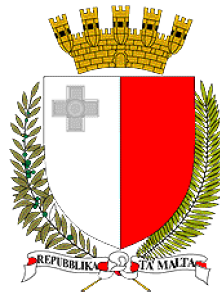


**ABSTRACT REPORT
ON THE MICROBIOLOGICAL QUALITY
FOR BATHING WATER
DURING THE BATHING SEASON
2004**



A full detailed report will be published over the next few months. Refer to:

www.health.gov.mt/dph/ehuhome.htm

RECREATIONAL WATER PROGRAMME - This programme, (also carried out in collaboration with the Regional Health Inspectors and the Public Health Laboratory) ran on a regular weekly basis from 17 May and 24 October. Throughout this period, 87 official bathing sites were monitored.

All sites were monitored for Faecal Coliforms every week as in previous years (Figure 8) and once every fortnight all sites were monitored for Total Coliforms (as per EU Directive for Bathing Water) and Faecal Streptococcus (Figures 9 and 10). A total of 3987 routine samples and 32 non-routine samples were collected, on which 70 analyses including Salmonella were carried out. This amounted to 4057 microbiological analyses being carried out at the Public Health Laboratories (Table 3).

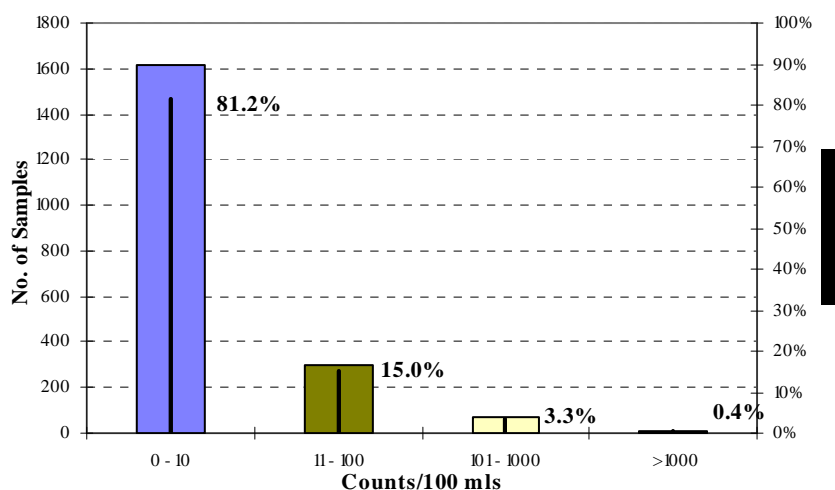


Figure 8. : Number of samples by counts for Faecal Coliforms - 2004

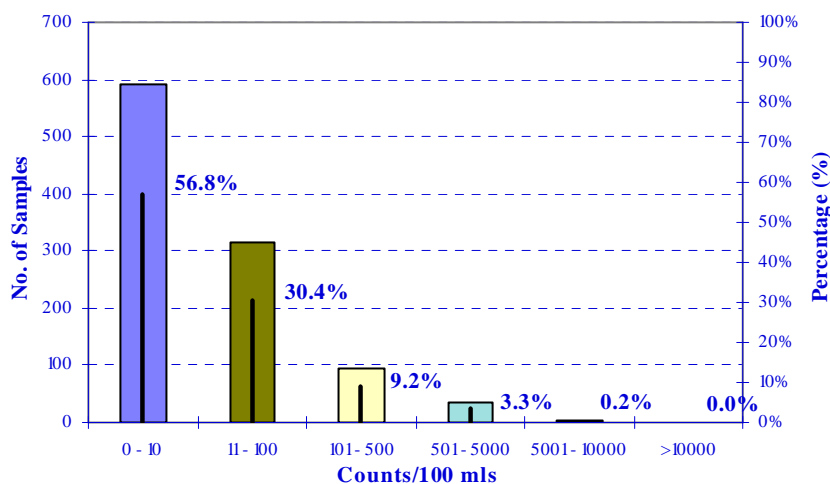


Figure 9. : Number of samples by counts for Total Coliforms – 2004

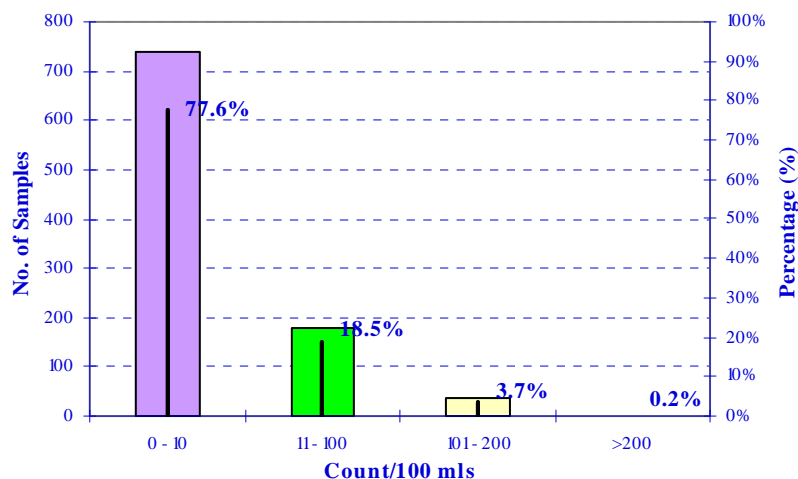


Figure 10. : Number of samples by counts for Faecal Streptococcus – 2003

Table 3.

NUMBER OF ROUTINE TESTS CARRIED OUT

MICROBIOLOGICAL PARAMETER	NO. OF ROUTINE TESTS CARRIED OUT
Faecal coliforms	1994
Faecal streptococci	95
Total coliforms	1038
TOTAL	3987

Health warning notices were issued 5 times throughout the bathing season (Figure 11.). A full report on the quality of bathing water during 2004 will be published.

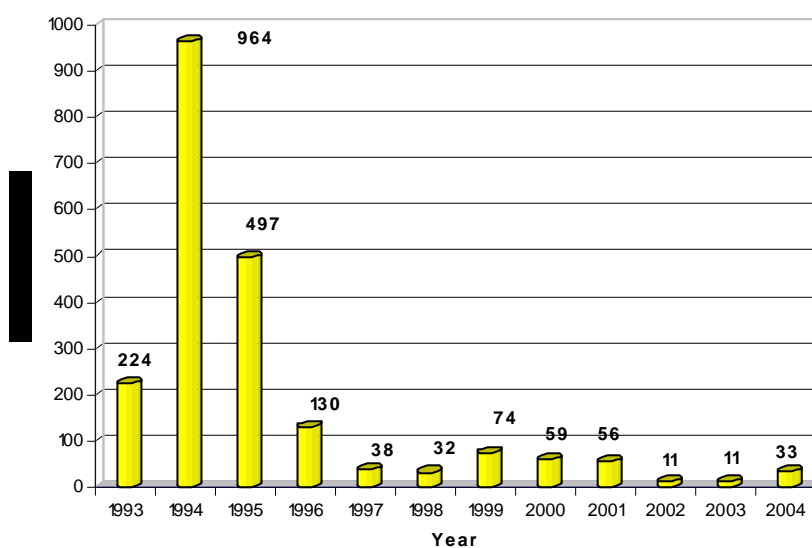


Figure 11. : Total number of sampling site-days closed by year (1993 - 2004).

All bathing sites in the four zones have been classified both with the Barcelona Convention Criteria and the EU Bathing Water Criteria. Details are provided in Tables 4, 5 and 6.

Table 4.

CLASSIFICATION OF BATHING WATER SITES ACCORDING TO THE BARCELONA CONVENTION CRITERIA

ZONE	NO. OF SITES	PASSED (CLASS 1)	PASSED (CLASS 2)	FAILED (CLASS 3)
A	17	10	7	0
B	15	12	3	0
C	32	27	5	0
D	23	23	0	0
TOTAL	87	72	15	0

Table 5.

CLASSIFICATION OF BATHING WATER SITES ACCORDING TO THE EU BATHING WATER DIRECTIVE CRITERIA FOR FAECAL COLIFORMS

ZONE	No of Sites	Conforms (I)	Failed (I)	Conforms (G)	Failed (G)
A	17	17	0	15	2
B	15	15	0	15	0
C	32	32	0	32	0
D	23	23	0	22	1
TOTAL	87	87	0	85	2

Table 6.

CLASSIFICATION OF BATHING WATER SITES ACCORDING TO THE EU BATHING WATER DIRECTIVE CRITERIA FOR TOTAL COLIFORMS

ZONE	No of Sites	Conforms (I)	Failed (I)	Conforms (G)	Failed (G)
A	17	17	0	16	1
B	15	15	0	15	0
C	32	32	0	32	0
D	23	23	0	23	0
TOTAL	87	87	0	86	1

Since the start of the bathing water monitoring programme this season was the fourth consecutive year to have all monitored sites conforming to the Barcelona Convention Criteria with 83% of the sites of a better quality i.e. classified in Class 1. Now as Malta is a member of EU the bathing water quality has also to be classified in accordance to the requirements of the EU Directive for Bathing Water Quality which has also been transposed by a local legal notice (L.N. 380 of 2003). All monitored sites for both microbiological parameters conformed to the mandatory levels (I) and only two sites failed with the guideline values (G). For the second season classification for all bathing sites has also been carried out based on the guideline values for the 3 microbiological parameters. This resulted with 3 sites failing, one

site failed for both faecal and total coliforms counts, one site failed for the faecal coliforms counts only and another site failed for the faecal streptococci counts. Thus the overall classification with the EU Directive for the Bathing Water Quality for all official bathing sites is summarised in Table 7 below.

Table 7.

CLASSIFICATION OF BATHING WATER SITES ACCORDING TO THE EU BATHING WATER DIRECTIVE
CRITERIA

ZONE	No of Sites	Conforms (I)*	Failed (I)*	Conforms (G)#	Failed (G)#
A	17	17	0	15	2
B	15	15	0	15	0
C	32	32	0	31	1
D	23	23	0	23	0
TOTAL	87	87	0	84	3

*Mandatory (I) classification is based on the 2 main microbiological parameters (Faecal coliforms and Total coliforms).

#Guideline (G) classification is based on the 3 microbiological parameters (Faecal coliforms, Total coliforms and Faecal Streptococci).

During this bathing season samples from a number of bathing areas where once again collected for enteroviruses analyses. 20 beaches were identified (Table 8.). Samples of 10 litres of seawater were collected from each beach throughout the season and all samples were sent to the UK Public Health Laboratory for analysis. Samples had to be at the UK laboratory within 24 hours from collection and thus all samples were sent by airfreight. All samples resulted enteroviruses absent. Samples for Salmonella spp. were also collected from each of these sites which were analysed at the Public Health Laboratory and no Salmonella was isolated from all samples.

Table 8.

BEACHES MONITORED FOR ENTEROVIRUSES

CODE	BEACH	LOCALITY
1	St. Thomas Bay	Marsascala
2	Pretty Bay	Birzebbugia
3	St. George's Bay	St. Julian's
4	Balluta Bay	St. Julian's
5	Mellieha Bay (San Remo)	Mellieha
6	Mellieha Bay (Da Tomaso)	Mellieha
7	Armier Bay	Armier
8	Paradise Bay	Cirkewwa
9	Golden Bay	Ghajn Tuffieha
10	Riviera Martinique	Ghajn Tuffieha
11	Mistra Bay	Mistra
12	Gnejna Bay	Mgarr
13	Bugibba Bay Square	Bugibba
14	Salina Bay	Salina
15	St. George's Bay	St. Julian's
16	Balluta Bay	St. Julian's
17	Xlendi Bay	Xlendi
18	Marsalforn Bay	Marsalforn
19	Ramla l-Hamra	Nadur
20	Blue Lagoon	Comino

During this bathing season the Department of Public Health has maintained the 53 signposts fixed during the previous year, identifying the official non-bathing zones in Malta. These included specific areas at St. Julian's, Bahar ic-Caghaq, St. Paul's Bay, Marsaxlokk, Marsascala and Birzebbugia.

During this bathing season the Environmental Health Unit launched its web page and all relevant information including a weekly classification report were regularly made available on the webpage. Information signs have also been fixed at all official bathing sites in Malta. Same type of signs has also to be fixed at all official bathing sites in Gozo.