# **Bathing water results 2008 – The Netherlands**

### 1. Introduction

This report gives a general overview of bathing water quality in the Netherlands during the 2008 bathing season.

The Netherlands reported 10 parameters under the Directive 76/160/EEC (1 Total coliforms, 2 Faecal coliforms, 3 Faecal streptococci, 6 pH, 7 Colour, 8 Mineral oils, 9 Surface-active substances reacting with methylene blue, 10 Phenols (phenol indices), 11 Transparency, 13 Tarry residues and floating materials).

The parameters to be taken into account for assessment according to the assessment rules of the Directive 76/160/EEC are microbiological (1 Total coliforms, 2 Faecal coliforms) and physico-chemical (8 Mineral oils, 9 Surface-active substances reacting with methylene blue, 10 Phenols (phenol indices).

The bathing waters are classified in the following categories:

- Compliant with mandatory values of the Directive for the 5 parameters (class CI)
- Compliant with mandatory and more stringent guide values of the Directive for the 5 parameters (class CG)
- Not compliant with mandatory values of the Directive for the 5 parameters (class NC)
- Banned (temporarily closed) or closed throughout the season (class B)

# 2. Length of bathing season and number of bathing waters

For all bathing waters the bathing season lasted five months, from 1 May to 1 October 2008.

A total of 642 bathing waters were monitored in the Netherlands during the 2008 bathing season, of which 86 were coastal bathing waters and 556 freshwater bathing waters (5 on rivers; 551 on lakes). The frequency of sampling was reduced by a factor of two for bathing waters that were compliant with at least the mandatory values for the two previous years. Only two bathing waters were insufficiently sampled.

With 642 bathing waters the Netherlands accounts for about 3% of the reported bathing waters of the European Union.

The evolution of the reported number of bathing waters since monitoring of the water quality began under the Directive 76/160/EEC is presented in Table 1. The number of coastal bathing waters increased significantly since the start of the reporting from 26 in 1990 to 86 in 2006. It remained the same afterwards. Similarly, the number of freshwater bathing waters increased from 459 in 1990 to 556 in 2008. There was one more freshwater bathing water in 2008 than in the previous year: six new bathing waters were added to the list and five were de-listed.

### 3. Results of bathing water quality

The results of the bathing water quality in the Netherlands for the period 1990-2007 as reported in 2008 report and for the bathing season of 2008 are presented in Figure 1.

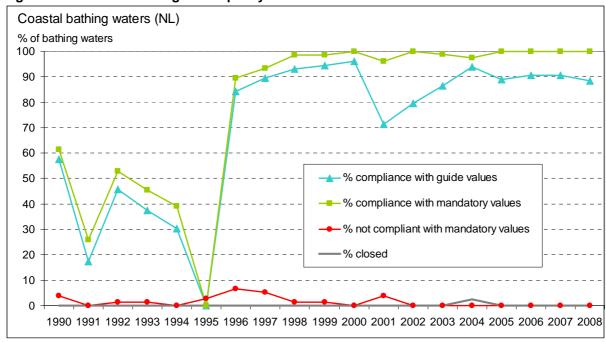
The graphs show, for coastal and freshwater bathing waters separately:

- The percentage of bathing waters that comply with the guide values (class CG, blue line)
- The percentage of bathing waters that comply with the mandatory values (class CI, green line)
- The percentage of bathing waters that do not comply with the mandatory values (class NC, red line)
- The percentage of bathing waters that are banned (temporarily closed) or closed throughout the season (class B, grey line)

Table 1 and Table 2 show the same information in absolute numbers and in percentages separately for coastal and freshwater bathing waters. Table 3 shows the bathing water quality results for 2008 season in the Netherlands for all bathing waters.

Map 1 shows the location of the reported bathing waters in the Netherlands. The location of the bathing waters is based on the geographic coordinates reported by the Dutch authorities.

Figure 1: Results of bathing water quality in the Netherlands from 1990 to 2008



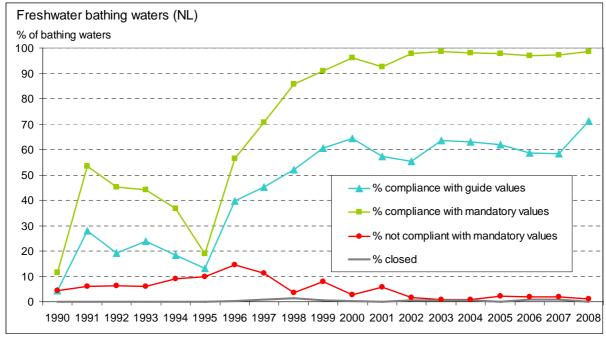


Table 1: Results of bathing water quality in the Netherlands from 1990 to 2008 as absolute numbers

		NL					
		Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/closed throughout the season	
	1990	26	15	16	1	0	
	1991	58	10	15	0	0	
	1992	70	32	37	1	0	
	1993	75	28	34	1	0	
	1994	79	24	31	0	0	
	1995	72	0	0	2	0	
	1996	76	64	68	5	0	
	1997	76	68	71	4	0	
	1998	72	67	71	1	0	
	1999	72	68	71	1	0	
	2000	77	74	77	0	0	
	2001	77	55	74	3	0	
	2002	78	62	78	0	0	
	2003	81	70	80	0	0	
	2004	82	77	80	0	2	
	2005	82	73	82	0	0	
Coastal	2006	86	78	86	0	0	
pathing	2007	86	78	86	0	0	
water	2008	86	76	86	0	0	
	1990	459	20	53	20	0	
	1991	571	159	305	34	0	
	1992	545	105	247	35	0	
	1993	491	117	216	30	0	
	1994	511	94	187	46	0	
	1995	522	69	98	51	0	
	1996	516	205	291	75	1	
	1997	511	231	361	57	4	
	1998	528	275	453	19	7	
	1999	534	324	485	42	3	
	2000	558	360	536	16	2	
	2001	554	317	513	32	0	
	2002	556	308	544	9	3	
	2003	558	354	550	5	3	
	2004	550	346	540	5	3	
	2005	550	340	538	12	0	
resh	2006	553	324	537	10	4	
water pathing	2007	555	324	540	10	4	
vater	2008	556	396	548	6	0	

Note: Bathing waters which were insufficiently sampled or not sampled according to the Bathing Water Directive were not included in this table. Therefore, in some cases, the sum of the different categories will not be equal to the total number of bathing waters.

Table 2: Results of bathing water quality in the Netherlands from 1990 to 2008 as percentages

		NL						
		Total number of bathing waters	% compliance with guide values	% compliance with mandatory values	% not compliant	% banned/closed throughout the season		
	1990	26	57.7	61.5	3.8	0.0		
	1991	58	17.2	25.9	0.0	0.0		
	1992	70	45.7	52.9	1.4	0.0		
	1993	75	37.3	45.3	1.3	0.0		
	1994	79	30.4	39.2	0.0	0.0		
	1995	72	0.0	0.0	2.8	0.0		
	1996	76	84.2	89.5	6.6	0.0		
	1997	76	89.5	93.4	5.3	0.0		
	1998	72	93.1	98.6	1.4	0.0		
	1999	72	94.4	98.6	1.4	0.0		
	2000	77	96.1	100.0	0.0	0.0		
	2001	77	71.4	96.1	3.9	0.0		
	2002	78	79.5	100.0	0.0	0.0		
	2003	81	86.4	98.8	0.0	0.0		
	2004	82	93.9	97.6	0.0	2.4		
	2005	82	89.0	100.0	0.0	0.0		
Coastal	2006	86	90.7	100.0	0.0	0.0		
athing	2007	86	90.7	100.0	0.0	0.0		
water	2008	86	88.4	100.0	0.0	0.0		
	1990	459	4.4	11.5	4.4	0.0		
	1991	571	27.8	53.4	6.0	0.0		
	1992	545	19.3	45.3	6.4	0.0		
	1993	491	23.8	44.0	6.1	0.0		
	1994	511	18.4	36.6	9.0	0.0		
	1995	522	13.2	18.8	9.8	0.0		
	1996	516	39.7	56.4	14.5	0.2		
	1997	511	45.2	70.6	11.2	0.8		
	1998	528	52.1	85.8	3.6	1.3		
	1999	534	60.7	90.8	7.9	0.6		
	2000	558	64.5	96.1	2.9	0.4		
	2001	554	57.2	92.6	5.8	0.0		
	2002	556	55.4	97.8	1.6	0.5		
	2003	558	63.4	98.6	0.9	0.5		
	2004	550	62.9	98.2	0.9	0.5		
Frooh	2005	550	61.8	97.8	2.2	0.0		
resh vater	2006	553	58.6	97.1	1.8	0.7		
athing	2007	555	58.4	97.3	1.8	0.7		
vater	2008	556	71.2	98.6	1.1	0.0		

Note: Bathing waters which were insufficiently sampled or not sampled according to the Bathing Water Directive are not included in this table. Therefore, in some cases, the sum of the percetages is not equal to 100%.

Table 3: Results of bathing water quality for all bathing waters in the Netherlands in 2008

		NL					
		Total number of bathing waters	Compliance with guide values	Compliance with mandatory values	Not compliant	Banned/closed throughout the season	
Bathing Waters	2008	642	472	634	6	0	

Note: Bathing waters which were insufficiently sampled according to the Bathing Water Directive were not included in this table. Therefore the sum of the different categories is not equal to the total number of bathing waters.

# 4. Development of bathing water quality

### Coastal bathing waters

In the Netherlands, 100% of coastal bathing waters (86) were in compliance with the mandatory values in 2008. This result is reached for the fourth consecutive year. The rate of compliance with the guide values decreased by 2.3%, reaching 88.4% (76 bathing waters). The percentage of bathing waters that met the mandatory values exceeds the percentage of that that met the more stringent guide values by 11.6%. No coastal bathing water had to be closed during the season.

In the early 90's the compliance rate in coastal bathing waters was low (from 26% to 61% compliance rate with mandatory values). The dip in 1995 can be explained by the large number of bathing waters that were insufficiently sampled. Compliance with both the mandatory values and the more stringent guide values improved from 1996 onwards. Since the start of the reporting in 1990, no coastal bathing water had to be closed during the season, except for two bathing waters in 2004.

#### Freshwater bathing waters

98.6% of the freshwater bathing waters (548) met the mandatory values in 2008. This is a slight increase compared to the previous year (+ 1.3%). The compliance with the guide values increased by 12.8%, reaching 71.2% (396 bathing waters). However, the percentage of bathing waters that met the guide values was still lower for 27.3% compared to the mandatory values. The percentage of noncompliant bathing waters decreased from 1.8% (10) to 1.1% (6 bathing waters). No freshwater bathing water had to be closed during the season.

Similarly as for the coastal bathing waters, the compliance rate was low for the freshwater bathing waters in the early 90's (from 11% to 53% compliance rate with mandatory values). From 1996 onward there is an overall increase in the compliance rate, although it took the Netherlands till the 2002 bathing season to reach a constant level of non compliant freshwater bathing waters below 5%. The mandatory water quality was met in over 90% of the bathing waters since 1999 and since 2002 in over 97% of the bathing. The bathing waters compliant with the more stringent guide values were fluctuating around 60% of all the bathing waters from 1999 to 2007. Since 1996, one to seven bathing waters (<1.5%) had to be closed throughout the season, except for 2001, 2005 and 2008 season.

### 5. General information as provided by the Dutch authorities

Procedures for providing the public with information vary from one province to another. In general, material can be obtained from tourist offices and the provincial authorities. In addition, the latest information about areas where bathing is prohibited or where there are certain risks (botulism, bluegreen algae, etc.) can be found on teletext (p. 725) or the Internet (<a href="www.waterland.net/zwemwater">www.waterland.net/zwemwater</a>). Information about bathing water quality is available locally in the most popular bathing areas.

Considerable effort has been made to reduce pollution from storm water overflows nearby bathing areas. Many discharges due to overflows have either been sanitised or the discharge point has been displaced to surface waters where there is no risk for bathing water quality.

### 6. More information on bathing water quality in the European Union

More information on bathing water quality in the European Member States, including the reports for 27 Member States and the EU summary report, can be found on the bathing water quality website (http://ec.europa.eu/environment/water/water-bathing/index\_en.html).

By 2015, Member States will have to comply with the stricter and more ambitious requirements laid out in the new Bathing Water Directive (Directive 2006/7/EC). This Directive requires more effective monitoring and management of bathing waters, greater public participation and improved information. More information on the new Directive can be found on the bathing water quality website and on http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:064:0037:0051:EN:PDF.

Cyprus, Denmark, Estonia, Finland, Germany, Hungary, Latvia, Lithuania, Slovakia, Spain and Sweden started to report according to more stringent new requirements in 2008 bathing season, while Luxembourg already started in 2007 bathing season.

WISE - Water Information System for Europe (www.water.europa.eu) is a gateway to all water related information. Among other water related data, information on individual bathing water quality can be found in the WISE Map viewer and WISE Data viewer through interactive maps and graphs (<a href="http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water">http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water</a>).

Map 1: Bathing waters reported during the 2008 bathing season in the Netherlands

