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SERVIZIO OSSERVATORIO ACQUE MARINE E LAGUNARI

InforMare

August 2014

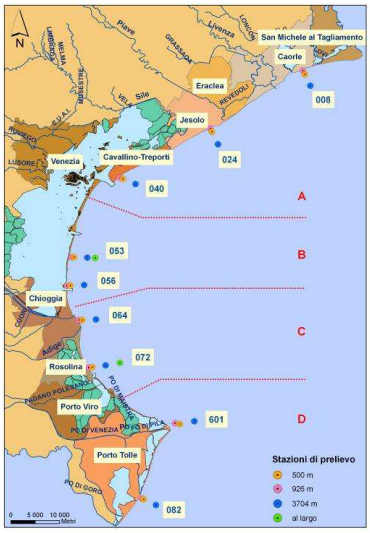
Coverage: regional **Frequency: monthly**

Period: seasonal

COASTAL SEA WATER SITUATION

Average surface values in sea water, measured with multi-parametric probe				
	A Area	B Area	C Area	D Area
Temperature (°C)	23,26	23,67	20,98	23,97
Salinity (PSU)	29,47	32,29	19,55	24,61
O_2 (%)	70,68	71,23	69,50	73,30
pH	8,02	8,02	8,04	8,11
Chlorophyll "a" (µg/l)	0,81	0,72	0,88	0,70

The temperature values are consistent with the weather and climate of the period. The oxygen dissolved in sea water has low values probably result from the decomposition of organic aggregates of mucilage.



REMARKS

The visual observations and transparency measures carried out through the "Secchi disk" showed a generally turbid water column, especially in the southern part of the coast, while seabeds were generally clean.

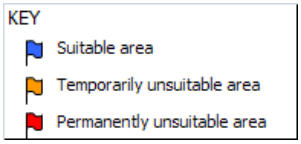
See the agency's website for further information on the tools used during the monitoring process: www.arpa.veneto.it/temi-ambientali/acqua/acque-marino-costiere

DID YOU KNOW?

Mucilage is formed by organic matter aggregates, mainly polysaccharides (complex sugars), normally produced by marine microalgae. If these exudates, that have different biological and ecological functions for microalgae, are produced in excessive quantity, they spread into the water forming, initially, small whitish flakes called "marine snow". These flakes can then aggregate into filaments that tend to disseminate along the water column. In particular conditions these aggregates increase and form structures like "cloud" that go down to the bottom of the sea, by incorporating in them plants and microorganisms and creating problems to the life of the seabed organisms. Once at the bottom, the decomposition activity of bacteria leads to the formation of bubbles of CO_2 (carbon dioxide) that uplifts the aggregates on the surface where they appear like large patches of whitish / yellowish material. This patches brought by the currents can sometimes reach the shore. This physiological and natural phenomenon is known for a very long time (already in 1700 had been reported the appearance of these aggregates in the Adriatic) and seems to be due primarily to the dinoflagellate *Gonyaulax fragilis*. The presence of mucilage, being aggregated of polysaccharides, although unpleasant to tourists, is not a phenomenon harmful to health; in the event of a massive presence, however, fishery industry may suffer damage due to clogging of the networks by the aggregates. Fortunately for the disintegration and dispersion of the mucilage it is sufficient the establishment of strong storms.

Fonte: ARPAV – Osservatorio Acque Marine e Lagunari.

COASTAL BATHING WATER SITUATION



For the year 2014, in the regional monitoring network for the quality of coastal bathing water, there are 95 control points in the Adriatic Sea and 1 on the Albarella expanse of nautical water. Each month from April to September, the following activities are carried out at every checkpoint: measurement of environmental parameters, visual inspections, and taking water samples for bacteriological analysis. The surveys are carried out by ARPAV's technicians, with the support of the nautical units of the Veneto Region Coast Guard and Harbour Offices. Details of the situation on **August 28** are given in the table on the right.

Algae Surveillance: no potentially toxic algal blooms were detected.

For further information, please visit the website at:
www.arpa.veneto.it/acqua/htm/balneazione.asp

Situation 28 August 2014			
Mare Adriatico	**95**		
S. Michele al Tagliamento (Ve)	6		
Caorle (Ve)	15		
Eraclea (Ve)	2		
Jesolo (Ve)	12		
Cavallino Treporti (Ve)	12		
Venezia	18		
Chioggia (Ve)	11		
Rosolina (Ro)	9		
Porto Viro (Ro)	2		
Porto Tolle (Ro)	8		
Specchio Nautico di Albarella	***1***		
Rosolina (Ro)	1		

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