographical constraints) are available and equally distributed throughout the season. Assessment of bathing water quality is possible when the bathing water sample dataset is available for four consecutive seasons. Bathing waters are accordingly classified to one of the bathing water quality classes (excellent, good, sufficient, or poor).

The classification is based on pre-defined percentile values for microbiological enumerations, limiting the classes given in Annex I of the Directive. The Directive defines different limit values for coastal and inland waters.

Quality assessment is not possible for all bathing waters. In these cases, they are instead classified as either:

- not enough samples⁷;
- new⁸;
- changes⁹;
- closed¹⁰.

⁷ Not enough samples have been provided throughout the last assessment period (the last four bathing seasons or, when applicable, the period specified in Article 4.2 or 4.4).

⁸ Classification not yet possible because bathing water is newly identified and a complete set of samples is not yet available.

⁹ Classification is not yet possible after changes that are likely to affect the classification of the bathing water.

¹⁰ Bathing water is closed temporarily or throughout the bathing season.

3. Bathing water quality

The results of the bathing water quality in Malta throughout the past period are presented in Figure 1. The previous reports are available on the European Commission's bathing water quality website¹¹ and the European Environment Agency's bathing water website¹².

3.1 Coastal bathing waters

In Malta, all existing bathing waters met at least sufficient water quality standards in 2015. See Appendix 1 for numeric data.

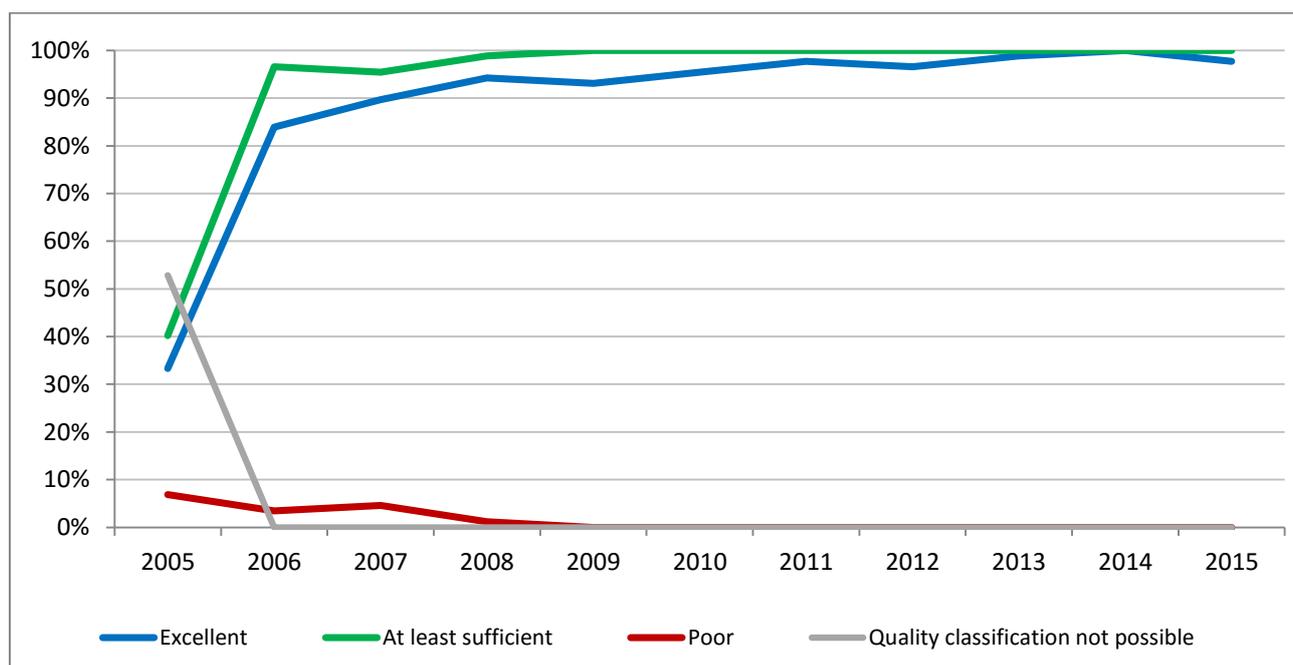


Figure 1: Coastal bathing water quality trend in Malta. Note: the “At least sufficient” class also includes bathing waters of “Excellent” quality class, the sum of shares is therefore not 100%.

3.2 Inland bathing waters

There are no inland bathing waters in Malta.

¹¹ http://ec.europa.eu/environment/water/water-bathing/index_en.html

¹² <http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>

4. Information regarding management and other issues

Bathing water monitoring programme is carried out by the Health Inspectorate Services within the Environmental Health Directorate (EHD). During the bathing season, the Environmental Health Directorate issues a weekly report with the classification for each bathing area based on the Escherichia coli and Intestinal enterococci counts (available at <http://health.gov.mt/en/environmental/Pages/Health-Inspectorate/Environmental-Health-Risk-Management/Bathing-Water-Programme.aspx>).

All bathing areas monitored as part of the bathing water monitoring programme are clearly identified by fixed information signs indicating the site code and stating that the area is monitored by the Environmental Health Directorate on a regular basis. These information signs are in five languages. These information signs will be replaced with new information board so as to include further information on the classification of sites and beach profiles.

During the 2015 bathing season, the Environmental Health Directorate issued four temporary closure health warnings at six bathing areas. Three bathing sites were temporary closed due to a chemical/oil spill in the area, while additional three bathing areas were temporary closed due to localised sewage overflows. Environmental Health Officers were on-sites during the temporary closure so as to inform the public that bathing was not recommended at that time until the health warning was lifted.

As part of the management programme, environmental health officers carry out routine site-inspections so as to check for any possible sources of pollution. These officers also investigate any complaints made by the public and in case of doubt extra samples are collected and sent for analysis at the public health laboratory. In the case that visual evidence of pollution is noted, the effected site would be temporary closed for bathing.

The Environmental Health Directorate has completed the compilation of 29 beach profiles covering all 87 bathing sites monitored as part of the annual bathing water monitoring programme in 2013. Following the publication of the official classification of bathing sites the Environmental Health Directorate published an up-date of all 29 beach profiles with data for 2014 season.

Officials from the Environmental Health Directorate participated on television and radio programmes discussing and giving information to the general public on bathing water quality.

5. Bathing water quality assessment presentation in online viewers

The European bathing water legislation focuses on sound management of bathing waters, greater public participation and improved information dissemination. More on the bathing and other water legislation can be found on the European Commission's website: http://ec.europa.eu/environment/water/index_en.htm.

The bathing water section of the Water Information System for Europe (WISE) which is accessible at the EEA bathing water website (<http://www.eea.europa.eu/themes/water/interactive/bathing/state-of-bathing-waters>) allows users to view the bathing water quality at more than 21 000 coastal beaches

and inland sites across Europe. The WISE bathing water quality data viewer combines text and graphical visualisation, providing a quick overview of the bathing water's locations and achieved quality. Having access to bathing water information, citizens are encouraged to make full use of it and participate with their comments.

Appendix 1: Results of bathing water quality in Malta from 2012 to 2015

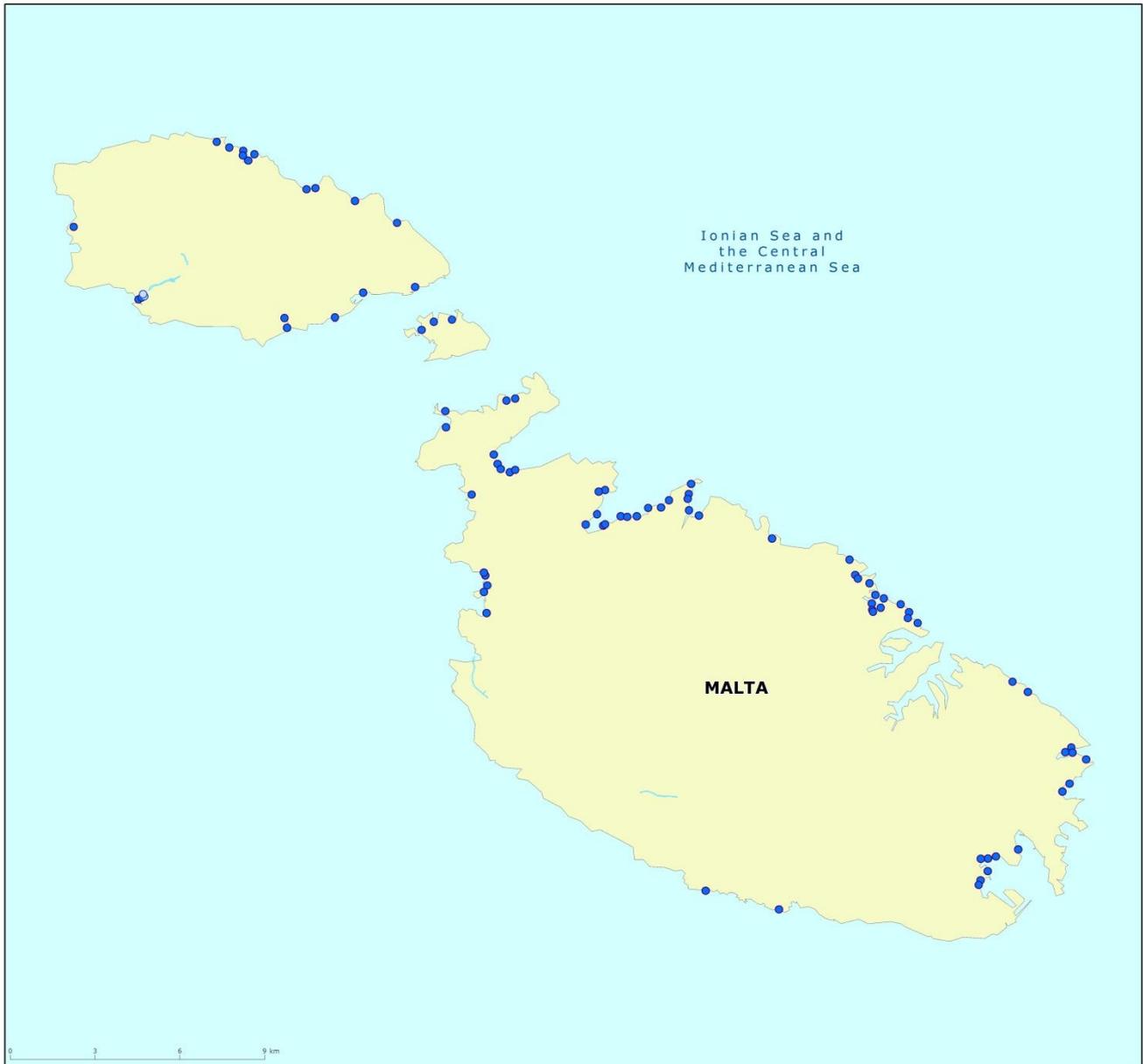
Table 2: Bathing waters in the season 2015 according to quality

		Total number of bathing waters	Excellent quality		At least sufficient quality		Poor quality		Quality classification not possible: not enough samples /new bathing waters/bathing waters subject to changes/closed	
			No	%	No	%	No	%	No	%
Total	2012	87	84	96.6	87	100.0	0	0.0	0	0.0
	2013	87	86	98.9	87	100.0	0	0.0	0	0.0
	2014	87	87	100.0	87	100.0	0	0.0	0	0.0
	2015	87	85	97.7	87	100.0	0	0.0	0	0.0

Note: the class "At least sufficient" also includes bathing waters which are of excellent quality, the sum of shares is therefore not 100%.

Appendix 2: Bathing water quality map

Map 1: Bathing waters reported during the 2015 bathing season in Malta



Bathing water quality

- Excellent water quality
- Good water quality
- Sufficient water quality
- Poor water quality
- Quality classification not possible: not enough samples / new bathing waters / bathing waters with changes / closed
- No data
- Outside data coverage (data available, not presented on the map)

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