

Continuous morbidity registration sentinel stations the Netherlands 1998

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FOREWORD

Infectious diseases have not yet been overcome. This is again evidenced by the number of reports of whooping cough by the spotter physicians in the last quarter of 1998. A striking feature is that the increase in the southern province group - Zeeland, North Brabant and Limburg - is more considerable than in the other province groups.

It has again been established that in the official notification of infectious diseases under reporting occurs. Curatively active physicians do not always feel the need or the duty to report an infectious disease. For them treatment of the patient takes pride of place, The surveillance of infectious diseases and the - if necessary - subsequent measures for prevention and control of the disease are not aided by that.

Aggression towards and discourteous treatment of the assistant and the GP were less in 1998 than in the year before. The number of times that the GP treated a victim of violence did not increase in 1998.

The prescription of hormone replacement by GPs for women around the menopause is not prevalent, Five years' recording of this subject gives rise to this conclusion.

The often intense pleas for the prescription of hormone replacement for women for the prevention of osteoporosis has in any case not led to an increase in prescribing among the spotter physicians.

Nor is an increase evident in the number of patients with an eating disorder (anorexia nervosa or boulimia nervosa). The increased attention in the media may create a different impression; this is not borne out by recording by the GPs.

Prof. dr. J. van der Zee
Chairman, Counselling Committee

INTRODUCTION

Continuous Morbidity Registration is a method of registration based on general practice. A national network of general practices, the sentinel stations, covers 1% of the Dutch population. In the composition of this network allowance has been made for a geographical spread and for a spread over regions with a varying degree of urbanization (see p. 6-9).

The participating general practitioners, the spotter physicians, submit a form every week on which certain illnesses, occurrences and actions are reported, the weekly return. This weekly return comprises a distribution by age and where necessary a distribution by sex (see p. 135).

Every two years a census takes place of the practice populations concerned. In this way the population to which the collected data must be related is known.

On the whole frequencies are calculated according to age group per 10 000 men or women (see p. 16).

Every year the topics that are to be placed on the weekly return are selected by the Counselling Committee. Requests or suggestions from others are also taken into consideration. In order that a disease or occurrence may be placed on the weekly return, at least five conditions must be met:

1. the importance of the subject must be described;
2. it must be possible to formulate strict and clear criteria with respect to the disease or occurrence to be recorded;
3. application of these criteria may not be too time-consuming and it has to suit the practice of the GP;
4. there must be a need for information at a national representative level, and
5. the CMR Sentinel Stations form the most suitable source of information.

When a topic is included for the first time in the weekly return, some background information is given in this report; for the 'old subjects' it is necessary to consult one of the previous reports.

When considering the subjects that have been included during the years on the weekly return (see p. 136 and 137) the conclusion is reached that the name of the project, Continuous Morbidity Registration, does not in fact cover the whole work. After all, in part it is not diseases that are registered but actions or occurrences. The name sentinel stations is better: a watch is kept, sometimes for one year, sometimes longer or even continuously. That is why the name "Continuous Morbidity Registration, Sentinel Stations the Netherlands" is used.

In addition to the submission of weekly returns, a start was made in 1976 with incidental investigations. This entails the physicians being asked at the end of the year questions about diseases or occurrences that did not happen frequently in the past year.

The report gives neither an exhaustive (statistical) analysis of the collected material nor an extensive study; the aim of the project is to collect basic details on certain subjects and to pass them on.

International cooperation

Since 1985 the CMR Sentinel Stations have been participating in international projects. Initially only in the International Primary Care Network, later in Eurosentinel too. Above all in Europe further cooperation has developed between networks of sentinel stations.

The European Influenza Surveillance Scheme (EISS) is currently the project with the longest history. In EISS not only the networks of sentinel stations cooperate, but also the national influenza centres of the participating countries: Belgium, Germany, France, Italy, Portugal, Scotland, Spain, the Czech Republic, Switzerland, the United Kingdom and the Netherlands. EISS is coordinated by NIVEL.

For coordination of EISS financing has been obtained from the European Commission.

In 1998, at the initiative of NIVEL and in cooperation with Dr Douglas Flemming (UK), the project leader of the British Sentinel Stations (Weekly Returns Service), subsidy has been requested and obtained for a project aiming at gearing together the health information from the networks of sentinel stations in countries of the EU.

The CMR Sentinel Stations are participating in this project.

COUNSELLING COMMITTEE

The subsidy arrangement with the Ministry of Public Health, Welfare and Sport lays down that the Counselling Committee for the implementation of the registration systems consists in principle of:

1. two representatives of the Ministry of Public Health, Welfare and Sport;
2. the Director of the Netherlands Institute of Primary Health Care (Chairman);
3. one representative of the Netherlands Institute of Primary Health Care;
4. two representatives of the Health Care Inspectorate;
5. two representatives of the spotter physicians;
6. one representative of the joint Institutes for General Practice of Dutch Universities;
7. two members on the basis of specific expertise.

In 1998 the committee functioned in the following composition:

F.K.A. Fokkema, M.D.⁵
W. Reijmerink¹
Dr. F.G. Schellevis, M.D.physician-epidemiologist³
H.O. Sigling, M.D.⁷
Dr. M.J.W. Sprenger, epidemiologist/microbiologist⁷
Dr. H. Verkley, sociologist⁷
J. Vesseur, M.D.⁴
A.A.M. Vloemans, M.D, physician/epidemiologist¹
J.K. van Wijngaarden, M.D.⁴
Prof. Dr J. van der Zee², chairman

Project leader: A.I.M. Bartelds, M.D.

Secretaries: Mrs M. Heshusius-van Valen

In 1997 Dr. D. Fleming, director of the Birmingham Research Unit of the Royal College of General Practitioners, was engaged as adviser to the CMR-Sentinel Stations.

This committee met twice in 1998. It had one vacation. (a representative of the spotter physicians). The committee had three members on the basis of specific expertise in 1998, whereas the joint Institute for General Practice of Dutch Universities were not represented.

MEETING OF SPOTTER CO-WORKERS 1998

Contact between the registering physicians and their co-workers, the counselling committee, the topic-holders and the project leaders is of great importance to a registration project like the CMR Sentinel Stations. Every year, at the beginning of a new registration period, a meeting is held for that purpose.

The CMR Sentinel Stations sometimes record topics with a number of years between two recording periods. Diabetes mellitus is one of those disorders, and mononucleosis infectiosa has appeared twice on the weekly return.

In the case of the incidental investigations too there is intermittent recording of a topic: anorexia nervosa and bulimia. Dr H.W. Hoek, psychiatrist/epidemiologist and chairman of the national Steering Group for Eating Disorders, manages this topic. In his presentation on the subject he again considered the syndrome anorexia nervosa and bulimia and what the GPs are deemed to record. Analysis of the recording of the first years of the second recording period shows that there is no question of an increase in the disorder.

The surveillance of respiratory infections under the denominator of influenza-like disorders has become a permanent activity of the CMR sentinel Stations and thus Dr J.C. de Jong is a permanent fixture in the programme. The audience was on this occasion informed about the recent developments in Hong Kong, in particular about the influenza (H₅N₂) virus active there. There is little surprising to report about the Dutch situation up to and including December 1997 with regard to the incidence of the viruses that cause respiratory diseases.

Dr T.G. Kimman, from the Laboratory for Infectious Disease Research of the RIVM, and Dr J.O.M. Zaat, general practitioner at Purmerend, discussed under the leadership of Prof. J. van der Zee, chairman of the Counselling Committee of the CMR Sentinel Stations and director of NIVEL, the role of the general practitioner in the research into infectious diseases. Views differ on above all the usefulness and the possibilities of making a good collection of samples among GPs. Dr Kimman proves to be eagerly awaiting the results of the patient-control investigation into acute gastro-enteritis. Dr Zaat is equally eager.

J. van der Velden, coordinator of the European Influenza Surveillance Scheme (EISS) and director of the National School for Public Health, Utrecht, explained the objectives of EISS and demonstrated to those present EISS' website on the big screen. At that time, that is to say up to and including week 52 of 1997, no increased influenza activity had been established as yet in the national or regional networks participating in EISS. The website does show that a number of influenza viruses had already been isolated in the participating networks.

DISTRIBUTION OF THE SENTINEL STATIONS OVER THE NETHERLANDS

Figure 1
 SENTINEL STATIONS
 Continuous Morbidity Registration
 1998



The number of sentinel stations in 1998 was 43. The number of general practitioners in the sentinel station practices is 65.

In the processing and discussion the following abbreviations or codes are used:

- A for the Groningen, Friesland and Drenthe province group (northern provinces);
- B for the Overijssel, Gelderland and Flevoland province group (eastern provinces);
- C for the Utrecht, North Holland and South Holland province group (western provinces);
- D for the Zeeland, North Brabant and Limburg province group (southern provinces);
- 1 for the degree of urbanization 5 (rural municipalities);¹
- 2 for the degree of urbanization 4-3-2 (urbanized rural municipalities together with municipalities with urban characteristics);
- 3 for the degree of urbanization 1 (municipalities with a population of 100 000 or more).

Appendix 1 (p. 133-134) gives a survey of the general practitioners who took part in the sentinel station project during 1998. In 13 sentinel stations there is cooperation between two or more general practitioners, viz 9 times 2, 4 times between 3 practitioners and once between 6 practitioners. In January 1998 the percentage of general practitioners cooperating throughout the Netherlands was 55%, and among the spotter physicians 55. There are 6 dispensing spotter physicians, 4 in degree of urbanization 1 and 2 in degree of urbanization 2, that is 9.4% of the total number of spotter physicians. For the Netherlands as a whole this percentage is 9.1.²

Tables 1 and 2 give a distribution of the number of spotter physicians and sentinel stations per province and degree of urbanization in the years 1989-1998. Adjustment to the standards applicable to the classification by degree of urbanization takes place where and when necessary.

Comparison with the number of general practitioners in the Netherlands in the various subgroups shows that the spotter physicians form a proportional representation.

Table 1: Distribution of the spotter physicians (general practitioners) and sentinel stations per province group in the years 1989-1998³

province group	A		B		C		D	
	Groningen, Friesland and Drenthe		Overijssel, Gelderland and Flevoland		Utrecht, North and South Holland		Zeeland, North Brabant and Limburg	
	number of		number of		number of		number of	
	GPs	sentinel stations	GPs	sentinel stations	GPs	sentinel stations	GPs	sentinel stations
1989	10	6	10	8	28	21	13	10
1990	10	6	10	8	28	20	13	10
1991	10	6	10	8	29	19	14	10
1992	10	6	10	8	29	19	14	10
1993	10	6	12	10	28	19	15	10
1994	10	6	13	11	26	18	15	10
1995	12	6	14	11	24	17	15	10
1996	12	6	14	10	26	17	15	10
1997	12	6	15	11	19	15	18	10
1998	12	6	16	12	23	16	14	9

Table 2: Distribution of the spotter physicians (general practitioners) and sentinel stations per degree of urbanization in the years 1989-1998

degree of urbanization	1		2		3		Netherlands	
	rural municipalities ¹⁾		urbanized rural municipalities together with municipalities with urban characteristics		municipalities with a population of 100 000 or more			
	number of		number of		number of		number of	
	GPs	sentinel stations	GPs	sentinel stations	GPs	sentinel stations	GPs	sentinel stations
1989	9	6	38	26	14	13	61	45
1990	10	6	37	25	14	13	61	44
1991	10	6	39	25	14	12	63	43
1992	10	6	37	24	16	13	63	43
1993	10	6	38	26	17	13	65	45
1994	9	7	41	29	14	9	64	45
1995	10	7	42	28	13	9	65	44
1996	10	7	43	27	14	9	67	43
1997	10	7	43	27	11	8	64	42
1998	11	8	44	28	10	7	65	43

1) From 1994 the new criterion of degree of urbanization as used by the CBS has been applied in the breakdown of the sentinel stations.

THE PRACTICE POPULATIONS

In 1997 a census of the practice populations took place; these details have been used for processing with effect from 1-1-1998. In 1999 a new census took place.

When the project was set up the aim was to take a sample of about 1% of the Dutch population. A geographical distribution (the above-mentioned province groups) was taken into account, as also a distribution of regions with various degrees of urbanization (degree of urbanization). An enquiry was held as to whether this aim is still being met. This proved broadly still to be so, as the following surveys demonstrate.

The Dutch population increased in 1997 by 87 085 inhabitants to 15 654 192 as on 1-1-1998.

Table 3: Comparison of the population of the practices of the spotter physicians with the total population of the Netherlands

		number of inhabitants of the Netherlands ⁴	number of patients of sentinel stations ⁵ (with percentages)
province group	A	1 640 804	25 079 (1.5%)
	B	3 252 469	37 383 (1.1%)
	C	6 933 733	48 638 (0.7%)
	D	3 827 146	35 522 (0.9%)
degree of urbanization	1	2 505 359	23 940 (0.9%)
	2	10 399 645	102 846 (1.0%)
	3	2 749 188	19 896 (0.7%)
sex	men	7 740 074	72 125 (0.9%)
	woman	7 914 118	74 497 (0.9%)
total		15 654 192	146 622 (0.9%)

Province group A (the northern provinces) is over represented.

With effect from the statistical year 1992 the Central Bureau of Statistics introduced a new criterion of urbanization: the address density of the surroundings.¹

The percentages of the men and women of the population of the Netherlands coming under the sentinel stations, per age group, province group and degree of urbanization, are as follows.

age in years	province group								degree of urbanization						Netherlands	
	A		B		C		D		1		2		3		M	F
	M	F	M	F	M	F	M	F	M	F	M	F				
0-4	1.5	1.4	1.1	1.1	0.6	0.6	1.0	0.9	0.8	0.8	0.9	0.9	0.7	0.7	0.9	0.9
5-9	1.5	1.5	1.2	1.3	0.6	0.7	1.0	0.9	0.9	0.9	1.0	1.0	0.7	0.8	0.9	0.9
10-14	1.4	1.6	1.2	1.2	0.7	0.7	0.9	1.0	0.9	0.9	1.0	1.0	0.8	0.7	0.9	0.9
15-19	1.5	1.6	1.0	1.0	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	0.8	0.8	0.9	0.9
20-24	1.5	1.8	1.0	1.1	0.7	0.9	0.9	1.0	1.0	1.2	1.0	1.1	0.6	0.8	0.9	1.1
25-29	1.8	1.8	1.3	1.3	0.7	0.8	1.0	1.0	1.1	1.1	1.1	1.1	0.7	0.9	1.0	1.0
30-34	1.6	1.7	1.2	1.2	0.6	0.7	1.0	1.0	1.0	0.9	1.0	1.0	0.7	0.8	0.9	1.0
35-39	1.7	1.6	1.2	1.2	0.6	0.7	1.0	0.9	0.9	0.9	1.0	1.0	0.7	0.8	0.9	0.9
40-44	1.5	1.5	1.2	1.1	0.7	0.7	1.0	1.0	0.9	0.9	1.0	1.0	0.7	0.7	0.9	0.9
45-49	1.6	1.6	1.1	1.0	0.7	0.7	0.9	0.9	1.0	0.9	1.0	1.0	0.7	0.8	0.9	0.9
50-54	1.4	1.4	1.1	1.2	0.7	0.6	0.9	0.9	1.0	0.9	0.9	0.9	0.6	0.6	0.9	0.9
55-59	1.4	1.5	1.1	1.2	0.7	0.7	0.9	0.8	0.9	1.0	1.0	0.9	0.7	0.7	0.9	0.9
60-64	1.5	1.5	1.2	1.3	0.7	0.7	0.8	0.8	1.0	1.0	1.0	1.0	0.8	0.7	0.9	0.9
65-69	1.3	1.3	1.2	1.2	0.7	0.7	0.8	0.9	1.0	1.0	1.0	0.9	0.7	0.7	0.9	0.9
70-74	1.3	1.3	1.2	1.0	0.7	0.7	0.8	0.9	1.0	0.9	0.9	1.0	0.6	0.7	0.9	0.9
75-79	1.3	1.3	1.1	1.0	0.7	0.8	0.8	0.8	1.0	1.0	0.9	0.9	0.7	0.6	0.9	0.9
80-84	1.2	1.3	1.2	1.0	0.7	0.7	0.8	0.9	1.0	1.1	1.0	0.9	0.5	0.6	0.9	0.9
≥ 85	1.5	1.3	1.4	0.9	0.7	0.7	0.9	1.0	1.1	1.1	1.1	1.0	0.7	0.6	1.0	0.9
total	1.5	1.5	1.2	1.1	0.7	0.7	0.9	0.9	1.0	0.9	1.0	1.0	0.7	0.7	0.9	0.9

It can be established that in 1998 there was an under representation of province groups C and degree of urbanization 3.

SCOPE AND CONTINUITY OF THE REPORTING

Since 1975 the number of days reported annually per sentinel station and the number of days per week of all sentinel stations together have been examined and processed. In this an effort was made to follow the scope and continuity of the reporting. In general the spotter physicians state - or have someone state - whenever they cannot report (vacation, personal circumstances). In the case of a weekly return not being submitted in time, telephone contact is made.

The maximum number of days that can be reported depends on the number of weeks in the year in question and the number of sentinel stations. In 1998 it was 11 395 (53 weeks x 5 days x 43 sentinel stations).

Table 4 shows the absolute numbers and the percentages.

Table 4: Maximum and actual number of reporting days per year

year	maximum number of days which can be reported	actual number of absolute	reported days percentage
1989	11 700	10 380	88.7%
1990	11 340	9 997	88.2%
1991	11 180	9 903	88.6%
1992	11 395	10 141	89 %
1993	11 700	10 269	87.8%
1994	11 700	10 227	87.4%
1995	11 400	9 900	86.5%
1996	11 180	9 663	86.4%
1997	10 920	9 340	85.5%
1998	11 395	9 733	85.4%

The percentage of reporting days is somewhat lower in 1997 than in previous years.

A breakdown by province and degree of urbanization may be seen in the following table. No great differences prove to exist.

The reporting in municipalities with more than 100 000 inhabitants is with 82% the lowest of the degree of urbanization groups. In the northern provinces the reporting with 94.2% is the highest of the province groups.

Per province group	Per degree of urbanization
A 94.2%	1 85 %
B 84.1%	2 86.4%
C 82 %	3 82 %
D 87.5%	

In Fig. 2 the weekly reporting in all sentinel stations can be found. This figure clearly shows the influence of public holidays. The average number of non-reporting days per week is 31 (maximum 43 x 5= 215).

Figure 2: The number of days registered in 1998 per week.

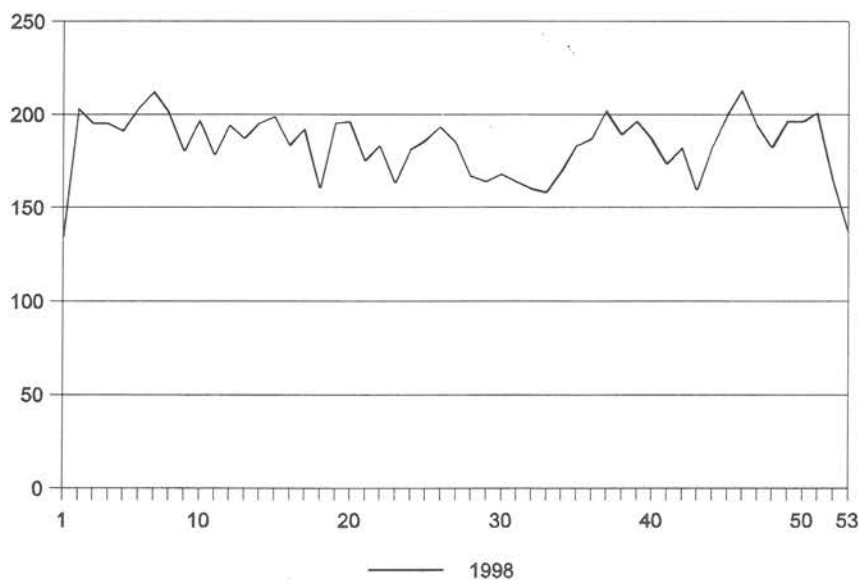


Table 5 presents the frequency distribution of the number of days not reported per sentinel station. The average number of non-reporting days per sentinel station in 1998 is 38 somewhat higher than in 1997.

A breakdown into single and group practices shows a clear difference here, viz 46 and 19 days respectively. This is in line with the frequent assertion that forms of cooperation of general practitioners increase the continuity of reporting.

Table 5: Frequency distribution of the number of days not reported on per sentinel station

number of days not reported on	number of sentinel stations									
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
≤ 0	1	2	1	2	3	4	3	4	3	3
1- 9	6	5	7	7	7	2	3	4	4	5
10-19	6	5	3	4	1	5	3	2	2	2
20-29	5	6	11	5	6	2	6	5	6	4
30-39	15	11	10	13	13	13	11	6	6	7
40-49	9	10	9	9	11	12	12	13	12	9
50-59	2	2	1	1	3	5	3	7	6	5
60-69	1	1	0	1	-	2	-	1	1	6
70-79	0	1	0	-	-	-	1	-	1	-
80-89	0	1	0	-	-	-	1	-	-	-
90-99	0	0	0	-	-	-	-	-	-	1
≥ 100	0	0	1	1	1	-	1	1	1	1
total number of sentinel stations	45	44	43	43	45	45	44	43	42	43
average	29	32	30	29	32	32	35	35	37	39
median	32	33	29	33	34	37	37	40	40	40

Further study of this table shows fairly constant reporting over the years. A major failure to report, i.e. more than 50 days per sentinel station, occurs in nearly 28% of the sentinel stations in 1998. This is more than in 1997. Illness of the spotter physician is the commonest reason for not reporting for a length of time.

THE WEEKLY RETURN (Appendix 2, p. 135)

The questions on the weekly return for 1998 were composed as follows; it is stated in brackets in which year the topics were added to the return.

1. Influenza(-like illness) (1970);
2. Cervical smear (1976);
3. Dog Bites (1998);
4. Herpes zoster (1997);
5. Sterilization of the man performed (1972);
6. Sterilization of the woman performed (1974);
7. Oestrogens prescribed (1994);
8. (Attempted) suicide (1979);
9. Out-patient mammography (1988);
10. P.I.D. (1993);
11. Urethritis of the man (1992);
12. Concern about AIDS (1988);
13. Physical violence (1996);
14. Gastro-enteritis (1996);
15. Prostate trouble (1997);
16. Whooping cough (1998).

The basis in principle is weekly reporting, which means that patients seen by the locum in a "free weekend" are reported as well (influenza excluded). Diagnoses made or advice given by telephone are not entered in the weekly return in principle; here too influenza is an exception.

The subjects in alphabetical order can be found in Appendix 3 (p. 136-137) together with the years of registration.

PROCESSING OF THE DATA ON THE WEEKLY RETURN

This report contains the results of the weekly return for 1998. The data were processed in 1998 at NIVEL.

Three tables are produced on a routine basis:

1. the absolute number of patients by sex and age group;
2. the absolute number of patients by sex and province group;
3. the absolute number of patients by sex and degree of urbanization.

Tables 1, 2 and 3 are produced per week on behalf of the surveillance and per quarter and per year on behalf of the reporting. Moreover, Table 1 is also produced every quarter per sentinel station for the convenience of the participating physicians.

With the exception of the information furnished per sentinel station, the data are likewise expressed per 10 000 of the total practice population (relative frequencies). The frequencies are given in round figures. In the case of frequencies of under 0.5 per 10 000 inhabitants, the figure is rounded off to '0'. When no cases at all have been reported, this is indicated by '-'. A frequency that is based on fewer than 5 reports is put between brackets.

When the frequency of new cases of a disease in a given period is concerned, one speaks in epidemiology of incidence; if, on the other hand, all existing cases of that disease in a given period or at a given moment in time are concerned, that is designated as prevalence. There is also a subdivision into absolute and relative incidence or prevalence.

In this report the incidence or prevalence is in all cases calculated per 10 000 inhabitants or men or women. So as to be able, if desired, to calculate absolute numbers for the Netherlands, in Appendix 4 (page 139) the age structure as on 1 January 1998 is given.

When a sentinel station does not report over the whole week (sickness, vacation, etc.), this is mentioned. The data from the physicians who have reported on 0, 1 or 2 days of the week are not processed, while the populations of these practices are not included in the calculation of the frequencies. The data from the practices that have reported on more than 2 days of the week are processed.

Until 1978 a correction factor was applied to this. Consideration of the number of times it was applied showed that the influence on the total was so small that this correction has been done away with effect from 1 January 1978. Moreover, enquiries among the spotter physicians revealed that in the cases of 1 or 2 days absence the work was simply moved to a later date.

The returns are built up from the weekly return figures, the frequencies being calculated on the average population present in the quarter.

This annual report will not attempt to give a complete analysis of the material, as already mentioned in the introduction.

The following annual tables are included (page 140-145).

1. Cumulative, all sentinel stations standardized. Year 1998, week 01-53, p. 1-3.⁶
2. Province group standardized by syndrome. Year 1998, week 01-53, p.1-3.⁶
3. Degree of urbanization standardized by syndrome. Year 1998, week 01-53, p. 1-3.⁶

INFLUENZA(-like illness)

Influenza⁷ is the only subject to have appeared on the weekly return since the start of the sentinel station project. The data on this subject are regularly distributed and used at international level. As soon as an increase in the incidence is noted, the numbers are reported weekly to the WHO in Geneva, together with virological and serological results. In this way the Netherlands participates in the worldwide influenza surveillance.

Influenza 1997/1998 and 1998/1999

1997/1998 season

Figures 3.1-3.3 give the number of cases of influenza-like illness per 10 000 inhabitants per week for the Netherlands and by province group and degree of urbanization for the 1997/1998 season⁸ Figures 4.1-4.3 give the number of cases for the 1998/1999 season. The progress of influenza-like illness in the first weeks of 1998 was already discussed in the 1997 report.

Figure 3.1 Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, for the Netherlands, 1997/1998

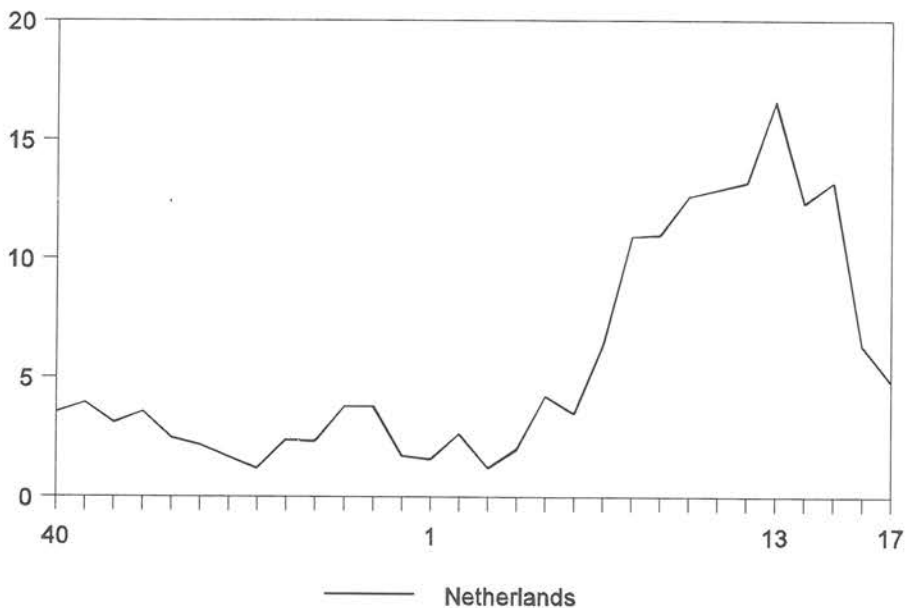


Figure 3.2 Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per degree of urbanization, 1997/1998

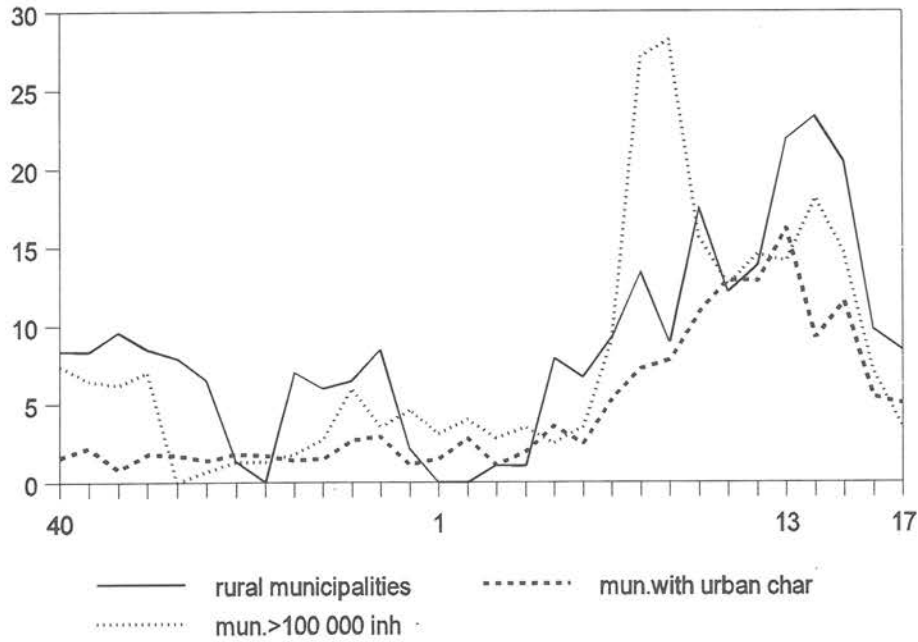
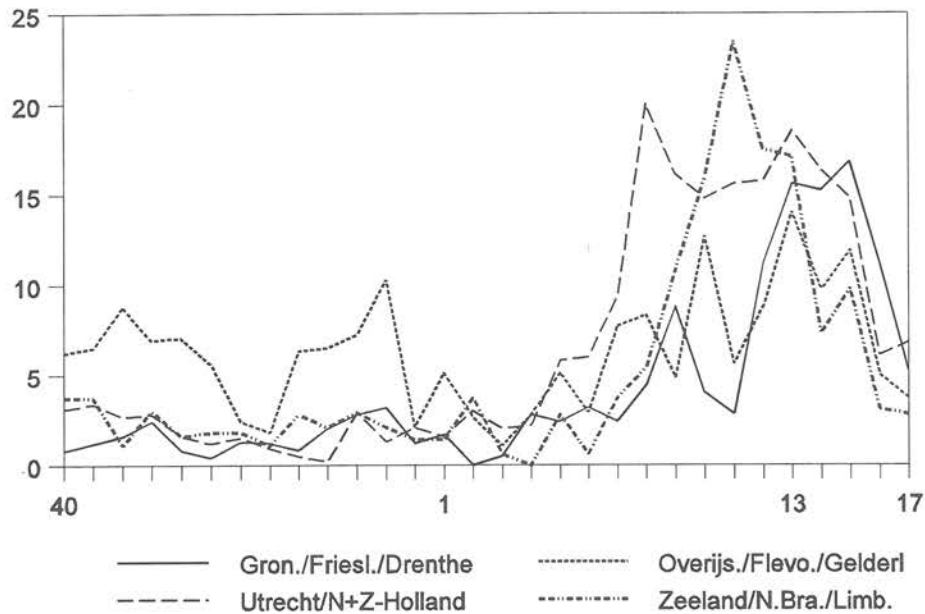


Figure 3.3 Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per province group, 1997/1998



1997/1998 season

In the 1997/1998 season the first influenza virus isolate was unusually slow to put in an appearance: in week 3 of 1998 an influenza B virus was isolated from a throat/nose swab submitted by one of the spotter physicians. In the same week the first influenza A virus was also isolated. This virus originated from a hospitalized patient. The season really got started in week 7. In week 8 an incidence of more than 10 cases of influenza-like illness per 10 000 persons was recorded for the first time. Not until week 13 of 1998 was the highest incidence reached: 17 per 10 000 persons. In the present season there is no question of a true "peak" such as is usually determined during an influenza A season. In 1995-1996 the highest incidence was 39 per 10 000; in 1996/1997 29 per 10 000. The majority of the further analysed influenza A viruses resemble the variant influenza A(H₃N₂)/Sydney.

1998/1999 season

Figure 4.1 Number of inhabitants with influenza(-like illness) per week and per 10 000 inhabitants, for the Netherlands, 1998/1999

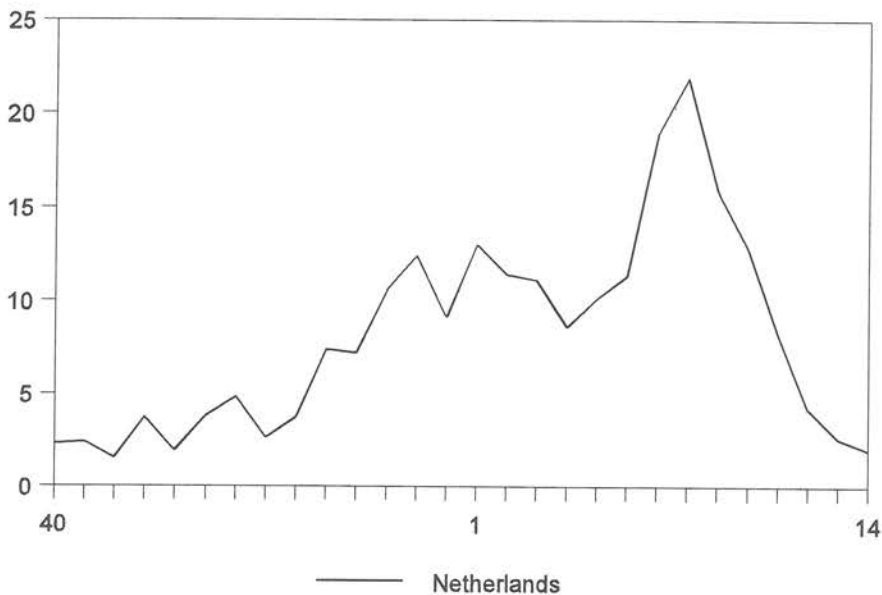


Figure 4.2 Number of inhabitants with influenza(-like illness) per week and per 10 000 inhabitants, per degree of urbanization, 1998/1999

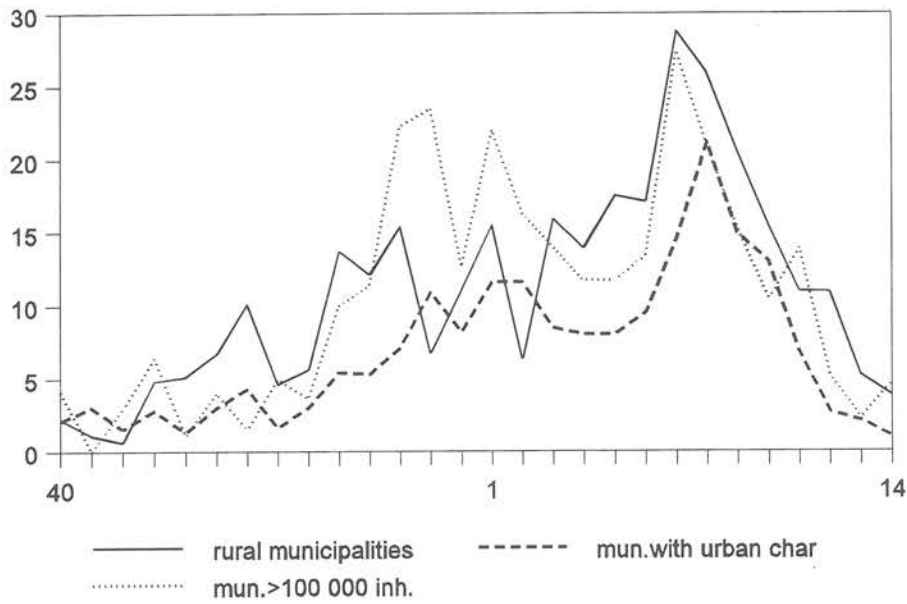
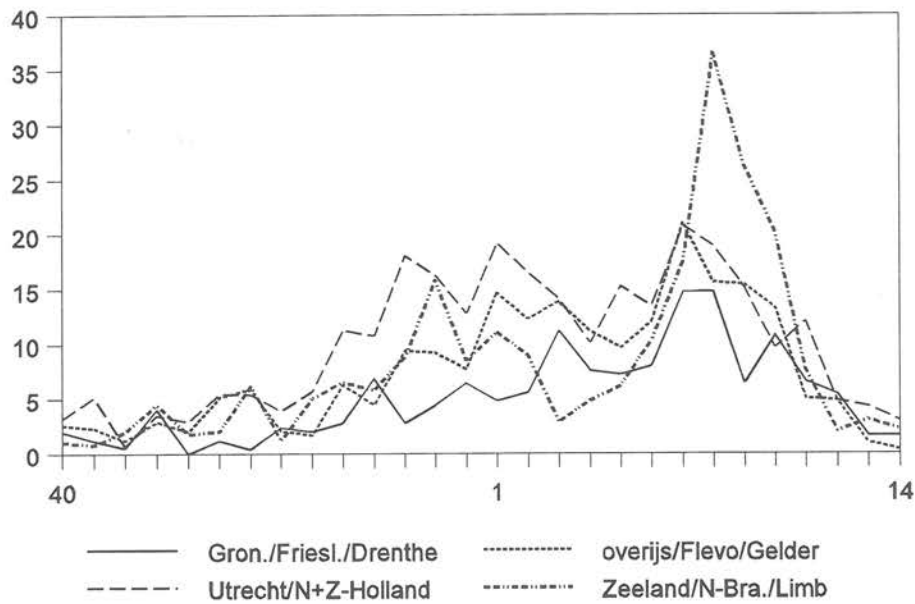


Figure 4.3 Number of inhabitants with influenza(-like illness) per week and per 10 000 inhabitants, per province group, 1998/1999



1998/1999 season

The trend of influenza activity during this season may be described as unusual. In the first place there were clearly two successive waves of influenza. As a result, the period with significantly increased influenza activity was longer than usual. The peak incidence in an absolute sense was not exceptionally high: 23 per 10 000 inhabitants in week 8 of 1999.

In week 47 of 1998 the first influenza virus of the season was isolated: an influenza B virus. In the weeks thereafter the number of influenza B viruses from the practices of the spotter physicians increased. In week 49 the incidence clearly increased for the first time.

From week 50 onwards influenza A viruses were also isolated, though clearly less in number than the influenza B viruses. After week 2 of 1999 the influenza A virus got the upper hand. Both the influenza A(H₃N₂) and the influenza B virus were active for a lengthy period in the season. It is also unusual that the influenza B virus was already present so early in the season.

Table 6: Number of patients with influenza(-like illness), per 10 000 inhabitants, 1989-1998

year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
total per calendar year	410	225	348	244	484	107	315	155	233	248	
highest weekly incidence per "season"	54	24	40	27	54	16	39	29	29	17	23

This topic is to be maintained on the weekly return.

PUBLICATION ON THE BASIS OR PARTLY ON THE BASIS OF DATA FROM THE CONTINUOUS MORBIDITY REGISTRATION

WILBRINK, B., J.W. DORIGO-ZETSMA, A.I.M. BARTELDs, M.J.W. SPRENGER, M.L.A. HEIJNEN.

Surveillance of respiratory pathogens and influenza-like illnesses in general practices in the Netherlands in winter 1998/99.

European Society for Clinical Virology, Budapest, Sept, 1999.

Introduction. NIVEL is running a surveillance network of 43 sentinel general practice (GP) stations, spread over the country and covering me 1% of the Dutch population. The incidence of influenza-like illnesses (ILI) is calculated weekly during the winter season by NIVEL from the data of the network. The system was extended by the RIVM with virus isolation and detection from nose/throat swabs obtained from patients with an acute respiratory infection (ARI), of whom about 70% are registered with ILI. The aim of the study was to provide insight in the etiology of ARI in the general population.

Materials and methods. A total nose/throat swabs were examined by virus isolation and PCR, using standard procedures. PCR was performed for respiratory syncytial virus, rhinovirus, enterovirus, coronavirus OC43 and 229E and *Mycoplasma pneumoniae*.

Results. In 58% of the samples at least one virus or bacterium was detected. 28% of the respiratory pathogens were recognised by PCR only. In 5% of the samples a double-infection was observed. Influenza viruses were detected most often (25%), followed by rhinoviruses (13%). Of the rhinoviruses, 77% was detected by PCR only, whereas 23% was detected by isolation and PCR. Registration of ILI and isolation of influenza viruses were in accordance with each other. However, in 26% of the patients registered with ILI other respiratory pathogens than influenza virus were detected (44% rhinovirus) and in 47% no pathogen was detected.

Conclusions. 1) Influenza viruses and rhinovirus were the predominant viruses detected in patients with ARI from a GP sentinel system. 2) Application of the PCR improved the detection of respiratory pathogens in nose/throat swabs considerably. 3) Registration of ILI by GP's was in accordance with isolation of influenza viruses in the laboratory.

DORIGO-ZETSMA, J.W.

Respiratoire infecties in Nederland: voorlopige resultaten NIVEL/RIVM surveillance winter 1998/99.

Infectieziekten Bulletin, 1999, jaargang 10 nr. 6

HEIJNEN, M.L.A., J.W. DORIGO-ZETSMA, A.I.M. BARTELDs, B. WILBRINK, M.J.W. SPRENGER.

Surveillance of respiratory pathogens and influenza-like illnesses in general practices. The Netherlands, winter 1997/98.

Eurosurveillance vol.4- no. 7/8 1999

The Netherlands Institute of Primary Health Care (NIVEL) has coordinated the activities of a sentinel surveillance network of 43 general practices since 1970. These practices care for 1% of the Dutch populations, a sample representative of the national population in terms of age, sex, and degree of urbanisations (1). NIVEL uses data from the network to

calculate the incidence of influenza-like illness each week during the winter season. At the request of NIVEL, the system has been enhanced since the winter of 1992/93 by the National Institute of Public Health and the Environment (Rijksinstituut voor Volksgezondheid en Milieu - RIVM), to include virus isolation and detection from nose/throat swabs obtained from patients with acute upper respiratory tract infections (ARI), of which on average influenza-like illness account for about 62%.

This article presents the main findings of the surveillance of influenza-like illness and other ARI in general practice in the Netherlands in the winter of 1997/98, assesses the relationship between influenza virus isolation and influenza-like illness registrations, and compares virus isolation and polymerase chain reaction (PCR) analysis for respiratory syncytial virus (RSV), rhinovirus, and enterovirus.

CLAAS, E.C.J., A.I.M. BARTELDs, J.W. DORIGO-ZETSMA, G.F. RIMMELZWAAN, J.C. DE JONGEN A.D.M.E. OSTERHAUS.

Het influenzaseizoen 1997/98 en de vaccinsamenstelling voor 1998/99.

Epidemiologische mededeling, Ned Tijdschr Geneeskunde, 1998; 142(44) : 2423-7

The influenza season 1997/98 and the vaccine composition for 1998/99. The 1997/98 influenza season in the Netherlands was marked by influenza A/H₃N₂ activity which never reached a true epidemic level. There was no real peak activity either but a prolonged of increased activity of approximately eight weeks with a maximum in week 13, when sentinel physicians reported 16.6 cases of influenza-like illness per 10,000 inhabitants. It was not until week 18 of 1998 than the influenza activity declined to baseline levels.

During the season, almost exclusively influenza A/H₃N₂ viruses were isolated, of which the majority resembled the new strain influenza A/Sydney/5/97 (H₃N₂). Further analysis of these variant viruses revealed that, although there was some cross-reactivity with the vaccine strain (A/Nanchang/933/95), no optimal protection could be expected to be induced by the vaccine. Antigenic characterisation of the sporadic influenza A/H₁N₁ and influenza B viruses showed that these were related to the vaccine strains.

As a result of these findings, the World Health Organization (WHO) recommended to change the H₃N₂ strain in the influenza vaccine for the season 1998/99 to an influenza A/Sydney/5/97(H₃N₂)-like strain. Based on epidemiological data from other countries, it was also decided to change the influenza A/H₁N₁ component to an influenza A/Beijing/262/95 (H₁N₁)-like strain.

BESTEBROER, T.M., A.I.M. BARTELDs, M.F. PEETERS, A.C. ANDEWEG, J.J. KERSSENS, K. BIJLSMA, G.F. RIMMELZWAAN, T.G. KIMMAN, C. VERWEIJ EN J.C. DE JONG

Virological NIVEL/RIVM surveillance of respiratory virus infections in the 1996/97 season

RIVM, 1999, Report no. 245607 005

The purpose of the Netherlands Institute of Primary Health Care (NIVEL) National Institute of Public Health and the Environment (RIVM) surveillance is to establish the incidence of acute respiratory virus infections (ARI) in patients who consult their family doctor because of ARI. Since the 1992/93 season, the general practitioners (Gps) of the NIVEL network have send for this purpose nose-throat swabs from a selection of ARI patients to the

RIVM. At the RIVM, these swabs were examined using virus culture and in the 1994/95 and 1997/97 seasons also using polymerase chain reactions (PCR) for the detection of selected viruses, *Mycoplasma pneumonia* (Mp) and *Chlamydia pneumoniae* (Cp). In the 1996/97 season part of the patients were also examined for conventional bacteria.

From week 29 of 1996 until week 28 of 1997, the RIVM received in total 540 clinical samples from 540 ARI patients from 36 of the 43 participating sentinel stations of the NIVEL. A potentially respiratory pathogenic agent was detected using culture and/or PCR in 64% of the specimens. Viruses were found in 55% and conventional bacteria in 16% of the samples (Table 2). Influenza virus, cultured from 24% of the samples, was the predominant virus, followed by rhinovirus (22%), respiratory syncytial (RS) virus (5%), and enterovirus (4%) (Table 2). Two respiratory pathogens were detected in 35 clinical samples and three respiratory pathogens in three samples (Table 8).

As in previous years, a temporary increase in the rate of positive samples - especially those containing rhinoviruses - was noted in September, coinciding with the opening of schools at the end of August (Fig. 3). The influenza epidemic of the 1996/97 season started in the second half of December in the Netherlands. It had the usual size (Fig. 4), and length (Fig. 5). The epidemic began with a major wave of subtype A(H₃N₂) virus infections, followed by a small overlapping wave of type B virus infections in weeks 4-9 (Fig. 5). Sixty-one percent of the influenza viruses isolated from GP patients were H₃N₂, while 88% of those isolated in diagnostic laboratories were this subtype (Fig. 7). In fact, this is a yearly recurring phenomenon (Fig. 8) and probably reflects the higher pathogenicity of subtype A(H₃N₂) compared with type B.

Over the five seasons studied, influenza virus infections accounted for at least 26% of the ILI registered by NIVEL (Table 25). Calculated over the same five seasons, an estimated 2.7% of the Dutch population developed an ILI caused by an influenza virus infection per season (Table 13). According to the ILI registration, the highest incidence of ILI was among 0-4-year-old children (Table 11). After correction for the influenza virus isolation rate and the fraction of ILI patients who consulted their GP, however, the highest incidence of influenza, 5.3%, was among the 5-14-year olds (Table 13). Influenza occurred most frequently in the (according to popular belief "healthy") country-side (Table 17) and least frequently in the northern region of the Netherlands (Table 18).

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CERVICAL SMEAR

Taking of a cervical smear was placed on the weekly return for the first time in 1976. The initial aim was to obtain insight into the extent of this work outside the mass screening for cervical cancer.

The question is subdivided into the indication for taking a cervical smear, i.e. following complaints and/or symptoms, on 'preventive' grounds at the initiative of the spotter physician or the woman, and a separate column in the case of a repeat smear, irrespective of the indication for taking the previous smear. Three years has been adhered to as the period within which a second or following smear has to be reported as a repeat smear. For 1998 that therefore means that a smear is reported as a repeat smear when the spotter physician himself has already taken a smear from the woman in question after 1 January 1996. This period is identical with the then valid interval between two mass screenings.

This topic has acquired a somewhat changed objective, since in March 1982 the Minister of Public Health and Environment announced the intention to amend the policy regarding mass screening for cervical cancer. On 25 August 1988 agreement was reached between the Association of Netherlands Health Insurance Funds and the professional organizations of general practitioners on reimbursement for the taking of cervical smears from patients covered by a health insurance fund (provisionally directed towards women of 35-54 years, and with a screening interval of three years). This made it possible to start the mass screening for cervical cancer throughout the Netherlands in 1989.

In 1996 a number of changes in performance of the mass screening for cervical cancer were introduced: the target group is now women of 30-60 years and the screening interval 5 years.

Enquiring among the spotter physicians revealed that mass screening for cancer smear was in fact a reality in all of the 43 sentinel stations. In 1989 mass screening was a fact in only 22 of the 45 sentinel stations.

In Table 7 the total number of smears taken has been subdivided by indication for taking the smear, including the repeat smears.

Table 7: Number of smears taken by spotter physicians by indication for taking a smear, per 10 000 women, 1989-1998

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
complaints and/or symptoms	72	55	73	72	70	60	59	61	64	96
"preventive"	521	577	537	523	485	474	467	560	667	611
repeat smear	237	273	239	233	225	268	267	267	278	216
total	830	905	849	828	780	802	793	888	1009	923

The total number of smears (1009 per 10 000 women) was higher in 1997 than in any previous year, and also higher than in 1998 (923 per 10 000 women).

In 1989 the new-style mass screening started at many places in the country. In 1990 this programme developed further. When considering these tables, as remarked in the previous reports, one must make allowance for the fixed period of three years within which a smear counts as a repeat smear.

The total number of first smears made on preventive indication, i.e. on the initiative of both the GP and the woman, nearly doubled in the period 1983-1990, from 294 to 577 per 10 000 women (see Table 7). In 1990-1995 the number of smears taken on preventive indication decreased again, to 467 per 10 000 women. At the end of this chapter this remarkable fall is further considered. The clear increase in 1996 and 1997 will also be discussed.

The year is considered separately.

The number of smears on account of complaints and/or symptoms has since 1980 been at a level of some 65 per 10 000 women. The years 1988-1989 and 1991-1993 displayed a higher level: over 70 per 10 000. In 1994-1996 the number of smears on account of complaints and/or symptoms was 60 per 10 000; in 1997 this number was a fraction higher: 65 per 10 000. As regards this category, the arrangement to register each smear taken from one and the same woman within a certain period as a repeat smear should be borne in mind. The actual number of smears taken on account of complaints and/or symptoms will therefore be higher.

The number of repeat smears increased in the eighties to 273 per 10 000 women in 1990. From 1991 onwards this number falls. In 1994-1997 a higher number of repeat smears was again taken every year: 278 per 10 000 women in 1997.

However, in 1998 a lower number occurred again, viz 216 per 10 000 women.

Age distribution

Table 8 gives a survey of the number of 'first' smears per age group per 10 000 women (cf. Figure 5).

Table 8: Number of 'first' cervical smears taken by age group, per 10 000 women, 1994-1998

	age group								
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64
1994	196	437	752	1601	1575	1178	1220	308	134
1995	186	437	707	1464	1548	1272	1196	410	190
1996	144	388	1593	1400	1308	1146	1242	1183	477
1997	142	556	1627	1360	1613	1610	1466	1547	670
1998	115	580	1300	1337	1840	1954	1177	1227	563

After the increase in the number of 'first' smears taken after 1988 in above all the 35-54 age group, from 1991 a continuing fall may be established in the number of 'first' smears taken in this target group of the mass screening.

In 1996 too this number fell further. However, in that year this could have been the result of adjustment of the interval between two smears, through which fewer women in this age group were called up.

A striking, but not entirely unexpected rise was established in the 25-34 and 55-64 age groups. These age groups overlap the above-mentioned expansion of the mass screening for cervical cancer: 30-34 years and 55-59 years respectively.

Table 8 gives a survey over the last five years of the number of 'first' smears per 5-year age group. The results of the expansion of the target group for the mass screening are then more clearly visible; above all in the case of the women called up for the first time, the 30-34 age group. a considerably larger number of first smears were taken, and also for women of 55-59 years and of 60-64 years.

From Table 8 it can be calculated that in the now applicable age groups for the mass screening the following percentages of the women have been reached in the last three years: 30-43 45.2%, 35-39 41%, 40-44 48%, 45-49 47%, 50-54 39% and 55-59 40%.

Around 1983, when the old-style mass screening was still in full swing, for the 35-44 and 45-54 age groups the percentages of women that were reached were 21 and 15 per cent respectively.

The GP therefore apparently reaches the older group less well. That can be explained in part by the number of women with a total uterus extirpation increa-

sing with age. This number is estimated for the total 35-54 age group at 14%, of which the 45-54 age group accounts for the majority.

Figure 5: Total number of 'first' cervical smears made by sentinel stations by age group, per 10 000 women, 1994-1998

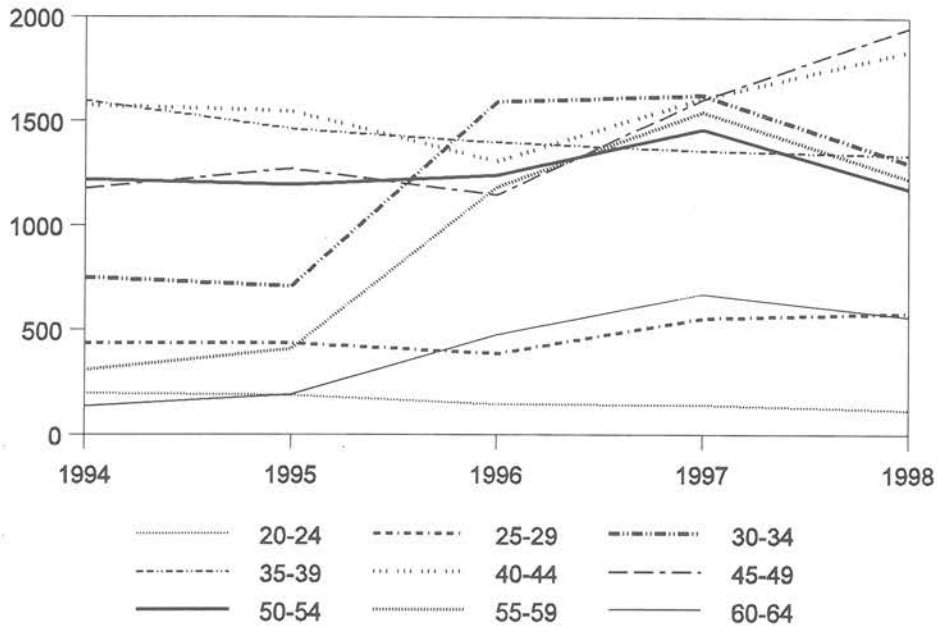
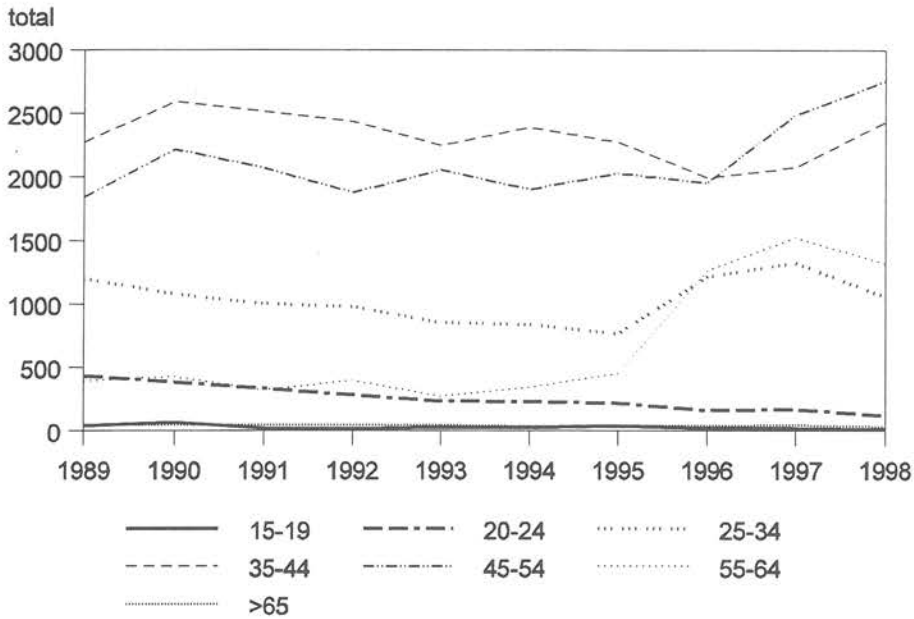


Table 9 gives a breakdown by age (see also Figure 6).

Table 9: Total number of cervical smears taken by spotter physicians by age group per 10 000 women, 1989-1998

		age group						
		15-19	20-24	25-34	35-44	45-54	55-64	>65
total	1989	44	437	1201	2274	1847	391	46
	1990	65	385	1081	2593	2221	423	50
	1991	20	333	1004	2518	2073	317	45
	1992	18	283	979	2438	1882	394	50
	1993	34	232	856	2249	2059	271	50
	1994	26	230	838	2391	1905	341	37
	1995	42	218	766	2276	2035	448	43
	1996	21	165	1218	1997	1956	1260	41
	1997	21	171	1329	2079	2490	1525	45
	1998	10	124	1061	2434	2756	1319	31

Figure 6: Total number smears of the cervix uteri taken by age group per 10 000 women, 1989-1998



In the younger age groups up to 30 years the number of smears seems to be stabilizing. In 1998 hardly any smears were made under the age of 20.

As expected, in the proportional distribution of the smears taken by age group a clear shift has occurred.

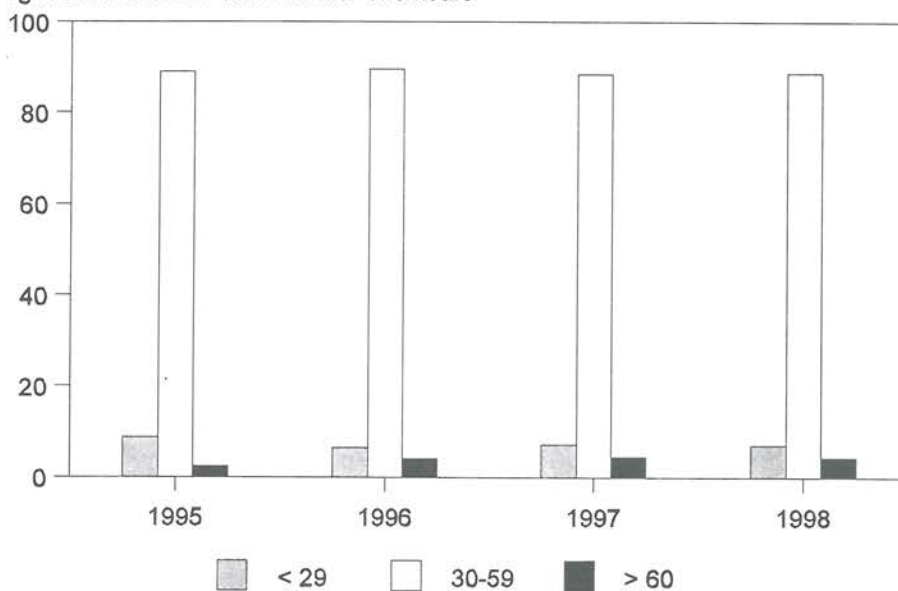
The share of the target group of the mass screening - was 35-54, is now 30-59 - has now become nearly 90%.

Table 10: Proportional distribution of smears taken per age group for all sentinel stations (as percentages), 1995-1998

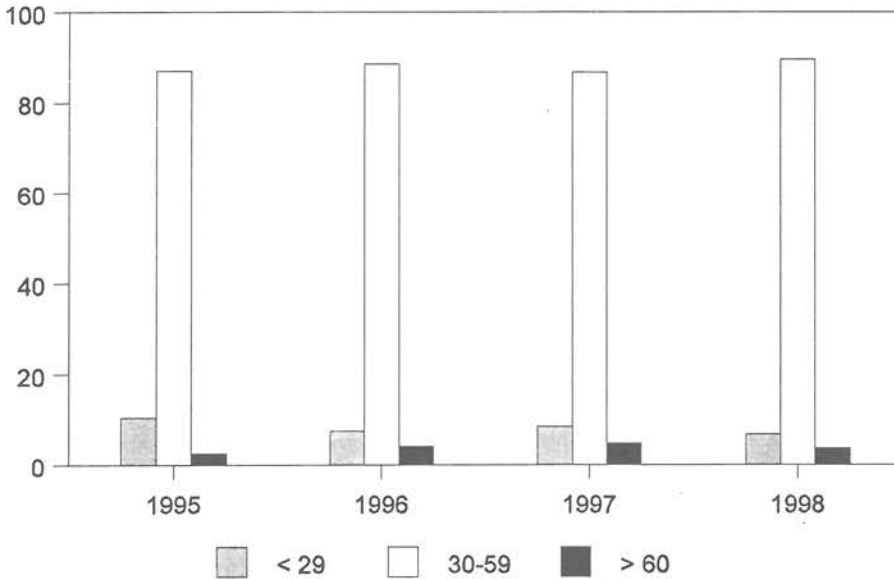
	≤29	30-59	≥60	total
per age group total number of smears				
1995	8.7	88.9	2.3	100
1996	6.4	89.5	4.1	100
1997	7.1	88.4	4.5	100
1998	7.0	88.7	4.3	100
per age group "first smear"				
1995	10.4	87.0	2.5	100
1996	7.4	88.6	4.0	100
1997	8.4	86.7	4.8	100
1998	6.8	89.5	3.7	100

Figure 7: Proportional distribution of smears taken by age group for all sentinel stations (in percentages), 1995-1998

age distribution for total number of smears



age distribution for first smear



Conclusion.

The principal developments may be summarized as follows. In the five-year period 1983-1987, when the old-style mass screening was ended, the number of preventive smears in the sentinel stations in the 35-54 age group gradually increased, by in total 30 percent. Thereafter the number doubled in the period 1988-1990, when the new-style mass screening began.

It is striking that after the peak year 1990 the number of preventive smears in the 35-54 age group steadily fell, returning in 1995 to the 1989 level. This development, which also applies to the repeat smears, is difficult to interpret. Is this a disturbing decrease in the interest in screening? Or is more selective use being made of screening, and for instance the extension of the screening interval from 3 to 5 years, which has been meanwhile decided upon by the professional groups, being anticipated? An indication of a more selective use of screening can be derived from the constant, considerable decrease in the number of preventive smears in the age groups below 35 years. The number of smears among women younger than 35 years was lower in 1995 than has ever been registered since 1978. From 1996 onwards this finding applies to preventive smears below the age of 30. In 1996 the expansion of the target group was attained: now women from 30 to 60 are called up. In 1997 and 1998 a stabilization seems to come about in

the number of preventive smears among women younger than 30.

The data for 1996-1998 confirm the impression that there has been more selective screening to an increasing extent.

Certainly the data from the year 1998 confirm this idea. Only 10% plus of the cervical smears are taken outside the mass screening. The majority of these smears of the cervix, as the data from past years show, will have been taken on account of the existence of complaints and/or symptoms. The number of smears taken on account of complaints and/or symptoms was in the last five years between 6.3 and 8.9% of the total of the cervical smears.

This topic has been removed from the weekly return in 1999. The National Information Network of General Practice has been reporting from 1997 on cervical screening as part of the mass screening for cancer of the cervix.⁹

MAMMOGRAPHY

The results of the H.I.P. (Health Insurance Plan) study that started in New York in 1963, which became available from 1971, displayed a clear decline in mortality from breast cancer in the group of women older than 50 years. These results were a reason to set up trial projects in Utrecht and Nijmegen and elsewhere outside the Netherlands. Data resulting from these projects confirm that a well-organized mass screening for breast cancer for women 50-69 years old can have a favourable effect on mortality from this disorder.

In 1987 both the Health Council and the National Council for Public Health made a positive recommendation on the desirability of national mass screening for breast cancer by means of mammography. Thereupon the State Secretary of Public Health took a positive decision in principle on national introduction of the screening from 1990 onwards. On 29 April 1993 the definitive decision likewise proved positive. By the beginning of 1994 40 of the in total 43 planned screening centres had started or were already engaged for some time in the mass screening. By the spring of 1998 the mass screening covered the whole country.

The number of mammograms made annually in the Dutch hospitals is not properly known. Even less is known about the indications on the basis of which examinations have been requested.

The Ministry of Public Health, Welfare and Sport and the Health Insurance Fund Council consider it important from a policy point of view to be well informed about the present number of mammograms and above all too about shifts that may occur in these when the mass screening is introduced in phases.

The phased introduction of national screening means that during a period of several years screening will be performed at one place but not at another. Where screening does take place, women younger than 50 and those older than 69 will for the time being not be enabled to participate in the screening, in anticipation of the results of further research. This is in anticipation of the results of further scientific research into the effects of the mass screening for these age groups. Since 1998 women of 70-75 years: have already been invited in phases. These two circumstances may lead to an additional call on the available capacity. Both women in areas where screening is not yet being performed and women below the age of 50 or above the age of 69 may be of the opinion that

they too should qualify for mammography. Such an effect is considered undesirable, because screening can be justified only if special requirements are met. In addition to the quality, the (considerable) costs also play a part.

In this registration the issue is the extent of the mammographic diagnosis requested by the general practitioner. A breakdown has been made into first and repeat examination. In the mass screening for breast cancer an interval of two years between two scanning rounds has been adhered to. This is also the case with the present registration. With a view to this the criterion for the distinction between first and repeat examination is formed by the question whether a mammogram has been made for the woman in question at any time after 1 January 1997. If at any time after 1 January 1997 a mammogram has been made for a woman and such an examination is performed **again**, this should be registered under the subgroup "repeat examination".

It is not important whether during the examination photographs are taken in different directions along with any supplementary enlargements or close-ups. The total examination is registered as one examination. Nor is it important whether a mammogram is made of one or both breasts.

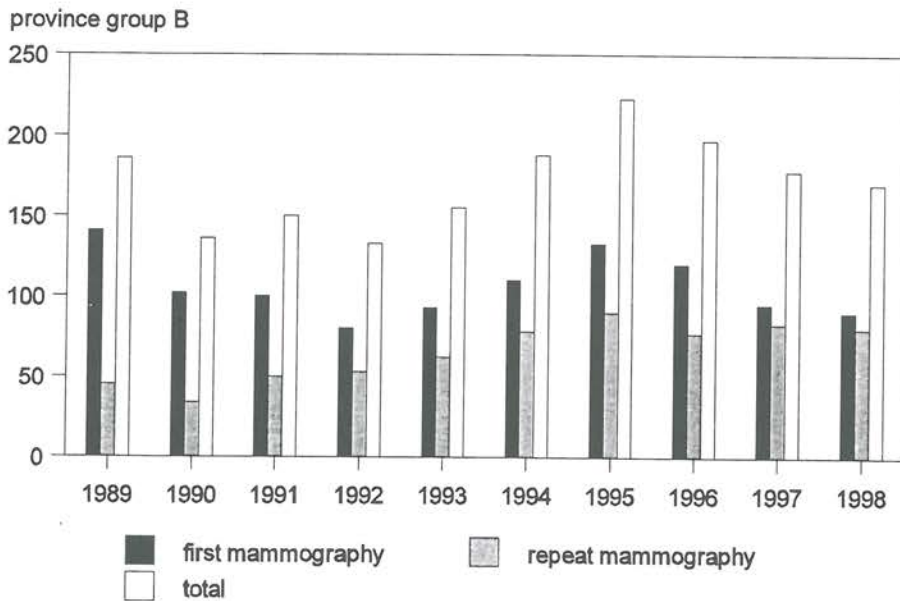
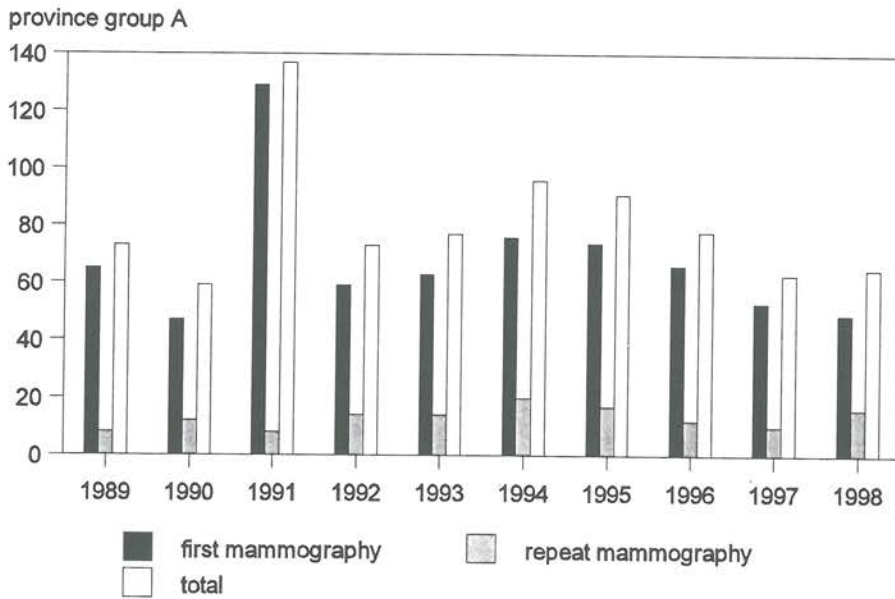
The data of this registration are made available to the group that in 1987-1990 performed the investigation into the costs and effects of mass screening for breast cancer for the Ministry of Public Health, Welfare and Sport (Project leader Prof. Dr P.J. van der Maas, Social Health Care Institute, Erasmus University, Rotterdam.)¹⁰ The same group is evaluating the actual cost and effects.

Table 11 gives the numbers of mammograms requested by the GP outside mass screening per province and degree of urbanization and for the Netherlands (cf. Figs 8 and 9).

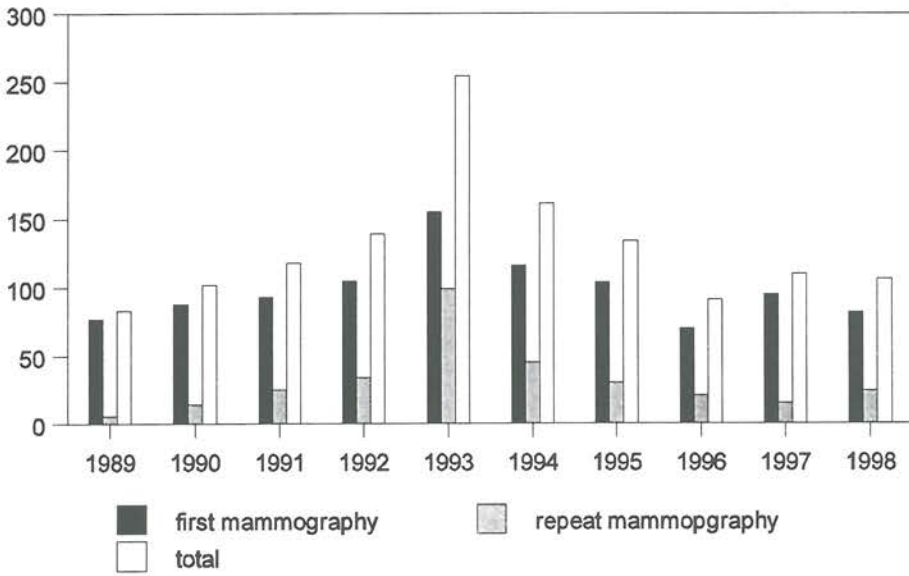
Table 11: Number of mammograms requested by the GP per province and degree of urbanization and the Netherlands per 10 000 women in 1989-1998

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
first mammography								
1989	65	141	77	84	154	71	87	87
1990	47	102	88	125	102	87	101	92
1991	129	100	93	112	103	92	142	105
1992	59	80	105	101	87	95	90	93
1993	63	93	155	106	105	129	96	117
1994	76	110	116	128	97	119	101	111
1995	74	133	104	104	124	96	124	104
1996	66	120	70	97	104	87	73	87
1997	53	95	95	94	88	83	101	87
1998	49	90	82	108	81	90	61	84
repeat mammography								
1989	8	45	6	15	41	10	11	15
1990	12	34	14	16	43	13	10	17
1991	8	50	25	20	54	22	20	26
1992	14	53	34	18	61	25	28	30
1993	14	62	99	17	72	72	23	59
1994	20	78	45	32	67	44	34	45
1995	17	90	30	23	63	36	35	39
1996	12	77	21	25	45	33	22	32
1997	10	83	15	32	70	30	16	34
1998	16	80	24	24	24	43	17	36
total								
1989	73	186	83	99	195	80	98	102
1990	59	136	102	141	145	100	111	109
1991	137	150	118	132	157	114	162	131
1992	73	133	139	119	148	120	118	123
1993	77	155	254	123	177	201	119	176
1994	96	188	161	160	164	163	135	156
1995	91	223	134	127	187	132	159	143
1996	78	197	91	122	149	120	95	109
1997	63	178	110	126	158	113	117	121
1998	65	170	106	132	105	133	78	120

Figure 8: Number of mammograms requested by the GP per province group, per 10 000 women, 1989-1998



province group C



province group D

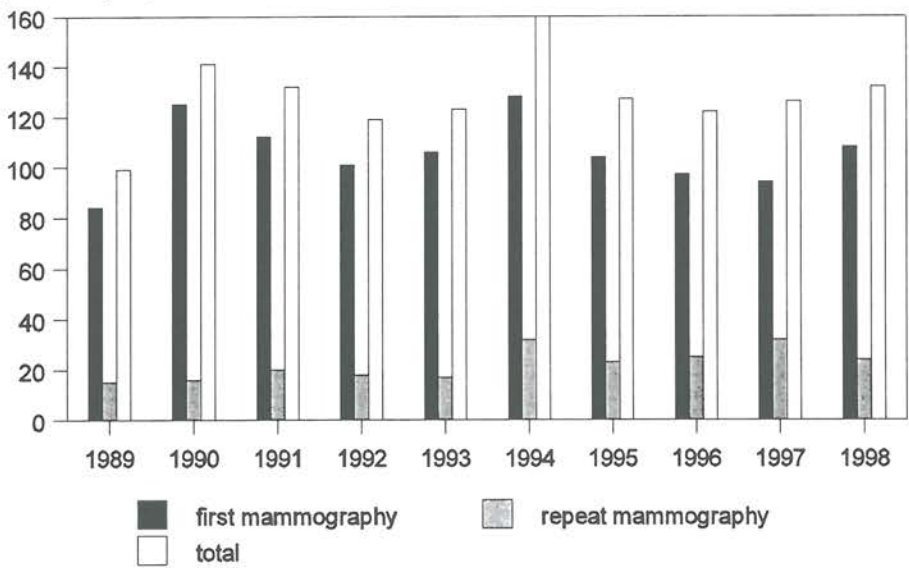
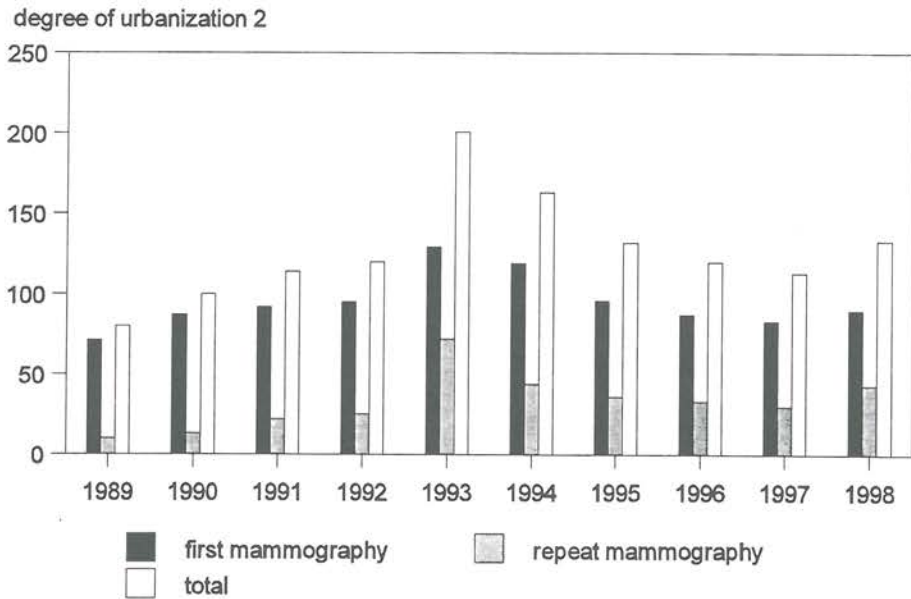
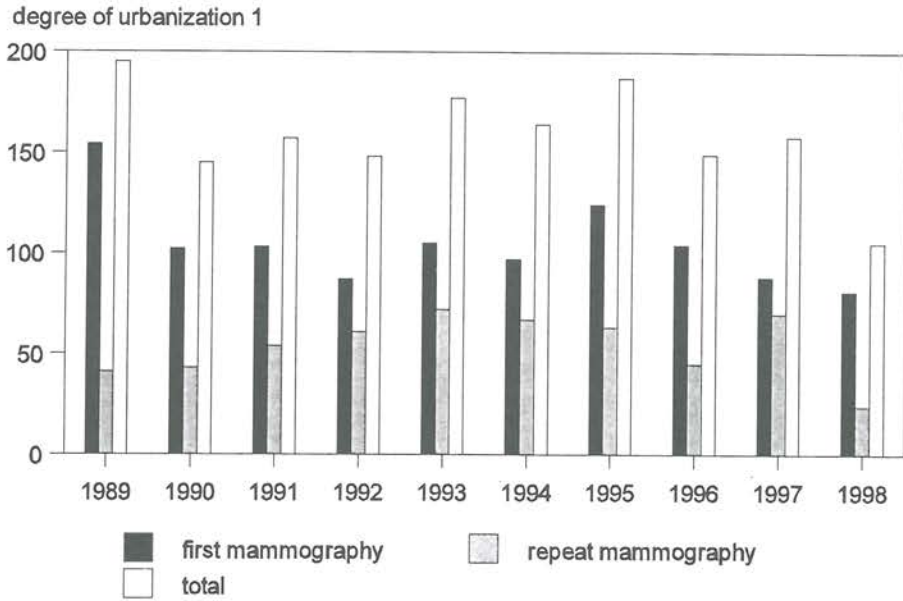
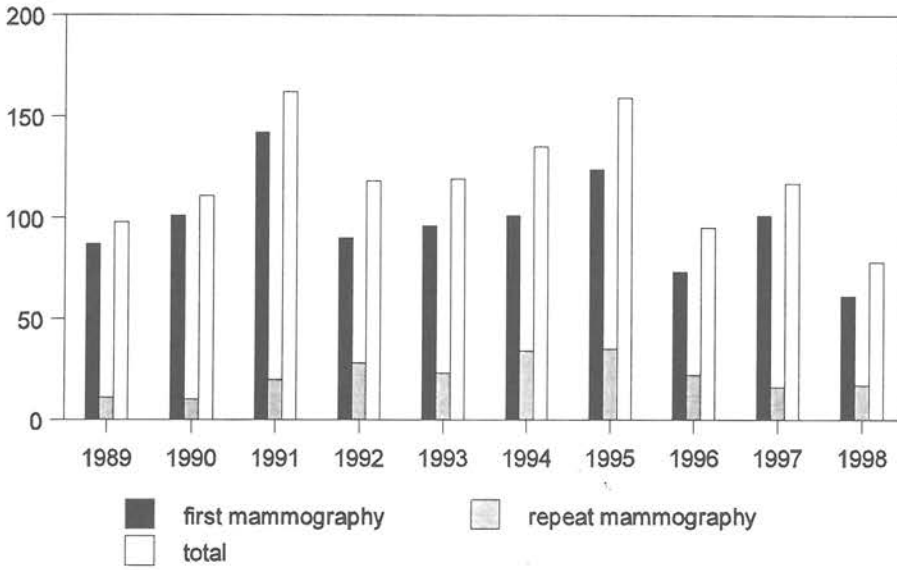


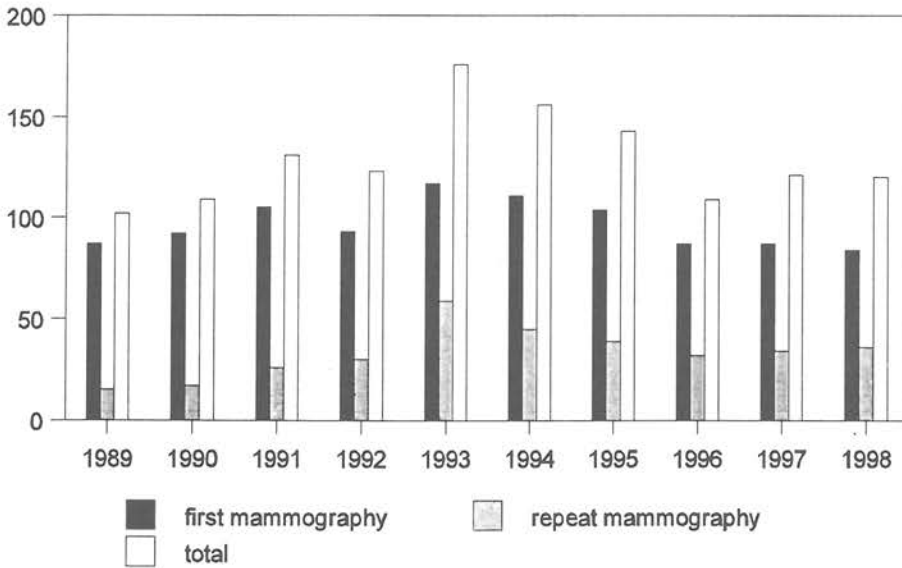
Figure 9: Number of mammograms requested by the GP per degree of urbanization and for the Netherlands per 10 000 women, 1989-1998



degree of urbanization 3



Netherlands



After falling for three years the number of mammograms has now stabilized at a level of approx 120 per 10 000 women.

It is being investigated whether the local start of the mass screening for breast cancer affects these results (Dr H.J. de Koning, Erasmus University).

In Table 12 the number of mammograms is stated by age group per 10 000 women.

Table 12: Number of mammograms requested by the GP by age group per 10 000 women for the Netherlands for 1989-1998

	Age group									
	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79
first mammography										
1989	124	189	223	213	159	127	102	46	34	31
1990	104	186	230	189	204	174	115	66	83	26
1991	140	170	253	226	229	166	147	117	75	54
1992	119	187	260	201	162	121	117	58	51	39
1993	153	190	214	227	255	242	174	139	98	53
1994	149	246	260	234	216	131	122	162	90	57
1995	142	207	225	221	208	179	94	89	84	48
1996	126	158	211	200	173	90	60	33	69	54
1997	97	160	214	241	128	114	48	61	96	57
1998	90	150	231	254	125	85	61	57	64	63
repeat mammography										
1989	17	34	42	37	28	31	18	8	(8)	(10)
1990	14	30	46	36	42	33	39	18	-	-
1991	15	35	89	70	67	50	41	20	25	(10)
1992	43	59	65	76	78	53	60	6	12	(15)
1993	27	69	85	114	132	159	235	159	79	43
1994	32	57	104	108	137	111	98	58	29	(10)
1995	22	69	105	115	104	76	57	26	33	(5)
1996	27	59	87	100	56	51	57	20	29	(14)
1997	27	58	59	99	92	81	48	43	28	(16)
1998	29	61	80	111	78	104	17	43	24	(5)

Table 12: Number of mammograms requested by the GP by age group per 10 000 women for 1988-1998 (continuation)

	Age group									
	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79
total										
1989	141	223	275	250	187	158	120	54	42	41
1990	118	216	276	225	246	207	154	84	83	26
1991	155	205	342	296	296	216	186	137	100	64
1992	162	246	325	277	240	174	177	64	63	54
1993	180	259	299	341	387	401	409	298	177	96
1994	181	303	364	342	353	242	220	120	119	67
1995	164	276	330	336	312	255	151	115	117	53
1996	153	217	298	300	228	141	117	53	98	68
1997	124	218	273	340	220	195	96	104	124	73

In the past years the majority of the mammograms have always been requested for women who fall outside the age group for which the screening is organized. It is above all the women in the 35-49 age group for whom mammography outside the screening is requested. For women older than 70 years this screening takes place to a relatively small extent.

Among above all the women in the 40-50 age group the number of applications for mammography by the GP have been increasing again in the last three years, both the number of first mammograms and the number of repeat mammograms. Possibly 'periodical screening' may occur outside the mass screening among this age group.

Table 14: Proportional distribution of all mammograms requested by the GP by three age groups. Percentages, 1989-1998

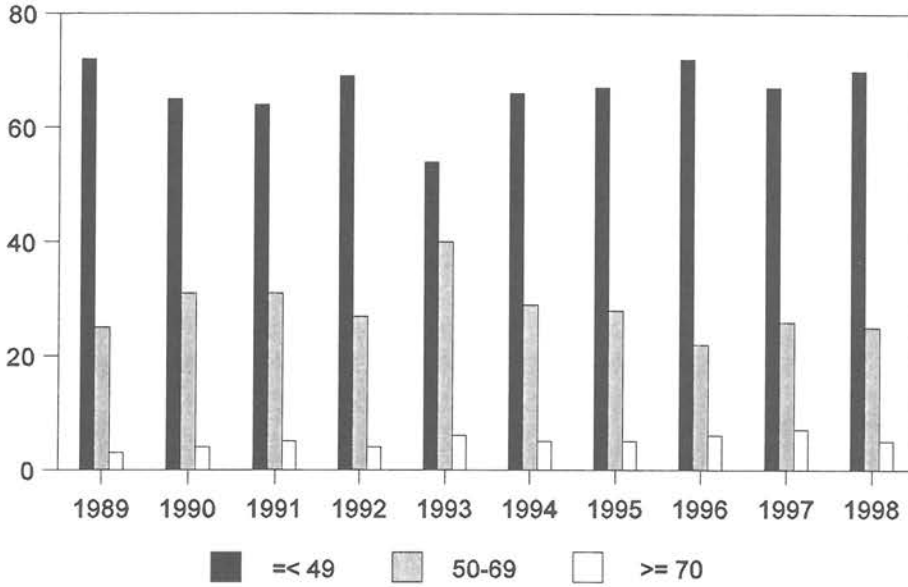
age distribution, total number of mammograms				
year	≤49	50-69	≥70	total
1989	72	25	3	100
1990	65	31	4	100
1991	64	31	5	100
1992	69	27	4	100
1993	54	40	6	100
1994	66	29	5	100
1995	67	28	5	100
1996	72	22	6	100
1997	67	26	7	100
1998	70	25	5	100

age distribution, "first" mammograms				
year	≤49	50-69	≥70	total
1989	73	25	2	100
1990	65	30	5	100
1991	64	31	5	100
1992	71	25	4	100
1993	61	33	6	100
1994	71	25	5	100
1995	69	26	5	100
1996	74	21	5	100
1997	72	20	8	100
1998	73	20	6	100

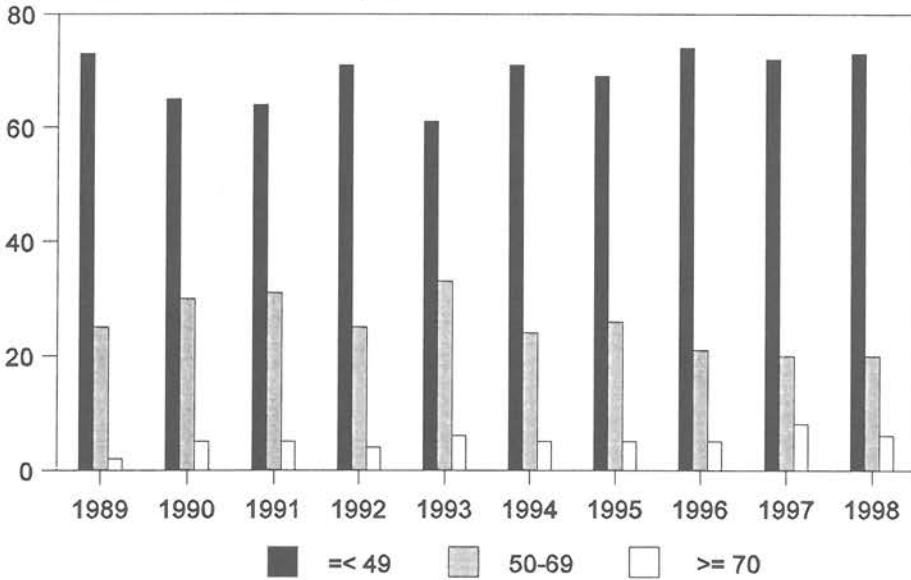
In 1998 compared with 1997 the share of women of 70 years and older has fallen for both the first mammograms and the repeat mammograms.

Figure 10: Proportional distribution of all mammograms requested by the GP in three age groups (percentages), 1998-1998

age distribution total number of mammograms



age distribution for 'first' mammograms



In 1998 the topic is maintained on the weekly return.

LIST OF PUBLICATIONS ON THE BASIS OR PARTLY ON THE BASIS OF THE DATA FROM MORBIDITY REGISTRATIONS SENTINEL STATIONS

BEEMSTERBOER, P.P.M., H.J. DE KONING, C.W.N. LOOMAN, G.J.J.M. BORSBOOM, A.I.M. BARTELDIS AND P.J. VAN DER MAAS.

Mammography Request in General Practice During the Introduction of Nationwide Breast Cancer Screening, 1988-1995

European Journal of cancer, 1999, vol. 35, no 3 pp. 450-454

Introducing an organised breast cancer screening programme for certain age groups in a population might induce opportunistic screening in adjacent (non-invited) age groups and influence health behaviour in the target population. We analysed the effect of the start of the Dutch national screening programme on the number of mammographies requested by 43-45 general practices for the age groups 30-39, 40-49, 50-69 and 70+ years, using logistic regression analysis. In all age groups an immediate increase was observed in the number of mammography requests after the start of the screening, which was large and statistically significant in the target population of the screening programme (age 50-69 years). More than 2 years after the start of screening, the number of mammography requests in all age groups had decreased to the level before the start and in the age group 50-69 years the number of mammographies was significantly lower than before the screening started. The unexpected increase in mammographies after the start of the breast cancer screening programme might be related to registry problems or to the process of building up the screening programme. Eventually there was a decrease in the number of mammographies in the target population, probably an effect of the introduction of the national screening programme. Opportunistic screening was not clearly demonstrated in adjacent age groups.

BEEMSTERBOER, P.P.M.

Evaluation of Screening Programmes. Studies on breast cancer and prostate cancer

Thesis Rotterdam, 1999, chapter 3.

STERILIZATION OF THE MAN

Sterilization of the man has been a topic on the weekly return since 1972. The data obtained on this subject, together with those on the subject sterilization of the woman, are being used inter alia for the compilation of a Dutch contribution to the Council of Europe's report: "Country Report of the Netherlands" and for computing the population trend.

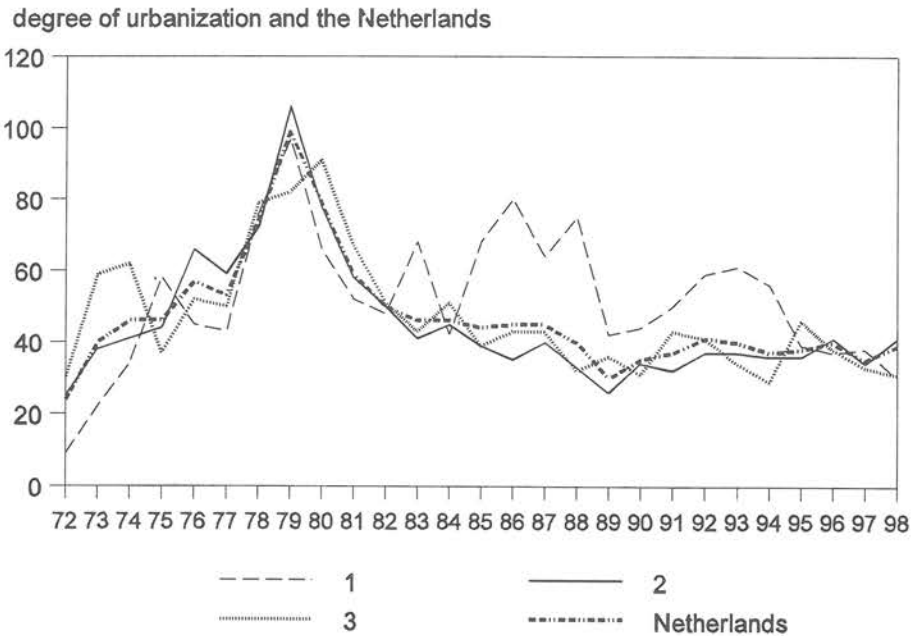
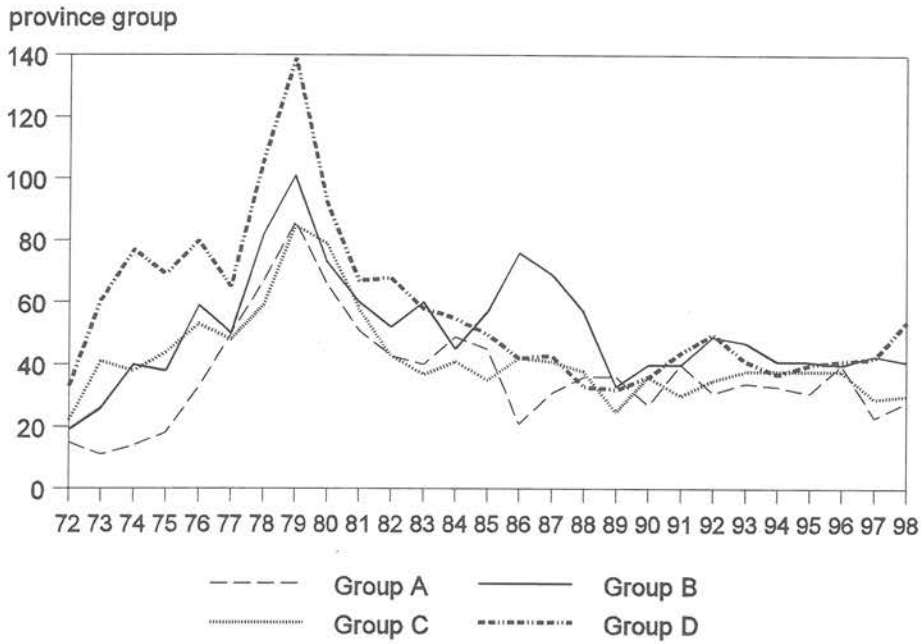
The annually published data form a partial but as yet indispensable instrument for assessing developments in the field of birth control behaviour.

The number of sterilizations of men performed per 10 000 of all men and per province group and degree of urbanization is given in Table 14 (cf. Fig. 11).

Table 14: number of sterilizations of men performed, per province group and degree of urbanization per 10 000 men, 1989-1998

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
1989	36	33	25	32	42	26	36	30
1990	27	40	36	36	44	34	31	35
1991	40	40	30	44	50	32	43	37
1992	31	49	35	50	59	37	41	41
1993	34	47	38	41	61	37	34	40
1994	33	41	38	37	56	36	29	37
1995	31	41	38	40	39	35	46	38
1996	40	40	38	41	37	41	38	40
1997	23	43	29	42	38	34	33	35
1998	28	41	30	54	30	41	31	39

Figure 11: Number of sterilizations of men performed, per province and degree of urbanization and for the Netherlands, per 10 000 men, 1972-1998



After peaks around 1979 the number of sterilizations stayed around 45 per 10 000 men for five years. In 1988 a fall in this number occurred; this development continued in 1989. In that year 30 sterilizations per 10 000 men still took place. However, in 1990 and 1991 the number was higher again: 35 per 10 000 men. In the years after 1993 the number of sterilizations stabilized at nearly 40 per 10 000 men.

In the southern provinces in 1998 the number of sterilizations of the man displayed a remarkable increase. The number of 54 per 10 000 men is the highest in the past 10 years and lies clearly above the level of the other province groups.

After extrapolation a figure of 21 500 sterilizations is arrived at for the whole of the Netherlands in 1998. There is little difference between the quarters.

As also stated in the previous reports, it was to be expected that in the course of time, and after an initially strong increase, a stabilization would occur at a lower level. This would be the result of a short-lived 'historical catching-up effect'. This effect did in fact occur.

The number of sterilizations performed in 1998 was practically as high as the replacement factor. This 'replacement factor' indicates the number of sterilizations that have to be performed in a year to allow the percentage of those sterilized at some time to remain the same. It is the resultant of two factors, viz population growth and the fact that those sterilized at some time disappear through ageing from the fertile age group (in a statistical sense this means: become 52 years).

As a result, the percentage of men sterilized at some time remained the same in 1998 as in 1997. The percentage of men sterilized at some time who statistically speaking belong to the fertile age group (17-51 years)¹¹ was 12.2% in 1997. This percentage has already been practically constant since 1986. For women it is, however falling (see below).

In Figure 13 (see p. 55) the number of sterilizations per 10 000 men per year of all subgroups together is compared with that of women. It is clear to see that in the past decade sterilization of the man in comparison with sterilization of the woman has become increasingly popular. In 1998 the sterilization ratio of men to women was 69:31.

Age distribution

The age-specific distribution of the number of sterilizations performed per 10 000 men is given in Table 15 (cf. Fig. 14, see p. 56).

An interesting development is that the percentage of men in the younger age group who have had themselves sterilized at some time has displayed a clear decline in recent years. In 1981 5.5% of the men between 22 and 31 had been sterilized, whereas that was only 2% in 1991, and in 1998 only 0.5%.

Table 15: number of sterilizations performed on men by age group, per 10 000 men, 1989-1998

	age group						
	20-24	25-29	30-34	35-39	40-44	45-49	50-54
1989	-	20	92	149	75	37	-
1990	(2)	15	98	175	94	49	(9)
1991	(4)	28	110	153	108	53	(3)
1992	-	12	108	200	114	51	25
1993	-	23	101	158	124	73	20
1994	-	(2)	62	186	139	61	21
1995	-	11	74	209	101	66	13
1996	-	8	78	200	121	50	27
1997	(2)	(7)	71	154	106	70	21
1998	-	10	89	144	128	71	28

Sterilizations of men are performed above all between the ages of 35 and 45; the largest number of sterilizations has since 1987 been performed between 35 and 39.

A striking feature is the larger number of sterilizations of men of 45 years and older since 1992.

A cumulative calculation shows that in the Netherlands since 1971 at least 899 000 sterilizations of the man have been performed, that is among 11,7% of the present male population. For a further study see the next section, in which the topic 'sterilization of the woman' is dealt with.

The question has been maintained on the 1999 weekly return.

STERILIZATION OF THE WOMAN

Sterilization of the woman performed was placed on the weekly return in 1974 (of the man performed in 1972). In 1998 17 sterilizations per 10 000 women were performed, somewhat lower than in preceding years. Extrapolation of these figures to the whole of the Netherlands yields a number of 13 500 sterilizations in 1998.

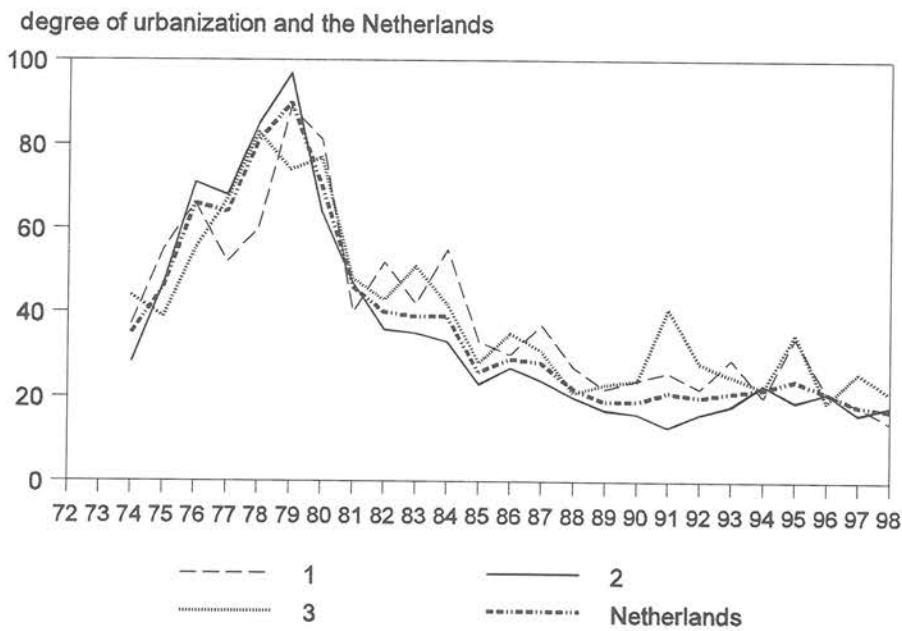
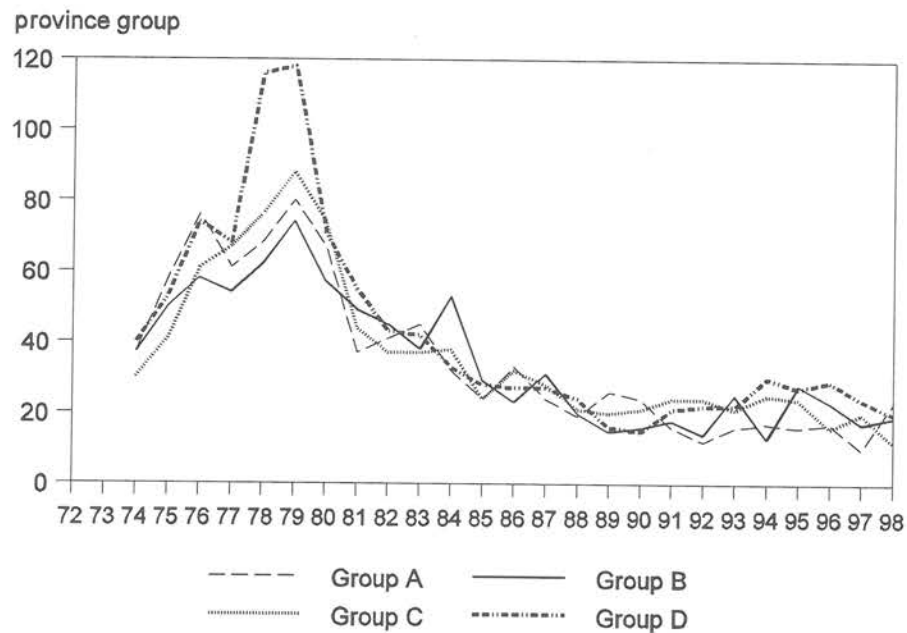
The number of sterilizations of women performed per 10 000 of all women and per province group and degree of urbanization is given in Table 16 (cf. Fig. 12).

Table 16: number of sterilizations of women performed, per province group and degree of urbanization, and for the Netherlands per 10 000 women, 1989-1998

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
1989	26	15	20	16	22	17	23	19
1990	24	16	21	15	24	16	24	19
1991	16	18	24	21	26	13	41	21
1992	12	14	24	22	22	16	28	20
1993	16	25	21	22	29	18	25	21
1994	17	13	25	30	20	23	22	22
1995	16	28	24	27	34	19	35	24
1996	17	23	16	29	21	21	19	21
1997	10	17	20	24	18	16	26	18
1998	23	19	12	20	14	18	21	17

The northern province group displays the largest number of sterilization of the woman in 1998. Since 1991 the numbers of sterilizations of the woman in the northern province group has been the lowest.

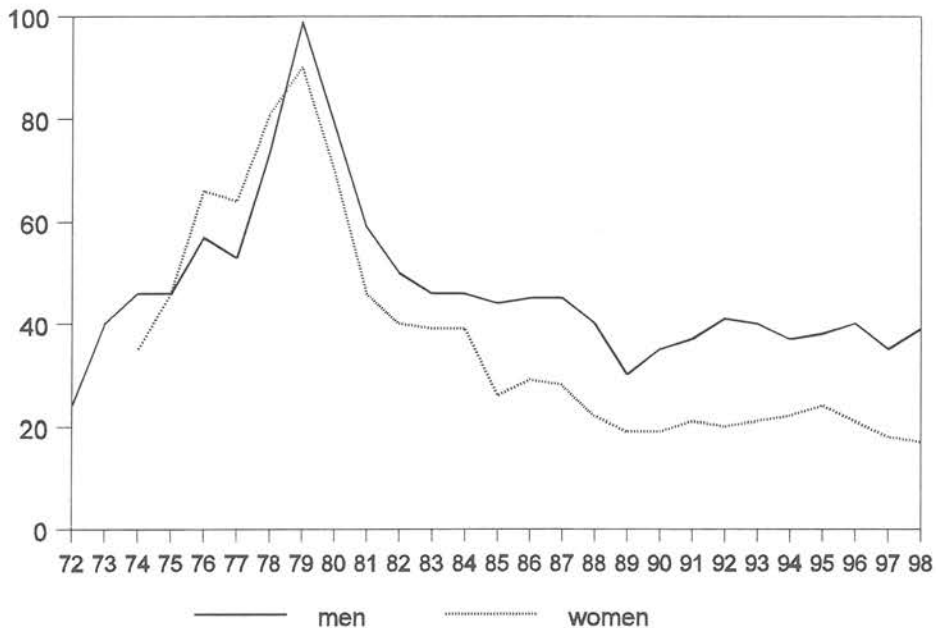
Figure 12: Number of sterilizations of women performed, per province group and degree of urbanization and for the Netherlands, per 10 000 women, 1974-1998



Since 1995 the number of sterilizations of the woman has gradually been falling. In the various subgroups some fluctuations occur, but without a clear direction.

Figure 13 gives a comparison between the number of sterilizations of women and of men per year. The curves display a great deal of similarity up to 1985. The remarks that were made on the trend in the previous chapter also apply here. From 1985 onwards the curves for men and women have diverged.

Figure 13: Number of sterilizations performed per 10 000 men and 10 000 women, for the Netherlands, 1972-1998



Age distribution

The age-specific distribution of the number of sterilizations performed per 10 000 women is given in Table 17 (cf. Fig. 14).

Figure 14: Number of sterilization performed by age group, per 10 000 men and women, 1989-1998

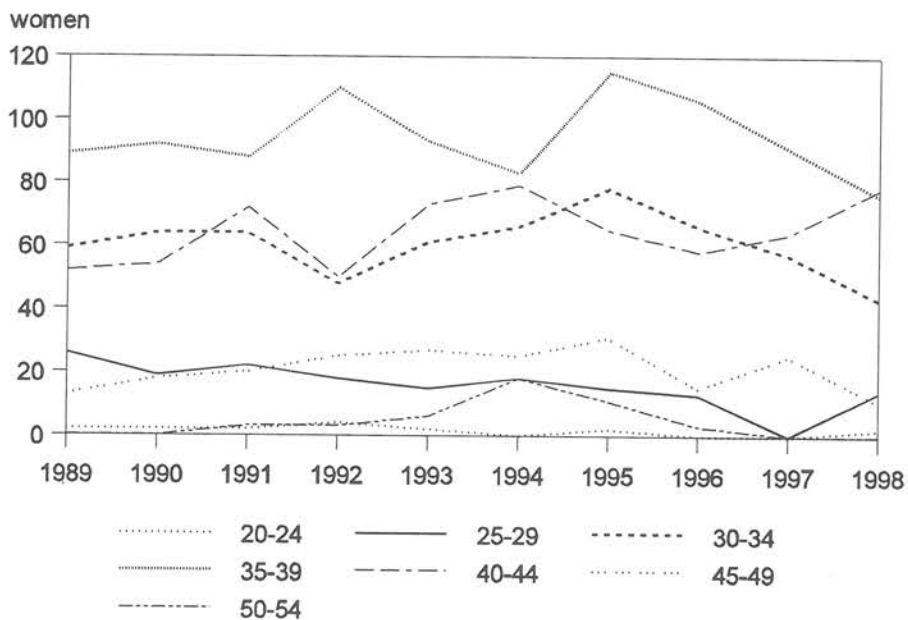
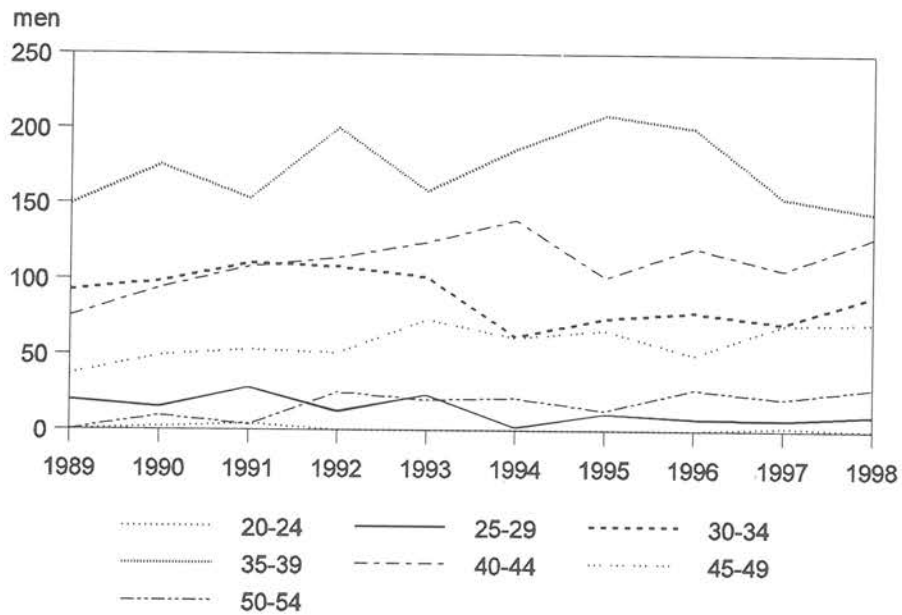


Table 17: number of sterilizations performed on women by age group, per 10 000 women, 1989-1998

	age group						
	20-24	25-29	30-34	35-39	40-44	45-49	50-54
1989	(2)	26	59	89	52	13	-
1990	(2)	19	64	92	54	18	-
1991	(2)	22	64	88	72	20	(3)
1992	(4)	18	48	110	50	25	(3)
1993	(2)	15	61	93	73	27	(6)
1994	-	18	66	83	79	25	18
1995	(2)	15	78	115	65	31	11
1996	-	13	66	106	58	15	(3)
1997	-	-	57	91	64	25	-
1998	(2)	14	43	76	78	11	-

Sterilization of the woman is performed above all between the ages of 30 and 45; below that age it is of little occurrence any more. In the age group up to 40 years the number of sterilizations has been falling quickly in recent years, whereas the number in the group >40 remains fairly stable.

A cumulative calculation shows that in the Netherlands since 1973 in total sterilization has been performed on at least 666 200 women, i.e. 8.4% of the present-day total female population. However, it is more realistic to relate the figures only to women of fertile age (15-49) and at the same time to bring in the sterilization pattern of the man. In that case it proves that in 1975 the woman or the man had been sterilized in approx. 6% of (married) couples. This percentage later rose from 18.5 in 1980 via 22.7 in 1985 to 23.0 in 1986. In 1987 it fell slightly for the first time. This fall continued. In 1990 this percentage was 22.1, in 1995 20.9 and in 1998 20.0%. The number of sterilizations (of men **and** women) that ought to have been performed in 1998 on the basis of this calculation to keep the total percentage equal to that of 1997 was 58 400. In reality this number was 35 000 (21 500 men and 13 500 women).

Table 18: percentage of women and men belonging to the fertile age group that have undergone sterilization at some time, 1980-1998

Year	women per 100 15-49 y	men per 100 17-51 y	total m+f per 100 15-51 y
1980	9,3	9,2	18,5
1981	9,8	10,0	19,8
1982	10,2	10,6	20,8
1983	10,6	11,1	21,7
1984	10,9	11,5	22,4
1985	10,8	11,9	22,7
1986	10,8	12,2	23,0
1987	10,6	12,3	22,9
1988	10,4	12,4	22,8
1989	10,2	12,3	22,5
1990	9,9	12,2	22,1
1991	9,6	12,2	21,8
1992	9,4	12,2	21,6
1993	9,1	12,2	21,3
1994	8,8	12,2	21,0
1995	8,7	12,2	20,9
1996	8,4	12,1	20,6
1997	8,1	12,2	20,3
1998	7,8	12,2	20,0

Since 1985 there has been a fall in the percentage of sterilized women in the fertile age group (15-49). In 1984 this percentage reached its peak with 10.9, after which it gradually declined to 7.8 in 1998. Among men the percentage of those sterilized has remained remarkably constant since 1986. The percentage of sterilized women and men together has been falling since 1986 (see Table 18). One can therefore speak of a decreasing popularity of sterilizations as a method of birth control, notably among women. According to Dr E. Ketting, who made these calculations, the above is probably bound up with two factors. In the first place women want to have (further) children at a steadily later age, as a result of which a decision concerning sterilization is increasingly postponed and often also put off indefinitely. And in the second place objections to still using oral contraception at a later age have clearly lessened in recent years, partly through the introduction of types containing a lighter dose, as a result of which the need for sterilization is decreasing. The percentage of women in the 40-49 age group using the pill rose from 8.6% in 1985 to 21.7 in 1996 (CBS, Statistical Annual 1998).

Much more clearly even than among men, the popularity of sterilization among young women has consequently been declining quickly in recent years. In 1980 6.9% of women aged between 25 and 29 had been sterilized, as against 0.4% in 1998. Since 1984 there has now also been a considerable decline among the 30-

34 age group of women (from 13.8% in 1984 to 3,1% in 1998). In the 40-49 age group the decline is much less (from 25.2% in 1985 to 20.3% in 1998).

By far the highest percentage of sterilized women may now be found in the 45-49 age group: 24.3%. This is caused above all by the fact that the large numbers of women who had themselves sterilized around 1980 at the age of 30-35 are now nearing 50.

Incidentally, it is interesting that the Netherlands, as far as is known, is the only country where clearly more men than women have been sterilized. This ratio is at present 69% men to 31% women. (In the fertile age group 505 000 men and 309 000 women had been sterilized by 1998.)

The topic sterilizations has been maintained on the weekly return for 1999.

PUBLICATIONS ON THE BASIS OR PARTLY ON THE BASIS OF THE DATA FROM THE CONTINUOUS MORBIDITY REGISTRATION

KETTING, E.P. LESEMAN.

Abortus en anticonceptie 1983-1984

Stimezo 1986, (hoofdstuk 3) p. 65-77

KETTING, E

Contraception in the Netherlands

International Family Planning Perspectives; 8, 1982, no. 4

OESTROGENS PRESCRIBED

Oestrogenic substances (whether or not combined with a progesterone) have a shifting field of application particularly around and after the menopause.

The pressure to prescribe oestrogens for women in the menopause is growing. Women are being informed via the mass media. It is conceivable that, just as with the pill, the use of oestrogens will increase under pressure from women.

However, Moors established earlier in 1992 that the reticence of GPs with regard to hormone replacement contrasts with the enthusiasm with which they almost simultaneously introduced the large-scale use of oral contraception in the Netherlands.¹² GPs are reserved and divided about the general introduction of hormone replacement, as are specialists, including gynaecologists and internists.

The demographic structure of the female population means that in the years to come the number of women in the target group will considerably grow.

The physicians were asked to register when they issue for the first time to a woman a prescription for oestrogens (whether or not combined with a progesterone). In other words, when hormone replacement is started in the menopause.

In the complementary questionnaire which the (spotter) physician has to complete for each report, it is asked on whose initiative the prescription will start, whether the woman has endured a uterus extirpation and the exact motive for the prescription: existing complaints and/or proven osteoporosis, or the wish to perpetrate prevention (with reference to the development of osteoporosis and cardio-vascular diseases).

Table 19 shows the number of first prescriptions for oestrogens by province group and degree of urbanization and for the Netherlands per 10 000 women in the 40-60 age group.

Table 19: number of first prescriptions for oestrogens by province group and degree of urbanization and for the Netherlands, per 10 000 women of 40-60 years in 1994-1998

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
1st prescription								
1994	83	297	236	150	153	161	273	180
1995	71	163	135	199	235	114	193	145
1996	26	130	104	93	134	76	146	88
1997	9	30	23	38	24	26	30	26
1998	12	39	35	20	34	27	29	28

The number of times that a first prescription for oestrogens was issued in 1998 was 28 per 10 000 women: about the same as the number in 1997.

A comparison with registration in 1994 and 1995 is not feasible. In those years spotter physicians were asked to report the first prescription in that year even when a woman had already begun with the treatment earlier. Under the term 1st prescription therefore both incident and prevalent cases are reported in 1994 and 1995.

From 1996 spotter physicians have been asked to report only incident cases, i.e. when a woman is given hormone supplementation for the first time.

A striking feature is that the number of times that oestrogen supplementation is started in the northern provinces is so low compared with the other province groups.

The differences are less great when the degree of urbanization is considered.

Age distribution

The age-specific distribution of the number of first and repeat prescriptions per 10 000 women appears in Table 20.

Table 20: Number of first prescriptions for oestrogens by age group per 10 000 women in 1994-1998

age group	1st prescription				
	1994	1995	1996	1997	1998
40-44	57	53	44	32	29
45-49	185	170	85	78	115
50-54	381	277	168	179	170
55-59	119	106	57	68	82
60-64	36	63	41	(14)	44
65-69	23	56	(13)	32	(4)
70-74	22	40	36	(16)	-
75-79	24	24	42	(5)	(15)
80-84	(13)	(6)	32	(7)	0
>85	(22)	(30)	(14)	(23)	(8)

Up to an advanced age women are still started on hormone supplementation with oestrogens. Most frequently this treatment is started with women between 45 and 55 years. The number of reports declines quickly from the age of 55. This distribution suggests that the substitution with oestrogens is directed above all to the complaints during and shortly after the menopause.

The topic has been removed from the weekly return in 1999.

DOG BITES

The Ministry of Agriculture, Nature Conservation and Fisheries has via the Animal Health and Welfare Act the possibility of laying down rules for aggressive animals.

For assessing the need to impose restrictions also actively with regard to certain breeds of dog this Ministry requires information.

Information is being collected on dog bites by SIG-Care Information on admissions to hospital and by the Consumer and Safety Foundation on departments for emergency first aid for out-patients

In 1986 and 1987 the sentinel stations recorded the topic of dog bites. The number of patients with a dog bite treated by GPs then proved to be twice as high as the number of patients treated in or admitted to hospital.

The Ministry of Agriculture asked the sentinel stations to place the topic on the weekly return again in 1998.

The spotter physicians are requested to record every patient who consults the GP about a dog bite for the first time. A distinction is made by sex.

In addition they are requested to issue a questionnaire to the victims of a dog bite. The questionnaire corresponds to the form that is used by the emergency first aid departments of the hospitals that are involved in the investigation by the Consumer and Safety Foundation. The victims of a dog bite are asked to send the questionnaire to the Consumer and Safety Foundation,

The Consumer and Safety Foundation (drs. M. Schellart) will report on this part of the investigation.

The number of persons with a dog bite per 10 000 men and per 10 000 women per province group and by degree of urbanization, with the number for the Netherlands, is given in Table 21.

Table 21: Number of persons that consult the GP about a dog bite for the first time per 10 000 men and per 10 000 women, per province group and by degree of urbanization and for the Netherlands for 1986-1987 and 1998

		province group				degree of urbanization			Netherlands
		A	B	C	D	1	2	3	
1986	M	29	42	26	35	39	31	25	31
1987		32	44	19	30	41	29	17	28
1986	F	28	24	22	18	29	22	17	22
		19	26	17	13	27	18	11	26
1998	M	11	15	6	9	22	8	4	10
	F	7	9	9	14	13	9	8	10
	T	9	12	7	11	17	9	6	10

Ten out of 10 000 inhabitants of the Netherlands were treated by the GP for a dog bite in 1998. This number is considerably lower than in the years 1986-1987, when 27 out of the 10 000 inhabitants were treated by the GP for a dog bite.

In 1998 the GP treated as many women as men for the consequences of a dog bite.

In the records for 1986-1987 there were somewhat more men who consulted the GP for this purpose.

Most patients with a dog bite were reported in 1998 in the eastern provinces; the smallest number were reported in the western provinces. This distribution was also found in 1986-1987.

As in 1986-1987, in 1998 too most patients with a dog bite in the rural municipalities were treated by the GP. In the cities this number was the lowest.

Two aspects play a part here: in the rural municipalities more biting dogs occur than in the cities and/or patients in the cities do not go after a dog bite to the GP but to the emergency first aid department of a hospital.

Seasonal influences

In Table 22 the numbers of persons consulting the GP about a dog bite for the first time are given per quarter.

Table 22: Number of persons consulting the GP about a dog bite for the first time per 10 000 persons per quarter for 1986-1987 and 1998

		1st quarter	2nd quarter	3rd quarter	4th quarter
1986	M	6	10	8	6
1987		8	8	7	9
1998		2	3	2	2
1986	F	5	7	6	4
1987		4	4	6	4
1998		3	2	2	2

The season does not prove to have any major influence on the number of patients visiting the GP with a dog bite (first consultations only).

Age distribution

In Table 23 the number of patients who consulted the GP about a dog bite for the first time are distributed by age group.

Table 23: Number of persons who consulted the GP about a dog bite for the first time per age group, 1986-1987 and 1998

age group	men			women		
	1986	1987	1998	1986	1987	1998
<1	-	-	-	-	-	-
1- 4	41	29	(9)	27	27	(10)
5- 9	55	25	12	41	13	12
10-14	49	36	15	26	26	(8)
15-19	43	33	(5)	39	26	(3)
20-24	26	32	10	17	20	13
25-34	31	36	8	21	16	10
35-44	29	17	9	23	16	11
45-54	17	28	9	27	24	15
55-64	28	32	18	20	18	8
>64	18	14	10	13	6	7

Just as in the previous recording period (1986-1987) no infants were treated by the GP for a dog bite. Again in 1998, as in the years 1986-1987, above all young people (1-19 years) were treated by the GP for a dog bite. In relative terms the proportion of young people has fallen.

Compared with 10 years ago considerably fewer people were treated by the GP for a dog bite: in 1998 about 40% of the number of people in 1986-1987. Information from other sources shows that between 1987 and 1996 the number of dogs in the Netherlands fell by 30%. Between 1987 and 1991 the number of treatments at the emergency first aid departments also fell. Then this number stabilized in 1992-1996 at the present level.

The topic will be continued in 1999.

**PUBLICATION ON THE BASIS OR PARTLY ON THE BASIS OF THE DATA
FROM CONTINUOUS MORBIDITY REGISTRATION**

MULDER, S.

Door een hond gebeten.

Consumer and Safety Foundation, 1989, Report No. 56.

HERPES ZOSTER

In several European countries sentinel station networks operate on behalf of epidemiological research in health care. The spotter physicians collect data for monitoring defined problems among their patients. After appropriate analysis these data give an indication for the trend in the occurrence of a defined problem.

The aim of sentinel station networks is to give some insight into the epidemiology of diseases in the population. An important question here is whether what is registered in a network of sentinel stations does in fact reproduce what diseases and problems occur in the population. Use of the correct denominator can reduce the uncertainty on this point.

Carefully maintained practice populations and age and sex registers are universally accepted as the most desirable denominator. However, these are not available in every health care system; in this situation mathematical models have been developed for estimating the population at risk.

Despite the availability of these models other possibilities are still being sought for determining the population at risk. One of these possibilities is utilization of an indicator disorder. The idea behind this is that when a disorder has a constant incidence it probably is possible to derive the population at risk with the aid of this incidence.

This idea has been formulated by D.M. Fleming and K.W. Cross of the Weekly Return Service of the Royal College of General Practitioners in Birmingham, UK.

The question that had then to be answered was which disorder leads practically always to a visit to the GP, has a relatively constant incidence and is easy to diagnose.

That herpes zoster is such a disorder emerged from examination of the data collected by the Weekly Return Service over 27 years.

The next step in the research into the possibilities of using herpes zoster as an indicator disorder is registering it in a different sentinel station network from the English one. CMR Sentinel Stations the Netherlands was asked to do this.

As from 1 January 1997 herpes zoster has been placed on the weekly return.

The spotter physicians are asked to report the patients regarding whom the physician makes the diagnosis herpes zoster.

The disorder is so characteristic that it has not been felt necessary to define it further.

Table 24 shows the incidence of herpes zoster by province group and degree of urbanization and for the Netherlands per 10 000 men and per 10 000 women and per 10 000 persons in 1997-1998.

Table 24: number of new cases of herpes zoster by province group and degree of urbanization and for the Netherlands per 10 000 men and per 10 000 women and per 10 000 persons in 1997-1998

		province group				degree of urbanization			Netherlands
		A	B	C	D	1	2	3	
1997	M	7	32	31	23	24	23	35	24
1998		11	33	36	26	32	30	33	28
1997	F	12	39	37	29	29	29	40	30
1998		22	32	44	46	41	24	45	37
1997	T	10	35	34	26	27	26	38	28
1998		16	32	40	36	36	22	39	33

GPs report more women with herpes zoster than men. This tallies with the findings in the Weekly Return Service in the UK.

The number of reports by GPs in the northern provinces is strikingly low.

Herpes zoster is reported more in the most densely populated areas than in the less urbanized areas and in the rural municipalities.

Age distribution

The age distribution of the number of new cases of herpes zoster per 10 000 men and per 10 000 women is shown in Table 25.

Table 25: number of new cases of herpes zoster by age per 10 000 men and per 10 000 women in 1997-1998

age group	men		women		total	
	1997	1998	1997	1998	1997	1998
< 1	-	-	-	-	-	-
1- 4	(6)	(9)	(7)	(7)	(7)	(12)
5- 9	(8)	12	(8)	22	8	17
10-14	(5)	13	14	10	9	12
15-19	13	20	(11)	23	12	21
20-24	18	14	(8)	13	13	14
25-29	15	12	12	24	14	18
30-34	13	30	13	23	13	27
35-39	21	20	12	13	17	17
40-44	32	24	26	27	29	25
45-49	29	41	40	34	34	38
50-54	40	32	52	43	46	37
55-59	31	39	52	64	42	51
60-64	35	55	52	98	44	77
65-69	30	41	39	71	35	57
70-74	81	92	88	99	85	96
75-79	61	59	77	83	71	73
80-84	98	54	111	90	106	78
> 85	(54)	120	94	92	82	160

Herpes Zoster increases with age; this already known datum is confirmed by this registration. This finding tallies with that made in the Weekly Returns Service in the UK.

The provisional conclusion from the registration now lasting two years is that the incidence of herpes zoster over time is not entirely constant. A longer time series will be needed to demonstrate whether the incidence is constant to some extent in the longer term.

The topic herpes zoster has been maintained on the weekly return in 1999.

(ATTEMPTED) SUICIDE

In consultation with the Health Care Inspectorate, formerly the Chief Medical Office for Mental Health the topic was included in the weekly return in 1979 and is still on it.

In other fields too (hospitals), research into suicide is being performed at present. In this way it is being attempted to get an insight into the extent, the trend and other aspects of the problem. The name of the topic is also the definition.

The Chief Office of the same time requested that supplementary data be collected on the cases reported. For this purpose a questionnaire has been compiled in cooperation with Professor R.F.W. Diekstra, clinical psychologist, Leiden. On this form the question whether the attempt was successful or not and how the attempt was made appears. At the same time questions are asked about contacts with the medical sector prior to the (attempted) suicide. However, the essential aspect here is not whether the attempt was successful; the primary concern is the patient's intention, with the possibility that suicide is a consequence of the action.

The absolute number of reports (which is not equal to the number of patients, since recidivists are not uncommon) was 73, 74, 95, 80, 76 and 71 in 1993-1998.

The number of attempts per province group and degree of urbanization per 10 000 inhabitants may be found in Table 26. This breakdown into subgroups is of limited value, because of the relatively small frequencies.

When the degree of urbanization is considered, most suicide attempts are consistently reported in the cities.

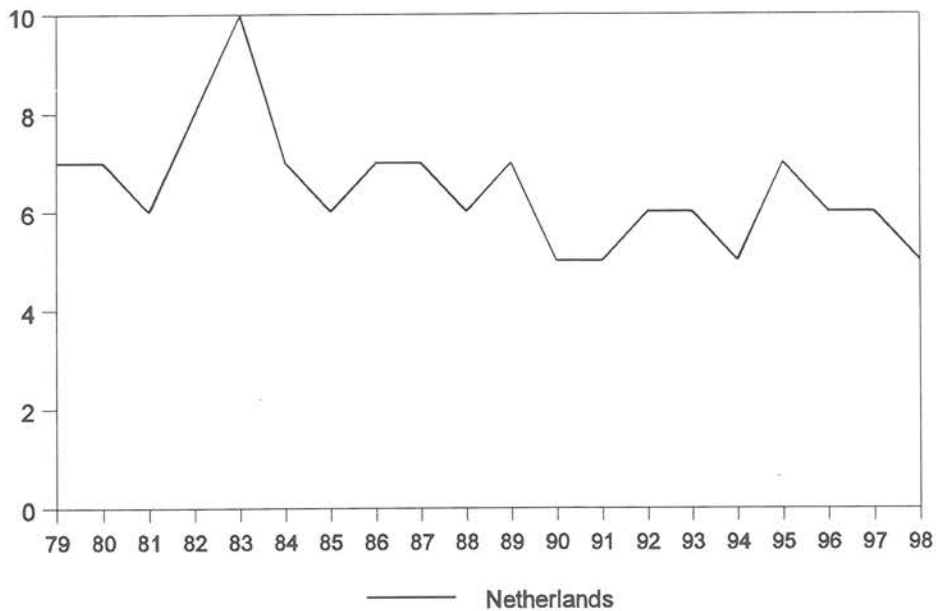
The distribution by province group displays a less consistent picture, possibly on account of the small numbers.

The figures do **not** support an increase that some suspect in the incidence of (attempted) suicide in the Netherlands.

Table 26: Number of reports of (attempted) suicide per province group and degree of urbanization and for the Netherlands, per 10 000 inhabitants, 1989-1998

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
1989	6	9	6	8	7	6	10	7
1990	5	6	4	7	4	5	7	5
1991	5	6	5	4	4	3	10	5
1992	12	4	6	5	3	7	7	6
1993	6	4	5	8	3	5	9	6
1994	5	6	5	5	3	4	9	5
1995	5	5	7	10	3	7	10	7
1996	6	5	4	9	1	6	7	6
1997	3	3	9	8	3	6	12	6
1998	5	4	6	7	4	4	11	5

Figure 15: Number of reports of (attempted) suicide for the Netherlands, per 10 000 inhabitants, 1979-1998



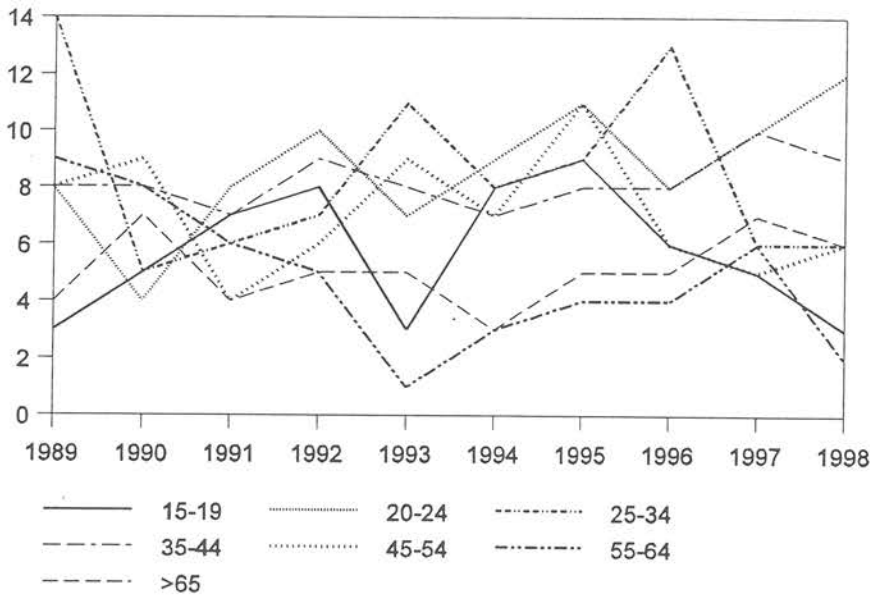
Age distribution

Table 27 gives the frequency of (attempted) suicide per 10 000 inhabitants by age group (see also Fig. 16).

Table 27: Number of reports of (attempted) suicide by age group, per 10 000 inhabitants, 1989-1998

	age group							
	10-14	15-19	20-24	25-34	35-44	45-54	55-64	>64
1989	-	(3)	8	14	8	8	9	4
1990	(1)	5	(4)	5	8	9	8	7
1991	(1)	7	8	6	7	4	6	4
1992	(1)	8	10	7	9	6	5	5
1993	-	(3)	7	11	8	9	1	5
1994	(1)	8	9	8	7	7	3	3
1995	-	9	11	9	8	11	4	5
1996	(1)	6	8	13	8	6	4	5
1997	(1)	(5)	10	6	10	5	6	7
1998	-	(3)	12	6	9	6	2	6

Figure 16: Number of reports of (attempted) suicide by age group, per 10 000 inhabitants, 1989-1998



With regard to age groups too the breakdown is of limited value on account of the small absolute numbers and the ease with which oscillations can occur. No clear preferential age emerges from the registration.

This topic has been maintained on the weekly return for 1999.

A PUBLICATION ON THE BASIS OR PARTLY ON THE BASIS OF THE DATA FROM CONTINUOUS MORBIDITY REGISTRATION

DIEKSTRA, R.F.W., M. VAN EGMOND.

Suicide and attempted suicide in general practice, 1979-1986.

Acta Psychiatrica Scandinavica; 79, 1989, p. 268-275

DIEKSTRA, R.F.W., A.C. DE GRAAF, M. VAN EGMOND.

On the epidemiology of attempted suicide: a sample survey among general practitioners.

Crisis; 5, 1984, no. 24, p. 108-118

DIEKSTRA, R.F.W., A.C. DE GRAAF, M. VAN EGMOND.

Over de epidemiologie van suïcidepogingen: een sample-survey onderzoek in huisartsenpraktijken.

Tijdschrift voor Sociale Geneeskunde; 1982, no. 15. P. 398-404

EGMOND, M. VAN.

De beoordeling van suïciderisico door de huisarts. Kan de huisarts suïcidepogingen voorkomen?

Leiden, Rijksuniversiteit, 1988 Dissertatie (Hoofdstuk 1)

EGMOND, M. VAN, R.F.W. DIEKSTRA, A.C. DE GRAAF.

Suïcidepogingen onder patiënten in de huisartspraktijk 1997-1984.

Tijdschrift voor Sociale Gezondheidszorg; 64, 1986, no. 24, p. 777-783

EGMOND, M. VAN, R.F.W. DIEKSTRA, A.C. DE GRAAF.

Suïcides onder patiënten in de huisartspraktijk.

Tijdschrift voor Sociale Gezondheidszorg; 61, 1983, no. 24, p. 934-937

EPIDEMIOLOGIE van Suïcidepogingen: de naald in de hooiberg:

Tijdschrift voor Sociale Geneeskunde; 60, 1982, no. 19, p. 549-550 Discussie.

PELVIC INFLAMMATORY DISEASE (P.I.D.)

Most cases of pelvic inflammatory disease (P.I.D.) are caused by a sexually transmitted agent (*Chlamydia trachomatis* or *Neisseria gonorrhoea*).

P.I.D. may have a number of consequences that call for more intensive medical counselling: infertility on account of a tubal closure, ectopic pregnancy and chronic abdominal complaints.¹³

The topic has been placed on the weekly return with the intention of intensifying the epidemiological research into the occurrence of 'new sexually transmittable diseases'. This policy was formulated by the former State Secretary Simons in a letter to the President of the Second Chamber (letter of 17 December 1991).

It is requested that every patient with acute P.I.D. (including salpingitis) be reported.

It has been elected to use the definition maintained in the Amsterdam Sentinel Station Project.

It relates to a patient with acute abdominal pain. The patient is clearly ill. Physical examination reveals pressure pain in the abdomen and in vaginal touch oscillating pain and painful adnexa. Fever ($>38^{\circ}\text{C}$), leucocytosis ($>12-15\ 000$) and an increased sedimentation ($>30\ \text{mm}$) support the diagnosis.

The criterion for counting the patient is that antibiotics are prescribed, either by the GP or by a gynaecologist if the patient has been referred for further examination.

The number of women with P.I.D. per 10 000 women per province group and degree of urbanization is given in Table 28 with the number for the Netherlands.

Table 28: Number of women with P.I.D. per province group and degree of urbanization and for the Netherlands per 10 000 women, 1993-1998

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
1993	9	4	8	7	8	5	10	7
1994	4	10	9	10	10	6	12	9
1995	3	10	10	8	11	7	10	8
1996	4	10	7	6	8	7	8	7
1997	7	8	10	5	12	5	13	8
1998	6	8	6	4	2	6	8	6

The national incidence of P.I.D. is about one third of the incidence that was registered in 1990 in Amsterdam: 8 and 24 per 10 000 women respectively.¹⁴ Over the years 1993-1998 the degree of occurrence is constant.

Considered over the registration period, P.I.D. occurs more in the western and eastern provinces. Occurrence in the northern provinces is on average clearly lower.

In the rural municipalities and the cities more patients with P.I.D. were reported than in the commuter municipalities and smaller towns (see also p. 78 for the distribution of urethritis by degree of urbanization).

Seasonal influences

Major differences between the quarters were not found in 1998

Age distribution

Table 29 gives the age distribution of the patients with P.I.D. reported by the spotter physicians.

Table 29: Number of women with P.I.D. per age group per 10 000 women, 1993-1998

age distribution	women					
	1993	1994	1995	1996	1997	1998
< 15	(1)	-	-	-	-	-
15-19	9	7	5	(5)	(11)	(11)
20-24	14	10	10	13	(8)	(9)
25-29	13	16	15	11	(5)	17
30-34	11	20	(12)	15	19	15
35-39	13	14	18	14	21	(6)
40-44	15	13	19	11	13	10
45-49	(5)	8	10	11	13	(7)
50-54	(9)	18	13	(8)	(5)	(2)
> 54	(1)	(2)	(2)	(6)	(5)	(1)

P.I.D. proves to be a disease above all of women in the 20-50 age group.

This finding tallies with the results of the registration by the Amsterdam GPs in the period 1983-1990.

The topic has been removed from the weekly return in 1999.

URETHRITIS OF THE MAN

Sexually transmitted diseases (STD) are, after influenza-like illnesses, the most common infectious diseases in the Netherlands. There are some 20 different pathogens that lead to a variety of complaints. Chlamydia, gonorrhoea, syphilis, herpes, H.P.V. infection, hepatitis B and H.I.V. infection are the principal ones.

The epidemiology of STD in the Netherlands is unclear, despite a large number of small-scale studies.

Hepatitis B and scabies (B diseases) and gonorrhoea and syphilis diseases) are notifiable diseases. Under-reporting is a recognized problem with the notifiable diseases. It is further the question whether gonorrhoea can still be used as a tracer disease for all STD. There is also a registration system in existence for STD cases with the social nurses of the Municipal Health Services.

Insight is desired into the occurrence of STD in the Netherlands. Studies on a small scale can give only partial insight. Registration in the sentinel stations can provide a useful supplementation of such studies.

The general practitioner is asked to report every patient with a (sub)acute discharge from the penis whereby dysuria usually occurs. This definition ties in with that used in the Amsterdam Sentinel Station Project.

When the disease AIDS comes up for discussion with a patient with urethritis during the consultation, the patient is also reported in the category concern about AIDS'.

The number of patients with urethritis per 10 000 men per province group and degree of urbanization, along with the number for the whole of the Netherlands, is given in Table 30.

Table 30: Number of patients with urethritis per province group and degree of urbanization and for the Netherlands, per 10 000 men, 1992-1998

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
1992	16	40	45	10	46	14	65	31
1993	15	32	25	19	36	16	33	23
1994	20	32	28	14	26	18	39	25
1995	14	40	32	11	43	18	42	26
1996	9	41	21	11	47	15	22	21
1997	12	23	22	11	33	10	34	17
1998	15	16	23	12	18	17	20	17

The national incidence of urethritis has clearly fallen.

In all years urethritis is clearly reported more in the eastern and western provinces.

The most striking finding in the registration of urethritis of the man is, however, its consistently low occurrence in the smaller towns and commuter municipalities. A good explanation cannot be found for this.

It is, however, striking that the occurrence of P.I.D. displays the same distribution over the urbanization groups.

Seasonal influences

Major differences between the seasons were not found.

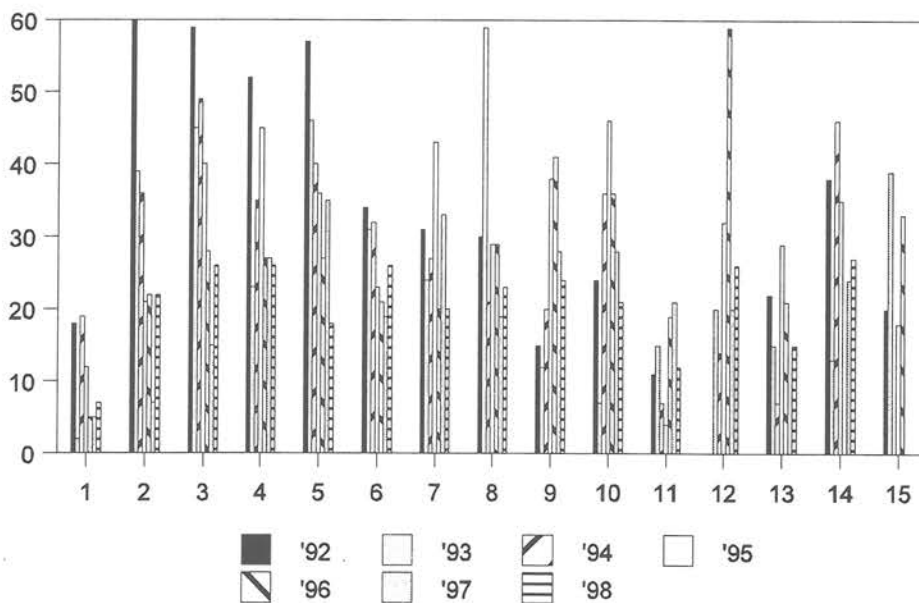
Age distribution

In Table 31 the age distribution is given of the patients with urethritis reported by the general practitioner (see also Figure 17).

Table 31: Number of patients with urethritis per age group per 10 000 men, 1992-1998

age group	men						
	1992	1993	1994	1995	1996	1997	1998
< 15	(0)	-	-	(2)	-	-	(0)
15-19	18	(2)	19	12	(5)	(5)	(7)
20-24	60	39	36	21	22	(7)	22
25-29	59	45	49	40	28	15	26
30-34	52	23	35	45	27	27	26
35-39	57	46	40	36	27	35	18
40-44	34	31	32	23	21	19	26
45-49	31	24	27	43	20	33	20
50-54	30	59	21	29	29	19	23
55-59	15	(12)	20	38	41	28	24
60-64	24	(7)	36	46	36	28	21
65-69	(11)	(15)	(7)	(4)	19	21	12
70-74	-	(20)	(14)	32	59	(20)	26
75-79	(22)	(15)	(7)	(29)	(21)	0	15
80-84	(38)	(13)	(46)	(35)	-	(24)	27
> 85	(20)	(39)	-	(18)	(33)	0	0

Figure 17: Number of patients with urethritis per age group per 10 000 men, 1992-1998



Age group

1=15-19 2=20-24 3=25-29 4=30-34 5=35-39 6=40-44 7=45-49 8=50-54
 9=55-59 10=60-64 11=65-69 12=70-74 13=75-79 14=80-84 15=> 85

Urethritis is seldom reported under the age of 15.

The majority of the patients are aged between 20 and 40. These results tally with those of the Amsterdam Sentinel Station Project.¹⁴

The topic will be repeated in 1999.

CONCERN ABOUT AIDS

General practitioners are confronted in their practice with AIDS patients and seropositivity to only a limited extent. The experience of GPs with care for seropositive patients and patients suffering from AIDS is limited.

Nevertheless, it is expected that among the population, despite or because of the extensive publicity campaign, there exists a certain degree of anxiety about this disorder. Publicity campaigns are often general in nature and do not give an answer to every question.

The present pattern of (sexual) relationships, often comprising various partners, whether or not simultaneously, may be a reason for questions being asked about the risks of infection with H.I.V.

It is considered important to obtain insight into these phenomena. In 1988 the topic "Concern about AIDS" started.

The aim of the registration is to take stock of the requests for help from which concern about or fear of AIDS emerges. These include the requests by patients who do not suffer from AIDS or are not proven seropositive. In addition to insight into the extent to which general practitioners are confronted with these requests, the aim is to obtain a picture of those making the requests and of the action undertaken by the general practitioners in response to them.

The spotter physicians are asked to register each consultation in which either the patient or the general practitioner brings up the subject of AIDS. In a supplementary questionnaire a number of supplementary data on the patient are recorded, the reasons for the patient's visit to the general practitioner, whether a request for determination of H.I.V. antibodies is made and whether that request is granted, whether the physician for other reasons than the patient's request proposes that such a test be performed and, if an examination has been made, what the result is.

Finally, the general practitioners are asked to specify the action that they further undertake in relation to the patient's questions and whether a follow-up contact is arranged. Extensive reporting on this supplementary examination is being done elsewhere¹⁵ (J.J. Kerssens and L. Peters, Netherlands Institute of Primary Health Care).

Table 32 lists the number of consultations in which AIDS comes up for discussion, by province group and degree of urbanization and for the Netherlands, per 10 000 inhabitants, 1989-1998.

Table 32: Numbers of consultations in which AIDS comes up for discussion, by province group and degree of urbanization and for the Netherlands, per 10 000 inhabitants, 1989-1998

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
1989	10	11	18	15	4	13	27	15
1990	8	8	21	22	4	15	30	16
1991	7	6	20	24	2	15	29	16
1992	16	13	24	27	7	19	35	22
1993	17	21	27	22	11	18	39	23
1994	16	20	32	33	8	22	50	27
1995	20	15	23	24	9	18	37	21
1996	13	15	23	25	7	20	29	20
1997	13	14	37	23	7	20	60	24
1998	12	12	25	18	11	16	36	18

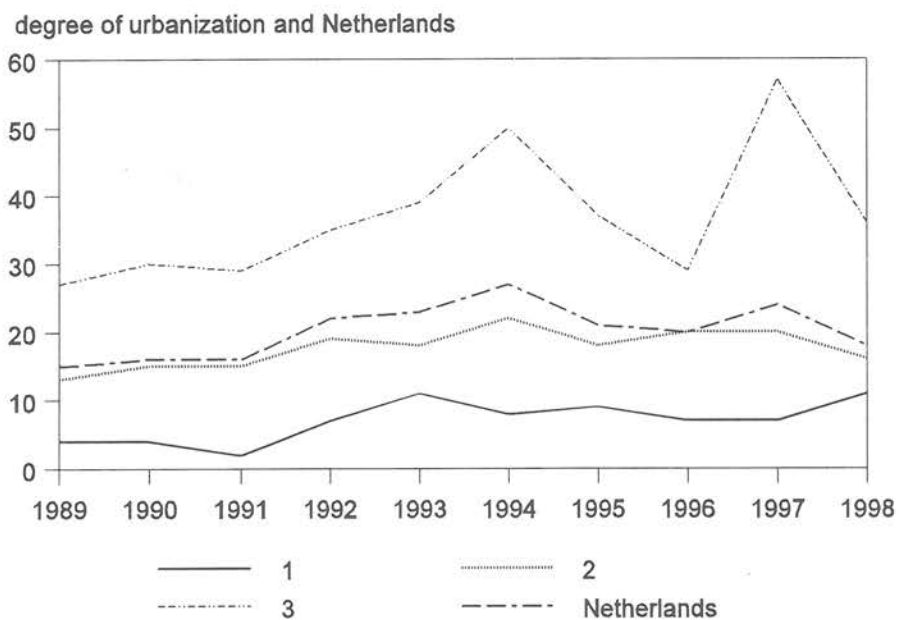
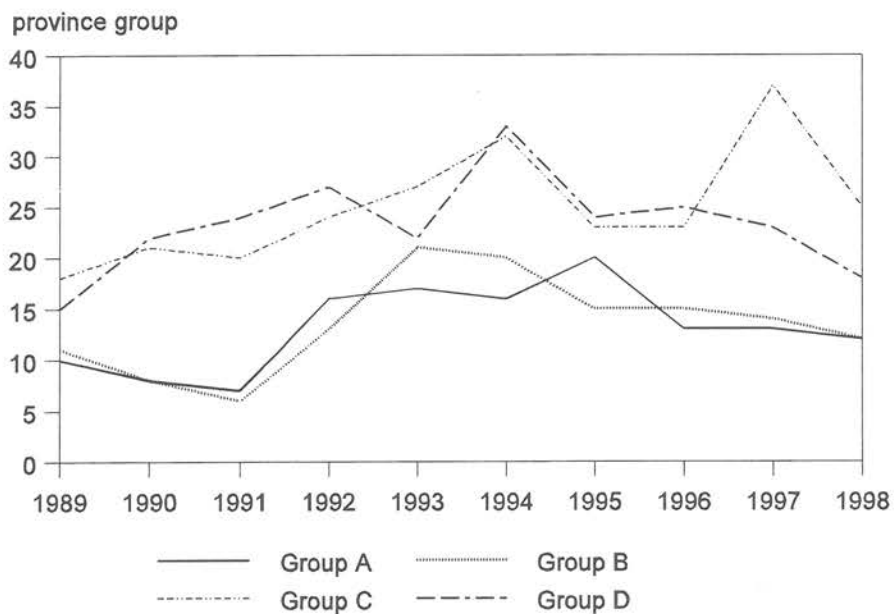
Initially, the number of consultations about AIDS was constant for several years. From 1992 an increase occurs, which also continued into 1994. From declining trend has 1995 a occurred. However, the GPs in the cities clearly have more consultations in which AIDS comes up for discussion than elsewhere (cf. Fig. 18).

The supplementary data show that the number of consultations in which a request for a test on H.I.V. antibodies is made initially steadily increased: from 131 in 1990 to 321 in 1994. In 1998 191 requests for a test were recorded.

Although not every request for a test is granted, the number of tests performed also initially increased: from 121 in 1990 to 259 in 1994. In 1998 this number was 108. In a small number of these cases the GP himself or herself takes the initiative for making a test.

The western provinces and the cities display unchanged the highest number of reports.

Figure 18: Number of consultations in which AIDS comes up for discussion, per province group and degree of urbanization and for the Netherlands, per 10 000 inhabitants, 1989-1998



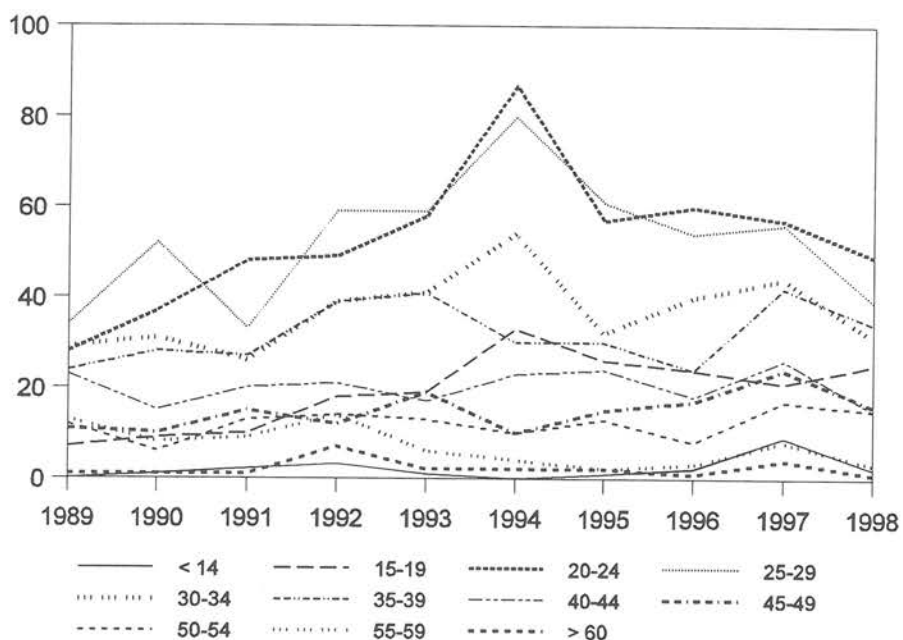
Age distribution

Table 33 gives the number of consultations in which AIDS comes up for discussion per 10 000 inhabitants per age group, for both sexes together (cf. Fig. 19).

Table 33: number of consultations in which AIDS comes up for discussion per age group, per 10 000 inhabitants, 1989-1998

Age group	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
< 14	-	(1)	(2)	(3)	(1)	-	(1)	(2)	9	(2)
15-19	7	9	10	18	29	33	26	24	21	25
20-24	28	37	48	49	58	87	57	60	57	49
25-29	34	52	33	59	59	80	61	54	56	39
30-34	29	31	26	39	41	54	32	40	44	31
35-39	24	28	27	39	41	30	30	24	42	34
40-44	23	15	20	21	17	23	24	18	26	15
45-49	11	10	15	12	19	10	15	17	24	16
50-54	12	(6)	13	14	13	10	13	8	17	15
55-59	13	8	9	14	6	4	2	(3)	(8)	(3)
> 60	(1)	(1)	(1)	7	(2)	(2)	(2)	(1)	(4)	(1)

Figure 19: Number of consultations in which AIDS comes up for discussion per age group, per 10 000 inhabitants, 1989-1998



The majority of the questions about AIDS put to the GP are asked in the 20-49 age group. The annual report of the AIDS info line for 1988-1990 likewise gives a high percentage; about 70% of those ringing this line are between 20 and 50 years.¹⁶ In the sentinel station registration in 1997 89% of the persons who come to talk about AIDS are between 20 and 50. Up to the end of 1994 in all age groups between 15 and 35 years the number of consultations in which AIDS comes up for discussion has increased. From 1995 a sharp fall has occurred precisely with this age group.

The topic has been maintained on the weekly return for 1999.

LIST OF PUBLICATIONS ON THE BASIS OR PARTLY ON THE BASIS OF THE DATA FROM THE CONTINUOUS MORBIDITY REGISTRATION

KERSSENS, J.J., L. PETERS

Ten years of questions about H.I.V. and AIDS for the GP

Aidsbestrijding, 1998, No. 42, p. 10-12

With the exception of the occasional doctor in Amsterdam and Rotterdam, Dutch GPs are confronted to only a limited extent with AIDS patients and seropositivity. The experience of GPs with care for H.I.V.-infected clients and patients who have AIDS is therefore limited. Nevertheless, the GP is in principle in a favourable position to make a contribution to the prevention of and provision of information on H.I.V. After all, a GP is often acquainted with the background of a patient and can in personal contact react to individual questions and to concern with regard to AIDS and seropositivity. And because the results of therapy in early treatment have been improved, it is becoming increasingly important to be able to make a good estimate of the possible need to decide on an H.I.V. test.

Action by GPs

The development of requests to the GP for help related to AIDS, from 1988 to the end of 1997, shows that in most respects the last year fits in with the preceding years. There is no question of any abrupt changes in the number of AIDS-related requests for help, nor in the number of appointments for an H.I.V. test. The availability of better medication, in the short term at least, has not had any great repercussions on the number of requests for help on aids from the Dutch GP by patients who are not (proven) seropositive. Coutinho considers the advantages of early treatment meanwhile so great that physicians ought to draw the attention of patients belonging to a high-risk group and not yet tested to the new possibilities of treatment. Proceeding on the fact that more than 90% of the contacts come about on the initiative of the patient, this policy does not seem to have made its way into Dutch general practice. With regard to AIDS GPs still act reactively. Even touching on the subject of testing is of rare occurrence, even now that in recent years there is no longer any question of a reticent test policy. Incidentally, that does not apply solely to the Netherlands. Although GPs are well aware of risk factors and believe that they are acting in accordance with the guidelines in recommending an H.I.V. test, that is disappointing in

daily practice. English GPs seem to find it difficult to talk about the H.I.V. test and about sexually risky behaviour. American doctors too fail routinely to discuss the H.I.V. test with patients with risky behaviour. Therefore, many people who have run risks in the past remain untested in the United States. Doctors have a positive image of their screening capacity, but that image does not tally with reality. Probably the Dutch situation in this respect is no different.

ROS, C.C., J.J. KERSSSENS, M. FOETS AND L. PETERS.

Trends in HIV-related consultation in Dutch general practice.

International Journal of STD & AIDS, 1999; 10: 294-299

KERSSSENS, J.J., L. PETERS.

Angst voor AIDS: hulpvragen bij de huisarts in de periode van 1988 tot en met 1997.

Nivel, juli 1998, Utrecht

ROS, C.C., J.J. KERSSSENS, M. FOETS, L. PETERS

Questions about AIDS put to the general practitioners in the period 1988-1996

NIVEL, April 1997, Utrecht

MOONS, MARIAN A.W., LOE PETERS, AAD I.M. BARTELDLS, JAN J. KERSSSENS

Concerns about AIDS in general practice.

BMJ, 1996; 312: 285-6

CASTEREN, Viviane van, Henk van RENTERGHEM, Joachim SZECSENYI.

Data collection on Patterns of demands for HIV-testing and other HIV/AIDS-related consultations in general practice. Surveillance by Sentinel Networks in various European Countries.

DG V Project "Europe Against AIDS", September 1995.

CASTEREN, V. VAN, A. BARTELDLS, e.a.

Prescription of HIV-test by Sentinel networks of general practitioners in various European countries .

Poster presentation for the VII th International Conference on AIDS. Florence 16-21 Juni, 1991

MOONS, M.A.W., L. PETERS.

Huisarts en vragen over AIDS.

Medisch Contact; 45, 1990, no. 36, p. 1055-1057

UNILATERAL PHYSICAL VIOLENCE AGAINST PERSONS

Until recently unilateral physical violence against persons was considered above all under the issues child abuse and violence against women. Of more recent date are the themes violence at school, brutality in sport and (sexual) intimidation at work.

In the discussion on these subjects the question is inevitably asked what the extent of the phenomenon is. It is therefore urged to investigate this further.

In 1985, on the instructions of the then Ministry of Welfare, Public Health and Culture, a national investigation was started into the nature, extent, background and consequences of violence against women in heterosexual relationships. Of the women interviewed 9% proved to have suffered incidental unilateral physical violence and 11.4% repeated times.¹⁷ In view of the culture in which 'ordinary violence' indoors against adult women is concealed and denied, these results in the opinion of the researcher indicate only a lower limit to the extent of the problem.

The Counselling Committee has received repeated requests to include some form of unilateral violence against persons on the weekly return. That was introduced in 1996.

Physical violence is interpreted as actions whereby against the will of the other party his/her physical integrity is violated and/or pain or injury is caused. It expressly relates only to forms of unilateral violence; fights between two persons fall outside the definition.

The GP is asked to report the victims of unilateral physical violence. A distinction should be made by age and sex.

In the supplementary questionnaire questions are asked whether incidental or repeated physical violence is involved, about the nature of the injury and the physical consequences and who the perpetrator was.

The number of reports of victims of unilateral physical violence per province group and by degree of urbanization is shown with the number for the Netherlands per 10 000 men and per 10 000 women in Table 34.

Table 34: Number of reports of victims of unilateral physical violence per province group and degree of urbanization and for the Netherlands per 10 000 men and women in 1996-1998

		province group				degree of urbanization			Netherlands
		A	B	C	D	1	2	3	
men	1996	7	4	5	7	7	6	2	6
	1997	6	3	10	11	6	8	8	8
women	1996	3	6	5	4	5	5	4	5
	1997	11	6	13	10	2	9	23	10
total	1996	5	5	5	5	6	6	3	5
	1997	8	4	11	10	4	9	16	9
	1998	9	5	11	6	6	7	16	8

In 1998 the number of victims of unilateral violence fell slightly in respect of 1997.

Seasonal influences

There are few differences established in the number of victims of unilateral physical violence between the quarters of 1998. The number of reports in the first half of 1998 was somewhat above that in the 2nd half.

Age distribution

Table 35 gives the age distribution of the number of victims of unilateral physical violence for the Netherlands.

Table 35: Number of victims of unilateral physical violence per age group per 10 000 men and per 10 000 women in 1996-1998

age group	men			women			total		
	1996	1997	1998	1996	1997	1998	1996	1997	1998
1-4	0	-	-	(3)	(3)	(3)	(1)	(2)	(2)
5-9	(4)	(5)	12	(2)	(3)	(5)	(3)	(4)	8
10-14	9	13	3	(2)	22	(8)	6	17	8
15-19	31	32	22	14	16	21	23	24	21
20-24	10	18	22	(4)	25	(6)	7	21	14
25-29	(3)	12	9	(5)	9	12	4	10	10
30-34	8	(5)	14	12	25	13	10	15	13
35-39	0	(4)	(4)	(7)	10	(4)	(4)	7	(4)
40-44	(6)	(2)	(6)	(8)	(6)	12	7	(4)	9
45-49	(2)	(8)	(3)	(4)	-	15	3	(4)	(3)
50-54	(5)	(5)	(6)	(3)	5	7	4	(5)	9
55-59	(3)	-	-	(3)	10	12	3	(5)	-
60-64	0	-	(4)	0	7	-	0	(4)	(2)
65-69	(4)	-	(5)	0	-	-	(2)	-	(4)
70-74	0	(5)	-	(4)	(4)	(4)	(2)	(5)	8

Above all the 15-24 age group proves to become the victim of unilateral physical violence. Boys are clearly more often the victim than girls in 1996 and 1998 and in 1997 with the same frequency.

In the 25-50 age group women are more often the victim than men.

Perpetrators of unilateral physical violence for which the GP is consulted are above all men (85%). When women are the victims the majority of perpetrators are known to the victim (65%); if men are the victims, over 65% of the perpetrators are unknown. This pattern has become clear during the now three years of recording.

The subject is maintained on the weekly return for 1999.

ACUTE GASTRO-ENTERITIS

Gastro-enteritis belongs to the top ten of disorders in the Netherlands as regards incidence, and it contributes towards a considerable burden on primary health care.¹⁸

In 1996 gastro-enteritis was again included in CMR Sentinel Stations the Netherlands. It appeared on the weekly return in 1992-1993 also.

The aim of the investigation is:

1. to follow trends in the incidence and care burden of gastro-enteritis;
2. to follow trends in the incidence of campylobacteriosis and Salmonellosis in connection with implementation of the National Zoonoses Plan;
3. to determine the extent of the care burden ascribable to specific pathogens.

The spotter physician is asked in this registration to report a person with a new episode of gastro-enteritis. A new episode entails that the patient is seen for the first time during this episode and after a possible earlier report has been free from complaints for at least 14 days.

Patients who consult the GP exclusively by telephone need not be reported on the weekly return.

The following definition of gastro-enteritis is used:

- three or more times a day thin motions, differing from normal for this person or;
- thin motions and two of the following symptoms (fever, vomiting, nausea, stomach-ache, stomach cramps, blood or mucus in the motions) or;
- vomiting and two of the following symptoms (fever, nausea, stomach-ache, stomach cramps, blood or mucus in the motions).

Supplementary to the registration on the weekly return patients are asked to complete a questionnaire and to send in a faeces sample. The GPs also ask a control person to complete this questionnaire and send in a faeces sample.

Both the faeces samples of the patients and those of the control persons are examined at the RIVM. The questionnaires are processed at the Centre for Infectious Diseases Epidemiology by Mrs. M.A.S. de Wit and Dr. Y.T.P.H. van Duijnhoven.

Table 36 lists the numbers of reports of acute gastro-enteritis per province group and degree of urbanization and for the Netherlands.

Table 36: Number of cases of acute gastro-enteritis per province group and degree of urbanization and for the Netherlands, per 10 000 men and per 10 000 women, 1992-1993 and 1996-1998

		province group				degree of urbanization			Netherlands
		A	B	C	D	1	2	3	
M	1992	38	40	52	112	38	59	82	62
	1993	32	53	49	88	31	53	80	56
	1996	39	47	49	66	40	51	56	51
	1997	26	54	68	51	29	51	85	52
	1998	27	89	81	46	56	61	97	64
F	1992	35	53	52	97	43	57	74	60
	1993	34	55	42	69	34	45	71	50
	1996	43	79	63	88	81	69	62	69
	1997	25	64	68	59	48	52	89	57
	1998	24	79	85	56	61	60	99	65
T	1992	37	47	52	104	41	48	78	62
	1993	33	54	46	78	32	48	76	53
	1996	41	63	56	77	60	60	59	60
	1997	26	59	68	55	38	51	87	54
	1998	25	84	83	51	58	60	98	66

The number of reports of gastro-enteritis is approximately at the level of 1992-1993. In 1996-1998 more women than men are reported with gastro-enteritis: 57-69 as against 51-64 respectively per 10 000 women and per 10 000 men. In the years 1992-1993 this difference was less clear.

In 1998 the largest number of reports came from the western and eastern provinces. In the southern provinces there has been a decline in the number of reports since 1992; this does not occur in other provincial groups.

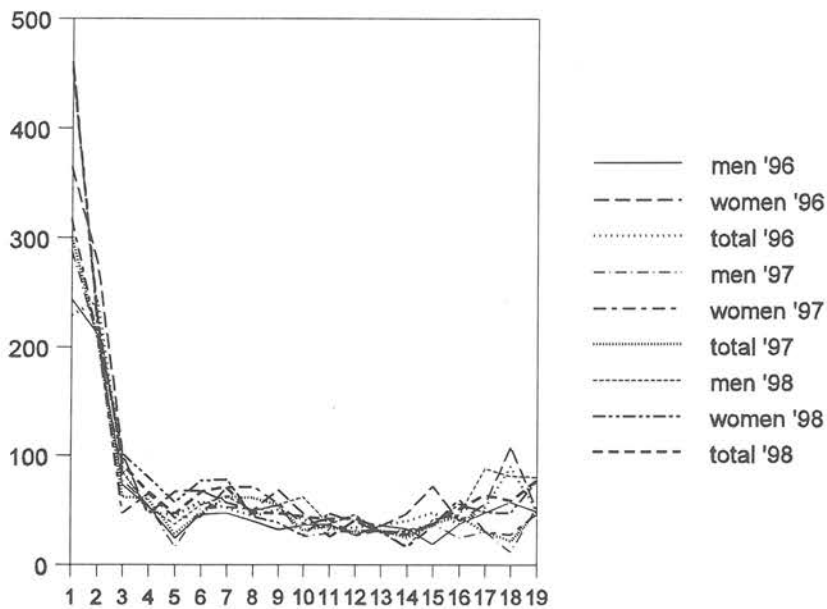
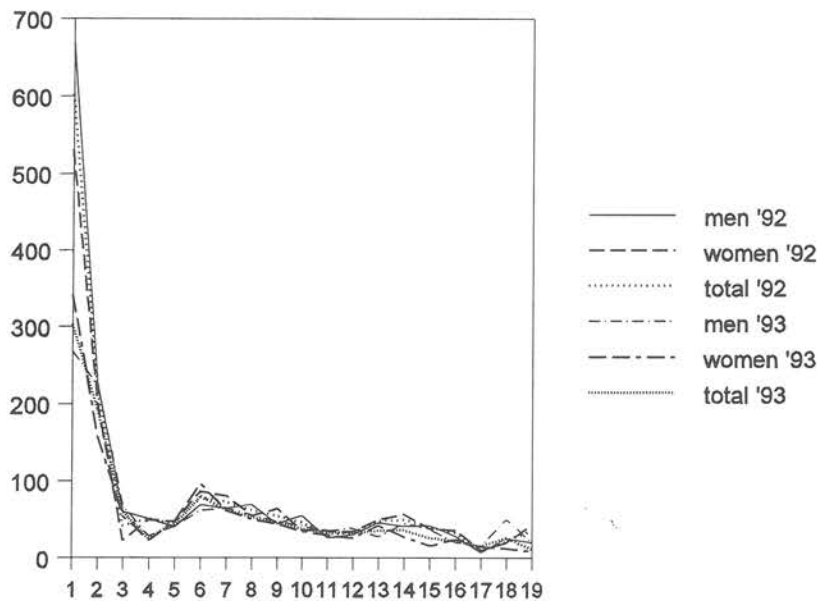
Age distribution

In Table 37 the data on the gastro-enteritis patients reported by the GP by age group are stated (see Figure 20).

Table 37: Number of reports of acute gastro-enteritis per 10 000 men and per 10 000 women, 1996-1998

age group	M			F			T		
	1996	1997	1998	1996	1997	1998	1996	1997	1998
≤ 1	244	288	447	364	317	460	229	301	453
1- 4	211	206	226	276	208	217	242	207	222
5- 9	73	77	84	102	47	101	87	62	92
10-14	53	55	53	46	65	80	49	60	67
15-19	24	16	37	67	43	57	45	29	47
20-24	46	51	55	68	44	77	58	47	67
25-29	47	53	63	57	71	78	52	62	71
30-34	40	50	49	50	72	45	45	61	47
35-39	32	54	55	68	56	39	50	55	47
40-44	36	26	62	47	38	27	42	32	44
45-49	37	29	37	26	42	47	32	35	42
50-54	27	32	46	41	27	40	34	30	43
55-59	35	31	30	36	32	30	36	32	30
60-64	33	32	17	47	16	31	40	25	28
65-69	19	38	41	72	36	36	48	37	38
70-74	37	25	46	40	60	56	38	45	51
75-79	48	31	88	56	31	49	53	31	64
80-84	57	(12)	81	109	28	48	90	22	59
≥ 85	49	54	80	51	47	77	50	49	78

Figure 20: Number of reports of acute gastro-enteritis by age group per 10 000 men and per 10 000 women, 1992-1993 and 1996-1998



1= \leq 1 2= 1-4 3= 5-9 4=10-14 5=15-19 6=20-24 7=25-29 8=30-34
 9=35-39 10=40-44 11=45-49 12=50-54 13=55-59 14=60-64 15=65-69 16=70-74
 17=75-79 18=80-84 19= \geq 85

In both registration periods most cases of acute gastro-enteritis are diagnosed among babies and 1-4 year-olds.

In 1996-1998, otherwise than in 1992-1993, there is among 5-9 year-olds a clearly higher incidence compared with the 10-80 age groups.

In the age groups between 10 and 80 years the incidence differs little: between 29 and 60 per 10 000 persons of any age group.

Seasonal influences

In Table 38 the numbers of acute gastro-enteritis cases per season are stated.

Table 38: Number of reports of acute gastro-enteritis per season, per 10 000 inhabitants, for 1997-1998

quarter	1	2	3	4	total
M 1997	10	13	20	10	53
1998	20	10	17	17	64
F 1997	12	15	19	11	57
1998	20	12	16	18	66
T 1997	11	14	19	11	55
1998	20	11	16	17	66

In 1998 the number of reports was the highest in the first quarter: 20 as against 11, 16 and 17 respectively per 10 000 inhabitants in the other quarters.

Results of the faeces cultures

The results of the examination of the faeces samples of both patients and control persons will be reported on in detail by the RIVM (Mrs. M.A.S. de Wit).

The subject appears on the weekly return in 1999 too.

PUBLICATIONS ON THE BASIS OR PARTLY ON THE BASIS OF THE DATA FROM THE CONTINUOUS MORBIDITY REGISTRATION

WIT DE M.A.S., M.G.P. KOOPMANS, L.M.KORTBEEK, W.J. VAN LEEUWEN, J. VINJE, A.I.M. BARTELDI, Y.T.P.H. VAN DUINHOFEN

Interim report of a study on gastro-enteritis in sentinel practices in the Netherlands (NIVEL) 1996-1999.

Results of the first two years.

RIVM, Bilthoven, January 1999, report No. 216852003.

Introduction In 1996 an investigation started into gastro-enteritis in patients reporting to the GP with gastro-enteritis. This investigation is being performed in cooperation with the Netherlands Institute of Primary Health Care (NIVEL) and has the following aims: estimating (trends in) the incidence of gastro-enteritis for which a GP is consulted, evaluation of the effect on people of a preventive programme among production animals to cut back the number of Salmonella and Campylobacter infections, estimating the relative importance of a road panel of micro-organisms in the causing of gastro-enteritis and the identification of risk factors. The data collection will be rounded off in 1999. This report presents the results of the first two years of this investigation.

Method The investigation consists of two parts: an enumeration study and a patient control investigation. All the patients who consult a NIVEL GP (40-45 sentinel stations) are tallied, by sex and age group. Moreover, GPs who take part in the patient control investigation (33-36 sentinel stations) ask each patient who consults them for gastroenteritis and an age-matched control to complete a questionnaire and collect a faeces sample.

Results The incidence of gastro-enteritis for which a GP is consulted was 77 per 10 000 person years from May 1996 to May 1998. The incidence was significantly higher among persons up to 5 years than among persons of 5 years and older. A higher incidence was also found for women and for urban areas. A lower incidence was found in the northern region in comparison with the rest of the Netherlands. Of all patients who consulted a participating GP 40% took part in the patient control investigation. In 34% of these patients and in 7% of the controls a pathogen was demonstrated in the faeces. This percentage was higher in the age groups up to 15 years (47%), and among patients who had complaints for less than 7 days before they consulted the GP (46%). Campylobacter spp was isolated in the faeces of 10% of the patients, Salmonella spp in 4% and Shigella spp and Yersinia spp in fewer than 1%. These bacteria were hardly found at all in controls. VTEC was found in fewer than 1% of both patients and controls. Rotavirus and SRVS were each found in 5% of the patients, adenovirus in 3% and astrovirus in 1%. Giardia Lamblia was found both in patients (6%) and in the controls (4%). Entamoeba histolytica. Cryptosporidium and Cyclospora were found in 1-2% of the patients. Dientamoeba fragilis was frequently found in patients (10%) and even more often in controls (15%). As independent risk factors for gastro-enteritis the following were found among others: having a chronic gastro-intestinal disorder (OR=6.5 95% b.i. 3.6-11.4) and travel to Asia (OR=25.8 95% b.i. 3.0-22.9) and other developing countries (OR=8.7 95% b.i. 1.1-70.4). For bacterial, viral and parasitical gastro-enteritis differences in risk factor

were found; for instance, parasitical gastro-enteritis proved to be connected with swimming in a swimming bath and with the presence in the household of a child attending primary school.

Conclusion In the incidence of GP consultations for gastro-enteritis of 77 per 10 000 person years a slight decline seems observable in respect of the incidence of 90 per 10 000 person years in a comparable investigation in 1991-1993. The principal pathogens of gastro-enteritis for which the GP was consulted were *Campylobacter* spp, *Salmonella* spp, rotavirus, SRV and *Giardia Lamblia* and *Dientamoeba fragilis*. However, the last two were also frequently encountered in controls. The incidence and the positive percentage for *Salmonella* spp, *Salmonella* Enteritidis and *Campylobacter* seemed to have declined somewhat on respect of a comparable investigation in 1992-1993. The risk factors for the various groups of pathogens can serve as a handle for determining preventive measures against contracting an infection with these pathogens. Definitive results and more extensive risk analysis will be presented after the data collection has been rounded off.

WITDE M.A.S., L.M. KORTBEEK, W.J. VAN LEEUWEN, M.P.G. KOOPMANS, A.I.M. BARTELD, I.A. VAN ASPEREN, M.W. BORG DORFF.

Interim-rapportage van onderzoek naar gastro-enteritis in huisartsenpeilstations (NIVEL) 1996-1997

Methoden en resultaten van de eerste vijf maanden.

RIVM, 1997, Rapport nr. 216852001.

GOOSEN, E.S.M., A.M.M. HOOGENBOOM-VERDEGAAL, A.I.M. BARTELD, M.J.W. SPRENGER, M.W. BORG DORFF.

Incidentie van gastro-enteritis in huisartsenpeilstations in Nederland, 1992-1993.

RIVM, 1995, Rapport nr. 149101012.

GOOSEN, E.S.M., A.M.M. HOOGENBOOM-VERDEGAAL, A.I.M. BARTELD, M.J.W. SPRENGER, M.W. BORG DORFF.

Incidentie van gastro-enteritis in huisartsenpeilstations in Nederland, 1992-1993.

Infectieziekten Bulletin, jaargang, 1995, nr. 4

PROSTATE TROUBLE

Early detection of frequently occurring forms of cancer in the hope of preventing further disaster by timely treatment continues to be called for. Introduction of mass screening for cancer demands research beforehand into the effect of early detection.

Prostate cancer is of frequent occurrence among men. However, screening for prostate cancer is still controversial, so that research is going on into the effect of early detection of prostate cancer.

The Social Health Care Institute of Erasmus University, Rotterdam, is involved in the evaluation of a randomized study into the effect of early detection of prostate cancer.

This early detection takes place by means of rectal touch, transrectal ultrasonography by a urologist and a PSA determination in the blood.

The GP can perform a rectal touch and has the possibility of applying for a PSA determination. For a good evaluation of the effect of early detection of prostate cancer it is important to chart how often the GP performs or applies for these two examinations in the situation in which no screening has been introduced.

The registration by the CMR Sentinel Stations is a good possibility of gaining insight into the performance of rectal touch and application for a PSA determination by the GP.

The spotter physician is requested to report all rectal touches performed and all PSA determinations applied for that are done to diagnose 'prostate trouble'. Spotter physicians are also asked to report when a patient, on the basis of the results of these examinations, is referred for suspected prostate cancer.

The number of times that the GP performs a rectal touch, applies for a PSA determination and, on the basis of the results of these examinations, refers a patient to the urologist with suspected prostate cancer is shown in Table 39 per 10 000 men by province group and degree of urbanization and for the Netherlands as a whole.

Table 39: number of rectal touches performed, PSA determinations applied for and referrals for suspected prostate cancer per province group and degree of urbanization and for the Netherlands, per 10 000 men in 1997-1998

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
rectal touch								
1997	64	144	147	97	164	100	147	116
1998	45	120	167	105	124	107	170	117
PSA determination								
1997	26	113	85	90	134	70	78	81
1998	33	109	103	69	121	71	105	83
referral								
1997	7	12	11	7	15	8	12	9
1998	7	19	20	7	24	12	14	14

In the northern provinces the lowest number of examinations performed is reported in both years. The number of PSA determinations applied for in the north is particularly low compared with the number of times that this examination is applied for in the other province groups.

The differences in PSA determinations applied for between the degrees of urbanization, although considerable, are nevertheless clearly less great.

As regards nearly all province group and the degree of urbanization groups, more patients are referred with suspected prostate cancer if more examination has been done nearly all province groups. In 1998 there is a considerable increase in the number of men referred with suspected prostate cancer.

Age distribution

The age distribution of the men on whom rectal touch is performed, for whom a PSA determination is applied and of men who are referred with suspected prostate cancer is given in Table 40.

Table 40: number of men for whom a rectal touch has been performed whereby a PSA determination has been requested and the number of men referred per 10 000 men by age group in 1997-1998

age group	rectal touch		PSA determination		referral	
	1997	1998	1997	1998	1997	1998
<15	0	-	0	-	0	
15-19	(3)	7	(3)	(2)	0	-
20-24	11	7	0	-	0	-
25-29	15	(2)	0	-	0	-
30-34	27	21	(2)	(5)	0	-
35-39	39	31	12	(4)	0	-
40-44	59	52	17	18	0	-
45-49	112	94	62	53	(4)	(2)
50-54	252	151	138	101	(3)	(2)
55-59	326	281	245	194	16	33
60-64	347	419	333	357	25	48
65-69	453	523	381	365	55	81
70-74	505	672	308	477	86	103
75-79	428	374	321	440	69	103
80-84	390	578	463	349	61	134
>85	144	321	162	361	0	20

More specific examination on 'prostate trouble' takes place from the age of 45-49. In the first instance above all rectal touch is performed as examination. From the 55-59 age group onwards application for a PSA determination is relatively more important. Referral with suspected prostate cancer increases above all from the 60-64 age group onwards.

In 1998 this is 5%. In about 3.4% of the men a PSA determination was done in 1997 and in 4 % in 1998. The number of men of 60-80 years referred with suspected prostate cancer rose from 0.5% in 1997 to 0.8% in 1998.

The topic 'prostate trouble' is retained on the weekly return in 1999.

WHOOPING COUGH

Vaccination against whooping cough (*Bordetella pertussis*) has been included in the National Vaccination Programme. The degree of cover is high (>90%).

It was surprising that in the course of the nineties whooping cough turned up again in a number of outbreaks in 1989-1990, 1993-1994 and in 1996-1997. Further analysis showed that the proportion of vaccinated persons among the indicated cases of whooping cough had increased¹⁹.

The analysis utilized the legal notification to the Health Care Inspectorate, hospital admissions registered by the SIG Care Information, the sera diagnosis by the RIVM and the *Bordetella* isolation recorded by the Regional Laboratories.

Information from general practice was not available or not retrievable as such from other sources. However, for good surveillance of infectious diseases general practice is indispensable and the information from general practice supplementary to that from other sources. Further investigation of the change in the epidemiology of whooping cough is desirable. It was decided to place the topic of whooping cough on the weekly return in 1998.

The spotter physicians are asked to record every patient with whooping cough. The often atypical course of the disorder among vaccinated persons does not simplify case definition.

For whooping cough the following definition is adhered to:

- lengthy coughing complaints (longer than 3 weeks) with the more or less typical characteristics and/or
- proven *Bordetella pertussis* infection (in accordance with the flow scheme of optimum laboratory diagnosis of the National Coordination Structure for infectious diseases).

The number of persons with whooping cough per 10 000 persons per province group and by degree of urbanization is shown with the number for the Netherlands in Table 41.

Table 41: Number of persons with whooping cough per province group degree of urbanization and for the Netherlands per 10 000 persons, 1998

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
1998	2	4	2	12	2	6	1	5

The occurrence of whooping cough across the country is unequal. In the southern provinces the number of cases of whooping cough is strikingly high: 12 per 10 000 persons as against 2-4 per 10 000 persons in the other groups.

Equally striking is the high occurrence of whooping cough in urbanization group 2, the smaller towns (< 100 000 inhabitants) and the commuting municipalities in comparison with the occurrence in the cities and in rural municipalities.

Seasonal influences

Table 42 shows the occurrence of whooping cough per quarter.

Table 42: Number of persons with whooping cough per 10 000 persons per quarter in 1998

	week 1-13	week 14-26	week 27-39	week 40-53
1998	1	0	1	4

The reports of whooping cough for 1998 indicate that in the last quarter of 1998 the start of a new outbreak of whooping cough has come up.

Age distribution

The age distribution of the persons with whooping cough is stated in Table 43.

Table 43: Number of persons with whooping cough per age group per 10 000 persons

age group	1998	4th quarter
<1	(17)	(17)
1- 4	37	22
5- 9	22	12
10-14	6	(3)
15-19	(4)	(4)
20-24	(1)	-
25-29	(2)	(2)
30-34	(2)	(1)
35-39	(2)	-
40-44	-	-
45-49	(1)	-
50-54	(2)	-
55-59	-	-
60-64	-	-
65-69	(2)	-
>69	-	-

A striking feature is the finding that whooping cough occurs in all age groups. The highest incidence is found.

The topic is maintained on the weekly return in 1999.

EXTRAPOLATION OF FREQUENCIES FOUND TO THE DUTCH POPULATION

The following survey gives an approximate impression of the number of patients, consultations, actions and occurrences in the Netherlands, on the basis of the frequencies calculated from the results of the Continuous Morbidity Registration by Sentinel Stations. As was remarked in the previous reports, it must be borne in mind, when studying the following tables, that although the population of the sentinel stations is a reasonably good representation (see also p 10-11) the spotter physicians are a select group. Consequently, it cannot be automatically established to what extent the results differ from the actual situation; the differences can vary depending on the nature of the question. Particular caution should be observed regarding those topics for which there is intervention by a general practitioner. As an example one may think of the topic 'mammography'; it is quite feasible that the spotter physicians differ from the typical general practitioner in this respect. In the '(attempted) suicide' topic there proves to be a difference in respect of registrations from elsewhere, as a result of the fact that this event is presumably not always reported to the general practitioner.²⁰

With regard, too, to registration in itself it may be stated almost with certainty that the spotter physicians act as a select group. However, this can only be to the benefit of the project. Nevertheless, the reader is advised not only to look at the extrapolated numbers but also to consult the relevant chapters.

For a correct interpretation of the extrapolated numbers first the total Dutch population per year is given, in thousands.

Dutch population by sex in thousands, 1989-1998 (Central Bureau of Statistics)*

year	men	women	total
1989	7 317	7 488	14 805
1990	7 358	7 535	14 893
1991	7 419	7 591	15 010
1992	7 480	7 649	15 129
1993	7 535	7 704	15 239
1994	7 586	7 755	15 341
1995	7 627	7 797	15 424
1996	7 662	7 832	15 494
1997	7 697	7 870	15 567
1998	7 740	7 914	15 654

* The numbers as on 1 January of the year in question.

Extrapolation of frequencies found to the Dutch population

category	frequency* incidence (per 10 000)			Netherlands** (absolute numbers)			
	year	M	F	total	M	F	total***
influenza	1989			410			607 000
	1990			225			335 000
	1991			348			522 000
	1992			244			370 000
	1993			484			772 500
	1994			106			162 500
	1995			315			480 000
	1996			115			178 000
	1997			233			360 000
	1998			248			388 000
cervical smear -with complaints and/or symptoms	1989		72			54 000	
	1990		55			41 500	
	1991		73			55 500	
	1992		72			55 500	
	1993		70			55 500	
	1994		60			46 500	
	1995		59			46 000	
	1996		61			47 500	
	1997		64			50 000	
	1998		96			76 000	
-preventive	1989		521			389 500	
	1990		577			434 500	
	1991		537			407 000	
	1992		524			400 000	
	1993		485			370 500	
	1994		474			367 500	
	1995		467			364 000	
	1996		560			438 500	
	1997		667			525 000	
	1998		611			483 500	

* see page 109

Extrapolation of frequencies found to the Dutch population (continuation)

category	frequency* incidence (per 10 000)				Netherlands** (absolute numbers)		
	year	M	F	total	M	F	total***
-repeat examination (within 3 years)	1989		237			177 000	
	1990		273			205 000	
	1991		239			181 500	
	1992		233			178 000	
	1993		225			173 000	
	1994		268			208 000	
	1995		267			208 000	
	1996		267			209 000	
	1997		278			222 000	
1998		216			171 000		
cervical smear total	1989		830			622 000	
	1990		905			682 000	
	1991		857			645 000	
	1992		829			632 500	
	1993		780			599 500	
	1994		802			622 000	
	1995		793			618 000	
	1996		888			695 000	
	1997		1009			795 000	
1998		923			727 000		
sterilization	1989	30	19		22 000	14 000	36 000
	1990	35	19		26 000	14 000	40 000
	1991	37	21		27 500	16 000	43 500
	1992	41	20		30 500	15 500	47 000
	1993	40	21		30 000	16 000	46 000
	1994	37	22		28 000	17 000	45 000
	1995	38	24		29 000	19 000	48 000
	1996	40	21		30 500	16 500	47 000
	1997	35	18		27 000	14 000	41 000
1998	28	17		21 500	13 500	35 000	
cumulative					899 000 ¹	666 000 ²	

* see page 109

1) from 1972

2) from 1974

Extrapolation of frequencies found to the Dutch population (continuation)

category	frequency* incidence (per 10 000)			Netherlands** (absolute numbers)			
	year	M	F	total	M	F	total***
(attempted) suicide	1989			7			10 250
	1990			5			7 500
	1991			5			7 500
	1992			6			9 000
	1993			6			9 000
	1994			5			7 500
	1995			7			10 750
	1996			6			9 250
	1997			6			9 250
	1998			5			7 750
first mammograms	1989		87			65 000	
	1990		92			69 000	
	1991		105			80 000	
	1992		92			75 500	
	1993		117			88 500	
	1994		111			86 000	
	1995		104			81 000	
	1996		87			68 000	
	1997		87			68 500	
	1998		84			66 500	
repeat mammo- grams	1989		15			11 000	
	1990		17			13 000	
	1991		26			19 500	
	1992		30			23 000	
	1993		59			21 000	
	1994		45			35 000	
	1995		39			30 500	
	1996		32			25 000	
	1997		34			27 000	
	1998		36			28 500	

* see page 109

Extrapolation of frequencies found to the Dutch population (continuation)

category	frequency*			Netherlands**			
	year	M	F	total	M	F	total***
mammograms	1989		102			76 000	
total	1990		109			82 000	
	1991		131			99 500	
	1992		122			93 500	
	1993		176			109 500	
	1994		156			121 000	
	1995		143			111 000	
	1996		119			93 000	
	1997		121			95 500	
	1998		120			95 000	
P.I.D.	1993		7			5 500	
	1994		9			7 000	
	1995		8			6 200	
	1996		7			5 500	
	1997		8			6 250	
	1998		6			4 750	
urethritis of the man	1992	31			23 000		
	1993	23			17 500		
	1994	24			18 500		
	1995	26			20 000		
	1996	21			16 000		
	1997	17			13 000		
	1998	17			13 000		
concern about aids	1989			15			22 000
	1990			16			24 000
	1991			16			24 000
	1992			22			33 500
	1993			23			35 000
	1994			27			41 500
	1995			21			32 000
	1996			20			31 000
	1997			24			37 500
	1998			18			28 000

* see page 109

Extrapolation of frequencies found to the Dutch population (continuation)

category	frequency* incidence (per 10 000)				Netherlands** (absolute numbers)		
	year	M	F	total	M	F	total***
dog bites	1998	10	10	10	77 500	8 000	15 750
unilateral physical							
violence	1996	6	5	5	4 250	3 750	8 000
	1997	8	10	9	6 250	7 750	14 000
	1998	8	9	8	6 250	7 250	13 500
gastro- enteritis	1996	51	69	60	39 000	54 000	93 000
	1997	52	57	54	40 000	45 000	85 000
	1998	64	65	65	50 000	51 000	101 000
herpes zoster	1997	24	30	28	18 500	23 750	43 000
	1998	28	37	33	21 500	29 250	50 750
"prostate trouble'							
-rectal touch	1997	116			89 250		
	1998	117			90 500		
-PSA-determina-							
-tion	1997	81			62 250		
	1998	83			64 250		
-referral to							
urologist	1997	9			7 000		
	1998	14			11 000		
whooping							
cough	1998			5			7.500

* Number of patients, consultations etc. per 10 000 men and/or women (sentinel station data).

** Extrapolation of the incidences to the Dutch population (of the year in question), in round thousands.

*** As a result of rounding-off, small differences may have occurred in the totals.

Reliability intervals

Around the estimated incidences and prevalences for the whole Dutch population allowance must be made for reliability margins. The following table gives an impression of these for both relative and absolute numbers.

The table must be read as follows: if in the total patient population of the sentinel station practices of approx. 144 000 patients a frequency of 0.1 per 10 000 patients is found (1st column), then the 95% reliability interval is 0.011 - 0.5 per 10 000 (2nd column). The estimated absolute number in the Dutch population is then 156 (3rd column) and the 95% reliability interval lies between 17 and 776. The table shows how these estimates lie at a found frequency in the sentinel stations of 0.1 to 1000 per 10 000 patients with a few intermediate 'steps'. Above all at the lower frequencies the reliability intervals are wide.

Table 44: Reliability intervals of estimates of incidence and prevalence and sentinel station practices per 10 000 and the absolute numbers

frequency per 10 000		Netherlands (absolute numbers)	
frequency	95% RI	frequency	95% RI
0.1	0.011-0.5	156	17-776
1.0	0.6-1.7	1.557	895-2.659
10	8-12	15.567	13.181-18.375
100	95-105	155.671	147.838-163.911
1.000	985-1016	1.556.711	1.532.761-1.580.992

For the total group of men and women separately who each form about half the total population, the reliability margins are only somewhat wider than shown in the table. For separate 5- or 10-year age groups the reliability margins are needless to say much wider. because these groups are smaller in size. Thus in 1997 the number of reports of suicide attempts was 6 per 10 000 persons (reliability interval 4.8-74 per 10 000). For the 25-34 age group the number of suicide attempts was also 6 per 10 000 persons. However, the reliability interval (0.8-28) is much wider here.

(with thanks to Dr H. Verkleij, RIVM)

INCIDENTAL INVESTIGATIONS

Since 1976 the "incidental investigations" have existed as part of the Sentinel Station Project. These are investigations into relatively uncommon diseases or occurrences. For a list of the subjects thus treated see the second part of Appendix 3. Here the data accordingly collected for 1998 are reported. These differ from the weekly return subjects in that they are asked for only once a year, in principle immediately at the end of the year. This makes it possible to collect retrospectively data on subjects for which registration is requested in the course of the year. However, one condition in that case is that it must be something that is firmly implanted in the physician's memory.

Euthanasia (request for application)

In 1976 attention was devoted for the first time to requests made to the general practitioner for the application of euthanasia. In this registration the question is not asked whether the GP granted such a request.

The spotter physicians are informed at the beginning of the year of the coming investigation. A form is sent to all spotter physicians at the end of the year with the request that they report whether the question was asked of them in the past year by a patient himself or herself for the application of active euthanasia directly or indirectly and, if so, what the motive was for this. In addition, information is sought on the age, sex, disease, place of care or nursing and the use or otherwise of a 'euthanasia declaration'²¹.

The results per patient can be found at the end of this section.

This table does not require much explanation.

In 1998 the number of requests was 49. Of the patients making a request for application of euthanasia, 82% have a malignancy.

The number of patients nursed at home is 41; two patients live in a hospital. Of 6 patients the whereabouts are unknown.

In 39 cases the request was supported by a written 'euthanasia declaration'. Requests for euthanasia were made by 47 patients. One patient asked only for help with suicide; for one patient this information is lacking. In 25 of the 49 requests the GP consulted another physician. In the case of a number of reports whereby no other physician was consulted, it is indicated that the patient already died naturally before the possible application of euthanasia.

It also happened that no other physician was consulted as yet because that had not yet come up for discussion.

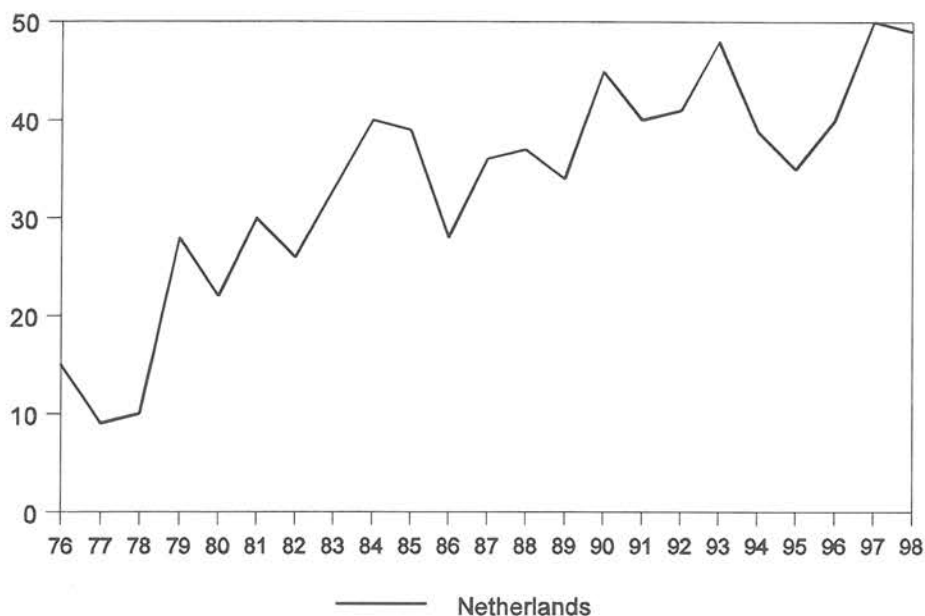
Requests for application of euthanasia 1976-1998.

The distribution of the number of requests per province and degree of urbanization and per sex may be found in Table 42 (cf. Fig. 21).

Table 42: absolute number of patients who requested the general practitioner to apply active euthanasia by sex, per province and degree of urbanization and for the Netherlands 1989-1998

absolute			province group				degree of urbanization			Netherlands
	M	F	A	B	C	D	1	2	3	
1989	21	13	7	1	21	5	6	17	11	34
1990	28	17	14	2	22	7	4	24	17	45
1991	21	19	7	5	23	5	2	21	17	40
1992	22	19	7	8	20	6	4	20	17	41
1993	23	25	2	9	23	14	5	19	24	48
1994	26	13	4	14	14	7	10	18	11	39
1995	18	17	5	8	12	10	2	16	17	35
1996	24	16	8	9	19	4	7	20	13	40
1997	24	26	11	11	23	5	2	38	10	50
1998	27	22	3	14	25	7	5	32	12	49

Figure 21: Absolute number of patients who requested the general practitioner for the application of active euthanasia or assistance with suicide, for the Netherlands, 1976-1998



Over the whole period 1976-1998 per sentinel station (i.e. not per general practitioner) the average number of requests for euthanasia and the distribution per province and degree of urbanization appears in Table 46 and Table 47.

Table 46: average number of requests per sentinel station by province group 1976-1998*

	province group			
	A	B	C	D
number of sentinel stations	6	6	14	9
average number of requests	17,2	17,7	24,7	10,0
scatter	0 - 38	7-43	12-54	2-19

* only sentinel stations that have reported over the whole period.

Table 47: average number of requests per sentinel station by degree of urbanization 1976-1998*

	degree of urbanization		
	1	2	3
number of sentinel stations	5	19	12
average number of requests	16.2	14.6	24.2
scatter	10-26	0-38	5-54

* only sentinel stations that have reported over the whole period.

These data show without change that requests for application of euthanasia are made more in the western provinces and in the cities.

Age distribution

The age distribution may be found in Table 48.

Table 48: absolute number of patients who requested the general practitioner for application of active euthanasia or assistance with suicide by age group, 1989-1998

	≤54	55-64	65-74	75-84	≥85	total
1989	4	6	12	11	-	34
1990	7	5	13	16	4	45
1991	9	5	11	10	5	40
1992	7	7	9	12	6	41
1993	10	5	17	13	3	48
1994	4	7	15	11	2	39
1995	14	5	12	2	2	35
1996	5	10	14	7	4	40
1997	12	7	17	9	5	50
1998	6	10	19	7	7	49

Survey of the reported requests

Meanwhile the data are known on 775 requests for application of euthanasia. Of these requests, 422 were made by a man (54.5%).

Insight into the disorders for which application of euthanasia is requested has been obtained by using the International Classification of Diseases (1975, 9th version) as a guide. One of the problems in classification is the multiple pathology that is inherent in old age. Another problem is that sometimes there is no question of known pathology: the group symptoms and incompletely described

disorders includes the request of a 92-year-old lady suffering from the disorder "old age".

Five groups of disorders are used:

- malignant neoplasms,
- cardio-vascular disease,
- chronic obstructive pulmonary disease,
- symptoms and incompletely described disorders,
- other diseases, including neurological and endocrinological disorders and AIDS.

The classification of the disorders from which the patients who request euthanasia are suffering proceeded in general without difficulty, despite the above-mentioned problems; the general practitioner indicated in the questionnaire what in his or her opinion was the relevant disorder within the framework of the request.

The disorders for which euthanasia was requested are stated in Table 49.

Table 49: disorders for which euthanasia was requested, 1976-1998

	n	%
malignant neoplasms	573	74
cardio-vascular disease	48	6
chronic obstructive pulmonary disease	34	5
symptoms and incompletely described diseases	39	5
other diseases	81	10
total	775	100

The distribution of the disorders for which euthanasia was requested by age is given in Table 50.

Table 50: percentage of requests per disorder of the total number of reports by age (n=absolute numbers of requests), 1976-1998

	≤ 54 %	55-64 %	65-74 %	75-84 %	≥ 85 %
malignant disorders	76	89	89	63	23
cardio-vascular disease	0	1	2	13	23
chronic obstructive pulmonary disease	1	3	3	8	11
symptoms and incompletely described diseases	3	1	1	5	30
other diseases	20	6	6	12	14

Below the age of 85 it is above all the malignant disorders that form a reason to ask the general practitioner for euthanasia. Below the age of 55 the group other diseases forms an extremely heterogeneous group: cystic fibrosis, multiple sclerosis and AIDS are mentioned, but also vital depression.

At a later age final stages of endocrinological disorders like diabetes mellitus and terminal renal insufficiency and advanced stages of rheumatoid arthritis are given as reasons for a request.

When someone with a poor vascular system does not die from a myocardial infarction or a cerebro-vascular accident, the quality of life can be seriously impaired at a later age. Chronic obstructive pulmonary disease can also entail serious infirmity and suffering and lead to a request for euthanasia.

Table 51 gives the percentage distribution of the number of requests for application of euthanasia by patients younger and older than 65 per disorder.

Table 51: percentage of requests for application of euthanasia by patients younger and older than 65 by disorder, 1976-1998 (n=absolute numbers of requests)

	n	≤ 64 %	≥ 65 %
all disorders	775	36	64
all malignancies	573	40	60
cardio-vascular disease	47	2	98
chronic obstructive pulmonary disease	34	15	85
symptoms and incompletely described diseases	39	15	85
other diseases	81	41	59

A further subdivision of the malignancies by localization of the tumour and the age of the patient displays the following picture (Table 52).

Table 52: percentage of requests for application of euthanasia by patients younger and older than 65 with a malignancy by localization of the tumour (n=absolute numbers), 1976-1998

	n	≤ 64 %	≥ 65 %
all malignancies	573	40	60
stomach	56	39	61
colon/rectum	87	31	69
trachea/lung	152	36	64
breast	60	55	45
other	218	42	58

In the age distribution no major changes occur. When breast cancer is the motive for the request, the percentage of female patients below the age of 65 clearly differs from the percentage for the other localizations.

The use of a "euthanasia declaration" has increased in recent years: from 15% in 1984 to 87% in 1997. In 1998 this percentage fell however, to 80.

Discussion

Until the beginning of the nineties it was barely possible to compare the data collected in the CMR Sentinel Stations on requests for euthanasia and help

with suicide with the results of other registrations and research (Bartelds 1989²²).

Since then important large-scale investigations have been performed into the practices by GPs and other doctors in the Netherlands with regard to euthanasia, help with suicide and decisions around the end of patients' lives (Van der Maas et al. 1991²³, Pijnenborg et al. 1994²⁴, Van der Wal et al. 1994²⁵). Recently a large-scale investigation has again been performed into euthanasia and other medical practices involving the end of life (Van der Maas et al. 1996²⁶). In that context the notification procedure for euthanasia and help with suicide laid down in 1991 has also been evaluated (Van der Wal et al. 1996²⁷).

The methodological differences between the above investigations and the registration by the spotter physicians are considerable. It would take us too far to discuss them here. One difference must, however, be mentioned: unlike the recent other investigations mentioned above the data of the Sentinel Stations originate exclusively from GPs.

In 1990 the difference in the average number of requests for euthanasia that a GP receives per year does not prove to be great: in the CMR-Sentinel stations 0.74 and in the investigation by the CBS and Erasmus University 0.8 on average per GP.

The number of more explicit requests for euthanasia at a given moment in the disease process rose between 1990 and 1995 by 9% (Van der Maas, 1996). The number of deceased increased by somewhat more than 5%.

The registration of the number of explicit requests for euthanasia by the spotter physicians likewise displays an increase in the period 1990-1995, though a slighter one than the 9% determined by Van der Maas et al. The number of requests for euthanasia seems to reach a 'natural' ceiling of approx. 3 per 10 000 patients, i.e. on average 0.75 requests per GP per year.

The relatively small absolute numbers of requests to the spotter physicians may display considerable differences, so that it is necessary to work with progressive averages

A striking difference, one of the few, between the interview study and the death certificate investigation performed by Van de Maas et al. concerns the sex distribution of the patients for whom the request for euthanasia has been granted.

In 1995, according to the death certificate investigation, euthanasia was applied more to women than to men. In the interview study of 1995 and in the 1990 research the sex ratio is the opposite.

The registration of the requests for euthanasia or help with suicide by the Sentinel Stations consistently displays a greater proportion of men than women: 55% as against 45% in the period 1976-1998.

In the investigations so far one result is consistently present: it is above all patients with a malignant disorder who request euthanasia and for whom such a request is granted (approx. 80%). It is likewise established that this proportion of the patients with a malignancy decreases with greater age.

Request by the patient for active euthanasia, 1998

age	sex	disease reported	motive for the request
95	F	-	weary of life
89	F	carcinoma of the oesophagus	no desire to await the end
89	F	cachexia, unknown cause	pain
88	F	degenerative defects	pain
88	F	decompensatio cordis	tired of life
86	M	terminal heart and lung function	
85	F	macroglobulinemia	unbearable hopeless suffering
82	M	carcinoma of the bladder with continued growth; pleuritis carcinomatosa	great pain, hopelessness
81	M	carcinoma of the rectum and metastases	pain in abdomen, depressive
80	F	carcinoma of the pancreas	anorexia, fever period, jaundice
79	F	carcinoma of the colon	disagreement with nursing children
78	M	carcinoma of the oesophagus	frightened of decline, pain
77	M	carcinoma of the prostate	cerebral metastases
74	M	carcinoma of the prostate	severely ill, personal decline
74	M	terminal carcinoma of the lung	wants to die with dignity
74	M	metastasized carcinoma of the prostate	cachexia
74	M	melanoma	headache, loss of consciousness, cerebral metastases
74	F	carcinoma of the colon and metastases	lacklustre in strong decline
73	M	carcinoma of the pancreas	general decline head
73	M	carcinoma of the lung, carcinoma of the bowel	hopelessness
73	F	metastasized carcinoma of the mamma	
72	M	metastasized carcinoma of the prostate	unbearable hopeless suffering

Request by the patient for active euthanasia, 1998 (continuation)

age	sex	disease reported	motive for the request
72	M	metastasized carcinoma of the prostate	unbearable suffering
72	M	carcinoma of the bronchus	unbearable suffering
72	F	-	to be certain that if necessary help will be given
71	F	metastasized carcinoma of the lung	cachexia, pain in bones
70	M	metastasized carcinoma of the lung	unbearable suffering
70	F	carcinoma of the mamma	dyspnoea and thoracic pain
69	M	carcinoma of the lung	pain and decline
68	M	carcinoma of the colon	fear of suffering in the final phase
67	M	carcinoma of the oesophagus	pain
65	M	carcinoma of the bronchus	unbearable suffering
65	F	bilateral adenocarcinoma	general decline of strength, pain
64	M	non-Hodgkin's lymphoma	treatment concluded
64	F	metastasized carcinoma of the ovary	unbearable hopeless suffering
64	F	carcinoma of the endometrium with metastases	general decline of strength, pain
59	M	metastasized carcinoma of the larynx	problems with swallowing, talking, urinating
54	M	carcinoma of the colon	unbearable suffering
54	F	carcinoma of the mamma with metastases	yellow, liver ascites
48	F	depression, alcohol abuse	relapses, depression
37	M	carcinoma of the stomach	pain, dying in dignity
32	M	high spinal cord lesion	lack of prospects and possibilities
20	M	depression	hopelessness

The investigation is being continued in 1999.

PUBLICATION ON THE BASIS OR PARTLY ON THE BASIS OF THE DATA FROM THE CONTINUOUS MORBIDITY REGISTRATION

BARTELDI, A.I.M.

Verzoek om (toepassing) van euthanasie in de C.M.R.-Peilstations.

Tijdschrift voor Sociale Gezondheidszorg; 67, 1989, no. 22, Middenkatern, G20 dag 1989, blz. 26-27

EATING DISORDERS

Anorexia nervosa and bulimia nervosa are serious eating disorders of which it is not clear whether the degree of occurrence is increasing. From 1985 to 1989 both eating disorders were registered by the spotter physicians in an incidental investigation. By means of a new registration in 1995 and following years the question whether there is an increase in these eating disorders can possibly be answered.

Retrospectively, in 1998 the spotter physicians were asked a number of questions per patient suffering from an eating disorder. Did this relate to an eating disorder diagnosed for the first time in 1998 and was the patient referred to another aid worker on account of the disorder? Other questions concerned the composition of the family from which the patient came and a number of physical aspects of the disorder.

As in the first registration period from 1985 to 1989 the investigation is taking place under the direction of Dr. H.W. Hoek, psychiatrist/epidemiologist and chairman of the steering group Eating Disorders the Netherlands.

Table 53 gives the distribution of the number of patients regarding whom the GP has diagnosed an eating disorder (absolute and per 10 000 inhabitants) by province group and degree of urbanization and for the Netherlands in 1985-1989 and 1995-1998. These numbers have not yet been corrected for duplication and contain both incident and prevalent numbers. The numbers stated should therefore be interpreted with the necessary reserve.

Table 53: Absolute number of patients regarding whom the GP has diagnosed an eating disorder, by province group and degree of urbanization and for the Netherlands in 1985-1989 and 1995-1998 and the numbers per 10 000 women

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
absolute year								
average:								
1985-1989	7	10	35	10	6	33	24	61
1995	11	11	26	16	5	49	10	64
1996	6	8	22	9	3	37	5	45
1997	12	10	11	9	8	29	4	42
1998	10	17	15	9	5	36	10	51
per 10 000								
women 1995	8.9	6.4	8.1	9.1	5.2	10.5	6.9	8.1
1996	4.7	4.7	8.9	4.8	3.0	8.9	3.3	6.2
1997	7.8	5.5	4.2	4.8	6.5	5.3	4.3	5.3
1998	7.2	9.1	6.7	5.6	8.6	7.1	11	7.1

Eating disorders are reported most in the cities.

In Table 54 the distribution of the eating disorders by age group follows.

Table 54: Absolute number of reports of patients regarding whom the GP has diagnosed an eating disorder, by age for 1985-1989 and for 1995-1998

women	1985-1989 aver.	1995	1996	1997	1998
1-4	-	-	-	1	-
5-9	-	-	-	1	-
10-14	1	1	1	0	2
15-19	8	13	15	10	9
20-24	12	14	9	11	14
25-29	14	10	7	7	5
30-34	6	9	4	3	5
35-39	7	8	6	3	4
40-44	4	2	2	4	11
45-49	1	4	1	1	1
50-54	1	2	-	-	-
55-59	1	-	-	-	1

In 1998 there were three reports of male patients.

In 1999 too an incidental investigation into eating disorders will be held.

A PUBLICATION ON THE BASIS OR PARTLY ON THE BASIS OF THE DATA FROM THE CONTINUOUS MORBIDITY REGISTRATION SENTINEL STATIONS

HOEK, W.HANS, AAD I.M. BARTELD, JACQUOLINE J.F. BOSVELD, YOLANDA VAN DER GRAAF, VERONIQUE E.L. LIMPENS, MARGO MAIWALD, CAROLINE J.K. SPAAIJ.

Impact of Urbanization on Detection Rates of Eating Disorders.

Am J Psychiatry, 1995; 152:1272-1278.

Objective: The purpose of this study was to examine the incidence of anorexia nervosa and bulimia nervosa among patients in primary care and to evaluate the impact of urbanization, age and sex differences, and changes over time. **Method:** During 1985-1989, 58 general practitioners, trained in diagnosing eating disorders, registered all of their patients who had diagnoses of anorexia nervosa and/or bulimia nervosa according to strict criteria. The study population (N=151,781) was 1% of the population of the Netherlands; the distribution of sexes, ages, geographical locations, and degrees of urbanization in the study group was representative of the Dutch population. Main outcome measures were rates of newly detected cases and age-adjusted rates ratios. **Results:** The crude annual incidence rate of detected cases in primary care per 100,000 person-years was 8.1 for anorexia nervosa and 11.5 for bulimia nervosa. The incidence of bulimia nervosa was lowest in rural areas, intermediate in urbanized areas, and highest in the cities (6.6, 19.9, and 37.9, respectively, per 100,000 females per year); no rural-urban differences for anorexia nervosa were found. Pronounced sex and age differences in incidence rates were observed. Over the 5-year period, there was no time trend in the incidence of anorexia nervosa, but the incidence of bulimia nervosa tended to increase. **Conclusions:** The incidence rates of eating disorders-as defined by detection rates in primary care-are higher than previously reported. Urbanization seems to be a risk factor for bulimia nervosa but not for anorexia nervosa.

HOEK, H.W., M. MAIWALD, A. BARTELD, J. BOSVELD.

The incidence of eating disorders and the influence of urbanization.

1992, Abstract Fifth International Conference on Eating Disorders, New York

HOEK, H.W.

The incidence and prevalence of anorexia nervosa and bulimia nervosa in primary care.

Psychological Medicine, 1991, 21, p. 455-460

AGGRESSION TOWARDS THE GENERAL PRACTITIONER AND THE ASSISTANT

Attention to and concern about aggression also towards social workers are increasing. Professional organizations are organizing congresses at which aggression towards assistants and physicians is discussed.

By means of an annual gauging in the sentinel station practices aggression towards the GP or towards the GP's assistant will be registered.

The first gauging was held in 1997.

The spotter physicians are asked to report whether signs of aggression towards the assistant or the physician have occurred in their practice. A distinction is made between aggression shown during the normal daily practice and aggression during evening, night and weekend duty. It is further asked whether a patient registered in one's own practice is involved or a patient from another practice.

The signs of aggression are broken down into threatening with physical violence, threatening with a weapon, actual violence, verbal and sexual intimidation and other signs taken as a threat.

Finally, it is indicated per registered sign of violence whether this was directed towards the assistant or the GP.

Of the 43 sentinel stations, 21 report one or more situations in which the assistant or the GP felt themselves aggressively approached in some way or the other.

This is considerably less than in 1997.

The distribution of the number of sentinel stations that reported aggression by province group and by degree of urbanization is shown in Table 55.

Table 55: number of sentinel stations that reported aggression towards assistant or GP by province group and degree of urbanization in 1997-1998 (% between brackets)

	province group				degree of urbanization			Netherlands
	A	B	C	D	1	2	3	
1997	3 (50)	8 (72)	11 (73)	9 (90)	5 (71)	19 (70)	7 (83)	31 (74)
1998	2 (33)	4 (35)	9 (60)	6 (60)	1 (14)	15 (55)	5 (62,5)	21 (50)

Nearly ½ of the sentinel stations were concerned with aggression in 1998; in the southern and western provinces 6 the 10 provinces are involved.

In the cities more sentinel stations report aggression towards the assistant and the GP than outside the cities.

During the normal opening hours it is above all the assistants in the practice that are aggressively approached; verbal intimidation occurs considerably more often than sexually tinged intimidation or threats with physical violence or a weapon (92 times as against 18 times respectively).

The GPs are less frequently subjected to verbal intimidation during the daytime (45 times) but threatened relatively more often (21 times).

During evening, night and weekend duty fewer cases of threats or intimidation in the absolute sense are reported. Relatively speaking, threats or intimidation will probably occur more frequently, but to support this statement the necessary data on the number of patient-practice contacts during the day and during the duty are not available. The GPs are above all verbally intimidated during the duty; threats of physical violence or with a weapon occur much less often (22 threats of violence as against 83 reports of verbal intimidation). The threats of physical violence or with a weapon are voiced during the duty above all by patients registered with other GPs than the GP who is on duty at that moment (16 as against 6). The distribution of the verbal intimidation is 66 times verbal intimidation by another than 'own' patient as against 6 times our patient.

There are great differences between the GPs; in the case of 'soft' matters such as threats and intimidation there is a chance of differences in interpretation.

This incidental investigation will be repeated in 1999.

GENERAL REMARKS

1. The weekly return for 1999 has been compiled as follows by the Counselling Committee.
 - a. Influenza(-like illness);
 - b. Aids and appliances requested/prescribed;
 - c. Dog bites;
 - d. Herpes zoster;
 - e. Sterilization of the man performed;
 - f. Sterilization of the woman performed;
 - g. (Attempted) suicide;
 - h. Out-patient or clinical mammography;
 - i. Urethritis of the man;
 - j. Concern about AIDS;
 - k. Physical violence;
 - l. Gastro-enteritis;
 - m. Prostate trouble.
 - n. Whooping cough.
2. The incidental investigations for 1999 relate to the subjects euthanasia, eating disorders and aggression towards GP and assistant.
3. Suggestions relating to the questions on the weekly returns will be gladly received by the Counselling Committee.
4. Data from this report may be reproduced with acknowledgment of the source.

A.I.M. Bartelds M.D., General practitioner/project leader.

LIST OF PUBLICATIONS ON THE BASIS OR PARTLY ON THE BASIS OF THE DATA FROM CONTINUOUS MORBIDITY REGISTRATION SENTINEL STATIONS

GENERAL

BARTELDS, A.I.M., J. FRACHEBOUD, J. VAN DER ZEE.

The Dutch Sentinel Practice Network; relevance for public health policy.

Nivel, Utrecht, 1989

The Dutch sentinel practice network; relevance for public health policy, Nivel 1989, considers the now 20-year history of the Continuous Morbidity Registration Sentinel Stations the Netherlands.

The book consists of two parts.

In the first part general aspects are discussed: the origin of the project at the end of the sixties and the objectives, organization and procedure. For a number of characteristics (age and sex, size of practice etc.) a comparison is made between the spotter physicians and the total population of Dutch general practitioners. On other aspects, including the attitude of the physicians with regard to a number of facets of the work of the GP, the spotter physicians are compared with populations of GPs who have participated in other Nivel studies. Finally, the results are discussed of the analysis of the registration pattern of the spotter physicians over five years.

Topics varying from influenza(-like) illness to requests for application of euthanasia are discussed in the second part. A choice has been made among the long series of topics that have appeared on the weekly return during the existence of the sentinel stations or have been the subject of an incidental investigation.

The authors of the chapters in the second part of the book are often also the applicants for registration of a certain topic. One of the questions that is discussed in the chapters is what the importance has been of registration of the topics by the CMR Sentinel Stations.

The results of registration of topics are presented in a number of chapters in a different way from that usual in the annual reports, of which to date 18 have been published (1970 to 1987 inclusive).

In several respects this publication is therefore an extension of the usual publication policy of the CMR Sentinel Stations.

The book has been published in English to meet the need that exists in other countries for information on both Dutch health care and more specifically, the functioning of the Dutch general practitioner. The CMR Sentinel Stations is one of the projects in which information is collected on a continuous basis on problems and diseases submitted to the GP and action taken by the GP.

BARTELDs, A.I.M.

Validation of Sentinel Data.

Das Gesundheitswesen. 55 (1993) 3-7. Sonderheft 1.

The Dutch Sentinel Practice Network "de Peilstations" started in 1970. The purpose of this network is to gain a better insight into the epidemiology of a number of illnesses and conditions as they are presented to the general practitioner. The network is sponsored by the Ministry of Welfare, Public Health and Culture. Value was attached to the distribution of the spotter physicians over the country and by degree of urbanisation. The presence of 1% of the population of the four province groups and the three urbanisation groups has been observed in the practices of the spotter physicians. The completeness of the registration, the internal and the external validity of the data collected by the physicians are discussed.

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Huisarts en Wetenschap; 33, 1990, no. 4, p. 141-144

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Diabetes Care, volume 19, number 3. March 1996.

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The Lancet 1994; 344: 590-593.

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APPENDIX 1

CONTINUOUS MORBIDITY REGISTRATION, SENTINEL STATIONS Participating General Practitioners in 1998

Name:	Residence:	Province:
A.A.E.E. Brockmüller	't Zand	Groningen
J.Th. Ubbink	Groningen	Groningen
Y. Wapstra/K. Tanis (group practice)	Franeker	Friesland
S. Vriesinga	Oostermeer	Friesland
F.M. van Soest/R.F. Sparenburg/ H.D.W.A. van Gijsel/Ms. M. Schellens/ Ms. J. Sanders/S.A. van Dijk (group practice)	Assen	Drenthe
H.E. Maillette de Buy Wenniger*)	Schoonoord	Drenthe
S. Kranenborg	Deventer	Overijssel
Th.J. van Dam/P.P.A. Kemps/B. Jansen (group practice)	Swifterbant	Flevoland
H. Kroeze	Zeewolde	Zuid-Flevoland
E.J. van Apeldoorn	Heerde	Gelderland
Dr. S. Verhoeven	Heerde	Gelderland
D. de Jong*)	Laren	Gelderland
D.G. de Jong	Barneveld	Gelderland
J.H. de Boer/Mw. I. Bruin-van Ingen/ Mw. M. Burger (group practice)	Zelhem	Gelderland
B.G.W.M. Arts	Nijmegen	Gelderland
M.A.J. Janssen	Nijmegen	Gelderland
W.J.A. Besselink	Doesburg	Gelderland
M.T.W. van der Velden	Dieren	Gelderland
Ms. I.K.I. de Jongh-Killian/F.K.A. Fokkema (group practice)	Amersfoort	Utrecht
P.J. Kromeich/Mw. L.G.M. Ketting-Stroet/ Mw. A.E. van Niel (group practice)	Utrecht	Utrecht
M.M. Spoor	Alkmaar	Noord-Holland
A.I.M. Bartelds	Huizen	Noord-Holland
C.W. Willeboordse	Heiloo	Noord-Holland
H.R. Neijs*)	Broek in Waterland	Noord-Holland
D.E. Kuenen	Haarlem	Noord-Holland

Appendix 1 (continuation)

Participating General Practitioners in 1998

Name:	Residence:	Province:
Ms. Y.E.V. van Hazel/P. Olie (group practice)	Amsterdam	Noord-Holland
Ms. A.J. Arbouw/Ms. Y.M. van der Dun (group practice)	Amstelveen	Noord-Holland
W.C.G. van Erp	Andijk	Noord-Holland
J. Hoornweg/Ms. E. Hoornweg-Sleeboom/ (group practice)	Voorhout	Zuid-holland
A.M. van Meurs	The Hague	Zuid-Holland
J.C.B.M. Rensing	The Hague	Zuid-Holland
D. Pasman	Maassluis	Zuid-Holland
B. Adèr	Rotterdam	Zuid-Holland
Ms. S.G. Vreugdenhil/R.J. Kuiper (group practice)	Dordrecht	Zuid-Holland
R.R. Lankhorst	Middelburg	Zeeland
P.R.L. Vercauteren/H.J.W.A. Meijerink/ J.A.P.A. Warringa(group practice)	Terneuzen	Zeeland
A.F.A. van der Reepe/W.L.M. Rijnders (group practice)	Etten	Noord-Brabant
J.A.M. Keulers/Ms. W. van der Laan (group practice)	Ravenstein	Noord-Brabant
M.G.A.M de Gouw	Rosmalen	Noord-Brabant
C.H.G.M. van Moorsel	Uden	Noord-Brabant
A.M.P. Linsen	Oirschot	Noord-Brabant
S.P.F. van Rijn/M.L.F. Klomp (group practice)	Eindhoven	Noord-Brabant
R.A.M. de Jong	Maastricht	Limburg

*) With dispensary

Weekstaat t.b.v. centrale registratie

CONTINUE MORBIDITEITSREGISTRATIE, PEILSTATION 1998

Proj. no. verslagjaar week no.

4 0 0 9 8

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Leefstijdsgroep			Kinkhoest			Prostaatlijden			Gastro-enteritis ⁽⁹⁾		Fysiek geweld ⁽¹⁾		C.A.I.D.S. ⁽¹⁰⁾ (concern about AIDS)		Urethritis bij man	P.I.D.	Mammografie		Suicide(poging) ⁽⁹⁾	Oestrogenen voorschrift 1 ^e maal ⁽⁸⁾	Sterilisatie verricht ⁽⁷⁾		Herpes Zoster		hondenbeten ⁽⁶⁾		Cervixuitrijk(e) ⁽⁵⁾			Influenza (-achtig) ziektebeeld ⁽²⁾		Leefstijdsgroep										
																			verwijzing verdenking prostaatca	PSA	rectaal toucher	M	V	M	V	M	V	M	V	Na 1-1-1997 voor 1 ^e maal	Herhalings-onderzoek	M	V	M	V	1 ^e maal	herhaling ⁽⁴⁾	geen bev. onderz. ⁽³⁾	M	V	M	V	M	V	M	V	M	V	M	V	M	V	M	V	M	V					
<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	≥85	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	≥85	M	V	M	V	M	V	M	V	M	V	M	V	M	V	M	V	M	V						

Aantal dagen gerapporteerd (zie voetnoot 1)

0 1 2 3 4 5

Opgemaakt d.d.: _____

Week nummer: _____

Appendix 3a

Subjects on the weekly returns in alphabetical order 1970-1999

subjects	
abortion (spontaneous)	1982-1983
abortion (request)	1970-1975
abortus provocatus	1971-1979
accidents	1971
accidents in the private sector	1981-1983
acute unusual headache	1988-1993
admission of psychiatric patient	1988
AIDS (concern about)	1988-1999
Aids and appliances requested/prescribed	1999
alcoholism	1975
anti-hypertensivum or diuretic (prescription)	1976
battered child syndrome (suspicion of)	1973-1974
bee or wasp sting	1992-1993
bites by pets	1986
burns	1988-1989
cervical smear	1976-1998
cerebrovascular accident	1986-1987
chronic benign pain disturbance	1995-1996
dementia	1987-1988
depression	1983-1985
diabetes mellitus	1980-1983 and 1990-1994
diarrhoea e causa ignota (acute)	1970
discharged psychiatric patient	1986-1988
dog bites	1987 and 1999
drug-use (consultation)	1972-1973 and 1979-1981
dwelling (certificate for another)	1975
echography applied for	1988
exanthema e causa ignota	1970
family planning (consultations)	1970-1976
gastro-enteritis	1992-1993 and 1996-1999
hay fever	1978-1982
hepatitis	1994
herpes zoster	1997 and 1998-1999
influenza (-like illness)	1970-1999
liver, gall bladder and pancreas disease	1995-1997
malignancies	1984-1986
measles	1975-1979
measles/mumps	1990

Subjects on the weekly returns in alphabetical order 1970-1999 (continuation)

subjects	
mononucleosis infectiosa	1977-1979 and 1991
morning-after pill (prescription)	1972-1991
musculo-skeletal system (trauma of)	1984
myocardial infarction (suspicion of and/or confirmed)	1978 and 1983-1985 1991-1994
oestrogens prescribed	1994-1998
otitis media acuta	1971 and 1986
out-patient or clinical mammography	1988-1999
Parkinson's disease	1980-1985
partus immaturus	1982-1983
partus at gravidity ≥ 28 weeks	1982-1983
penicillin (prescription and side-effects)	1982-1983
physical violence	1996-1999
p.i.d. (pelvic inflammatory disease)	1994-1998
pregnancy (despite contraception)	1987-1991
prescription of Rohypnol	1987-1988
prostaat trouble	1997-1999
psoriasis	1976-1977
referrals	1984
referrals for physiotherapy	1985
referrals for psycho-social problems	1986-1988
referrals for logopedics	1989-1990
rubella (-like illness)	1971
side-effect of cosmetics (suspicion of)	1992-1993
skull traumas in traffic	1975-1977
smoking (consultation with regard to addiction)	1974
sport traumas	1979-1983 and 1992-1993
sterilization of the man performed	1972-1999
sterilization of the woman performed	1974-1999
suicide (attempted)	1970-1972 and 1979-1999
tonsillectomy or adenotomy	1971
tranquillizer (prescription)	1972-1974
ulcus ventriculi/duodeni	1975
ulcus pepticum	1985-1986
urinary tract infection (prescription of medicine)	1977
urethritis of the man	1992-1999
whooping cough	1998-1999

Appendix 3b

Incidental investigations and other extra investigations, 1977-1999 (alphabetical)

subjects

acute intoxication in the work situation	1994-1995
aggression towards GP and assistant	1997-1999
alternative forms of treatment (registration feasible?)	1980
anorexia nervosa and boulimia	1985-1989 and 1995-1999
euthanasia (request for application)	1976-1999
incest	1988
influenza (vaccination against)	1992
Lyme disease	1991-1994
malignancies	1982-1983
mastitis puerperalis	1982
multiple sclerosis	1977-1982
serum collection	1980 and 1985
regretting sterilization	1980-1984

Appendix 4

Age structure of the population of the Netherlands by sex, in thousands, 1 January 1998 (C.B.S.)

age	men	women	total
0-4	496	473	969
5-9	504	482	986
10-14	474	453	927
15-19	474	453	927
20-24	499	487	986
25-29	647	625	1 272
30-34	674	642	1 316
35-39	648	627	1 275
40-44	596	581	1 177
45-49	581	561	1 142
50-54	543	523	1 066
55-59	407	398	805
60-64	343	354	697
65-69	300	341	641
70-74	239	311	550
75-79	167	259	426
80-84	93	184	277
≥ 85	56	160	215
total	7 740	7 914	15 654

(As a result of rounding-off, small differences may have occurred in the totals.)

CORITIBRE MONDIDITELTREGISTRATIE PEILSTATIONS
 LEEFTIJDGROEP NAAR ZIEKTEBEELD CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD
 JAAR 1975 WEEK 1 t/m 53

Leeftijdsgroep	POPULATIE		*INFLU- ENZA*		*INFLU- ENZA		1 ^e MAAL HERHA- LING		GEEN BEV. HONDENBETEN ONDERZ		HONDENBETEN		HERPES ZOSTER		
	M	V	M+V	M	V	M	V	M	V	M	V	M	V	M	V
1-3 jr	504	587	1191	806	0	0	0	0	0	0	0	0	0	0	0
4-9 jr	3359	3131	6490	515	0	0	0	0	0	0	9	10	9	16	12
10-14 jr	4267	4061	8328	353	0	0	0	0	0	0	12	12	12	12	17
15-19 jr	3744	3875	7619	183	0	0	0	0	0	0	15	8	13	10	12
20-24 jr	4030	3882	7912	192	5	0	5	0	5	5	5	3	4	20	23
25-29 jr	4164	4673	8837	177	36	9	79	9	79	10	13	11	14	13	14
30-34 jr	5852	5891	11741	176	445	54	136	9	136	9	10	9	12	24	18
35-39 jr	5492	5393	10885	257	1124	204	176	7	169	7	9	8	30	23	27
40-44 jr	4999	4896	9895	258	1665	580	174	8	165	9	6	7	20	13	17
45-49 jr	4899	4692	9591	240	1735	880	220	8	174	8	16	12	24	27	25
50-54 jr	4363	4230	8593	237	1021	506	156	9	156	9	12	10	41	34	38
55-59 jr	3348	3275	6623	260	1099	458	128	18	128	18	6	12	32	43	37
60-64 jr	2911	2961	5872	267	490	230	74	17	74	17	10	14	55	98	77
65-69 jr	2467	2811	5278	218	14	11	46	12	46	12	14	13	41	71	57
70-74 jr	1949	2518	4467	264	4	0	16	5	16	5	12	9	92	99	96
75-79 jr	1365	2049	3414	158	0	5	20	15	20	15	0	6	59	83	73
80-84 jr	744	1445	2189	228	0	7	0	13	0	13	0	5	54	90	78
85 jr	499	1298	1797	100	0	0	0	0	0	0	0	0	120	92	100
TOTAAL	64976	67242	132218	248	611	216	96	10	96	10	10	10	28	37	33

CURIEFOLIO MORBILO: UT-REGISTRATIE PEILSTATIONS
 LEEFTIJDGROEP NAAM ZIEKTEBILDE CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD
 WEEK: 1 t/m 53
 JAAR 1958

Leeftijdsgroep	POPULATIE				STERILISATIE				OESTRO- SUICIDE GENEN (POGING)				MAMMOGRAFIE				URETHRI- CAIDS TIS	
	STERILISATIE		STERILISATIE		SUICIDE (POGING)		SUICIDE (POGING)		1-1-97		HERHA- LING		P.I.D.		URETHRI- CAIDS TIS			
	M	V	T	M	V	T	V	M+V	V	M	V	M	V	V	M	V	M	M+V
1-4 jr	864	587	1191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-9 jr	3397	3131	4490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-14 jr	4267	4051	8328	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-19 jr	3844	3875	7819	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24 jr	4030	3882	7912	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29 jr	4164	4673	8837	0	2	1	1	0	12	30	6	9	11	9	22	7	49	25
30-34 jr	5852	5889	11741	10	14	12	0	0	7	58	12	17	17	15	26	39	31	31
35-39 jr	5720	5576	11296	89	43	66	0	0	5	90	29	15	15	26	31	34	31	34
40-44 jr	5922	5393	10885	144	76	110	0	0	8	150	61	6	6	18	34	34	34	34
45-49 jr	4897	4896	9895	128	78	103	0	0	10	231	80	10	10	26	15	15	15	15
50-54 jr	4897	4692	9591	71	11	42	0	0	4	254	111	7	7	20	16	16	16	16
55-59 jr	4363	4230	8593	28	0	14	0	0	8	125	78	2	2	23	15	15	15	15
60-64 jr	3381	3279	6623	9	0	5	0	0	3	85	104	0	0	24	3	3	3	3
65-69 jr	2911	2961	5872	0	0	0	0	0	2	61	17	7	7	21	3	3	3	3
70-74 jr	2467	2811	5278	0	0	0	0	0	0	57	43	0	0	12	2	2	2	2
75-79 jr	1937	2518	4467	5	0	2	0	0	0	64	24	0	0	26	0	0	0	0
80-84 jr	1365	2047	3414	0	0	0	0	0	0	3	63	5	5	15	0	0	0	0
1958 jr	744	1445	2189	0	0	0	0	0	0	27	48	7	7	27	0	0	0	0
TOTAAL	497	1298	1797	0	17	28	0	0	17	84	36	6	6	17	18	18	18	18

CONFIRMIE MORBIDITEITSREGISTRATIE PEILSTATIONS
 LEEFTIJDGROEP NAAR ZIEKTEBELD CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD
 JAAR: 1996
 WEEK: 1 t/m 53

leeftijdsgroep	POPULATIE						FYSIEK GEWELD						GASTRO-ENTERITIS						PROSTAATLJUDEN						KINK-HOEST	
	M		V		T		M		V		T		M		V		T		M		M		M		M+V	
	M	V	M	V	T	M	V	M	V	T	M	V	T	M	V	T	M	V	T	RECTAAL TOUCHER	PSA	VERWIJZING	M	M	KINK-HOEST	KINK-HOEST
< 1 jr	604	587	1191	0	0	0	447	460	453	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17
1-4 jr	3359	3131	6490	0	3	2	226	217	222	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	37
5-9 jr	4267	4061	8328	12	5	8	84	101	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	22
10-14 jr	3944	3875	7819	8	8	8	53	80	67	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
15-19 jr	4030	3882	7912	22	21	21	37	57	47	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
20-24 jr	4164	4673	8837	22	14	14	55	77	67	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
25-29 jr	5852	5889	11741	9	12	10	63	78	71	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
30-34 jr	5720	5576	11296	14	13	13	49	45	47	21	5	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
35-39 jr	5492	5393	10885	4	4	4	55	39	47	31	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
40-44 jr	4599	4896	9895	6	12	9	62	27	44	52	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-49 jr	4699	4692	9591	2	15	8	37	47	42	94	53	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
50-54 jr	4363	4230	8593	0	7	3	46	40	43	151	101	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2
55-59 jr	3348	3275	6623	6	12	9	30	31	30	281	194	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60-64 jr	2911	2961	5972	0	0	0	17	30	24	419	357	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69 jr	2467	2811	5278	4	0	2	41	36	38	523	365	81	0	0	0	0	0	0	0	0	0	0	0	0	2	2
70-74 jr	1939	2518	4457	5	4	4	46	56	51	672	477	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75-79 jr	1365	2049	3414	0	10	6	88	49	64	374	440	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80-84 jr	744	1445	2189	0	0	0	81	48	59	578	349	134	0	0	0	0	0	0	0	0	0	0	0	0	0	0
> 85 jr	499	1298	1797	0	15	11	80	77	78	321	361	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAAL	64976	67242	132218	8	9	8	64	65	65	117	83	14	5	5	5	5	5	5	5	5	5	5	5	5	5	5

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS
 PROVINCIEGROEP NAAR ZIEKTEBEELD CUMULATIEF ALLE PEILSTATIONS OESTANDAARDISEERD
 JAAR: 1998 WEEK: 1 t/m 33

POPULATIE	*INFLU- ENZA*			CERVIXUITSTRIJKJE			HONDENBETEN			HERPES ZOSTER		
	M	V	T	M+V	V	T	M	V	T	M	V	T
I PROVINCIEGROEP	12037	12345	24382	173	499	199	11	7	9	11	22	16
IGR+FR+DR	16441	16466	32907	207	608	243	15	9	12	33	32	32
IDV+GLD+FLE	20459	22295	42754	341	697	242	6	9	7	36	44	40
IUTR+NH+ZH	16041	16137	32178	222	581	165	9	14	11	26	46	36
IZLD+NB+LIM	64978	67243	132221	248	611	216	10	10	10	28	37	33
I TOTAAL												

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS
 PROVINCIEGROEP NAAR ZIEKTEBEELD CUMULATIEF ALLE PEILSTATIONS OESTANDAARDISEERD
 JAAR: 1998 WEEK: 1 t/m 53

POPULATIE	STERILISATIE			OESTRO-GENEN			MAMMOGRAFIE			URETHRI-CAIDS		
	M	V	T	M	V	T	1 ^e MAAL	SUICIDE (POGING)	1-1-97	HERHA-LING	P.I.D.	URETHRI-CAIDS
I PROVINCIEGROEP	12037	12345	24382	28	23	25	12	5	49	16	6	15
IGR+FR+DR	16441	16466	32907	41	19	30	39	4	90	80	8	16
IDV+GLD+FLE	20459	22295	42754	30	12	21	35	6	82	24	6	23
IUTR+NH+ZH	16041	16137	32178	54	20	37	20	7	108	24	4	12
IZLD+NB+LIM	64978	67243	132221	39	17	28	28	5	84	36	6	17
I TOTAAL												

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS
 PROVINCIEGROEP NAAR ZIEKTEBEELD CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD
 JAAR: 1998
 WEEK: 1 t/m 33

	POPULATIE				FYSIEK GEWELD				GASTRO-ENTERITIS				PROSTAATLUDEN				KINK- HOEST	
	M	V	T	M+V	M	V	T	M+V	M	V	T	M+V	M	V	T	M+V	M	V
PROVINCIEGROEP	12037	12345	24382	8	10	9	27	24	26	45	33	7	2					
IGR+FR+DR	16441	16466	32907	6	5	5	89	79	84	120	109	19	4					
IDV+GLD+FLE	20459	22295	42754	9	12	11	85	85	83	167	103	20	2					
IUTR+NH+ZH	16041	16137	32178	6	7	7	46	56	51	105	69	7	12					
I ZLD+NB+LIM	64978	67243	132221	8	9	8	64	65	65	117	83	14	5					
ITOTAAL																		

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS
 STEDELIJKHEIDSGRAAD NAAR ZIEKTEBEELD CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD
 JAAR: 1998
 WEEK: 1 t/m 33

	POPULATIE				"INFLU- ENZA"				"INFLU- ENZA				HERPES ZOSTER				
	M	V	T	M+V	M	V	T	M+V	M	V	T	M+V	M	V	T	M+V	
STEDELIJKHEID	10514	10349	20863	382	586	227	93	22	13	17	32	41	36				
I 3	46534	47836	94370	202	603	241	100	8	9	9	26	35	31				
I 4-3-2	7930	9057	16987	339	685	72	83	4	8	6	33	45	39				
I 11	64978	67242	132220	248	611	216	96	10	10	10	28	37	33				
ITOTAAL																	

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS
 STEDELIJKHEIDSGRAAD NAAR ZIEKTEBEELD CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD
 JAAR: 1998
 WEEK: 1 t/m 53

POPULATIE	STERILISATIE			OESTRO-GENEN			SUICIDE (POGING)			MAMMOGRAFIE			P.I.D.			URETHRI-TIS		
	M	V	T	M	V	T	V	M+V	V	V	V	V	V	V	V	M	M	M+V
ISTEDELIJKHEID																		
15	10514	10349	20863	30	14	22	34	4	81	24	2	18	11					
14-3-2	46534	47836	94370	41	18	29	27	5	90	43	6	17	16					
11	7930	9057	16987	33	21	26	29	11	61	17	8	20	36					
TOTAAL	64978	67242	132220	39	17	28	28	5	84	36	6	17	18					

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS
 STEDELIJKHEIDSGRAAD NAAR ZIEKTEBEELD CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD
 JAAR: 1998
 WEEK: 1 t/m 53

POPULATIE	FYSIEK GEWELD			GASTRO-ENTERITIS			PROSTAATLIDEN			KINK-HOEST		
	M	V	T	M	V	T	M	V	T	M	M	M+V
ISTEDELIJKHEID												
15	10514	10349	20863	8	5	6	55	61	58	124	121	24
14-3-2	46534	47836	94370	7	8	7	61	60	60	107	71	12
11	7930	9057	16987	13	19	16	97	99	98	170	105	14
TOTAAL	64978	67242	132220	8	9	8	64	65	65	117	83	14

FOOTNOTES

1. Dulk C.J. den, Stadt H. van de, Vliegen J.M. Een nieuwe maatstaf voor stedelijkheid: de omgevingsadressendichtheid. Mnd. stat. bevolk, (CBS) 92/7.
2. Beroepen Extramurale Gezondheidszorg. Per 1 Januari 1998. NIVEL, Utrecht.
3. The tables indicated only by figures are text tables.
4. 1-1-1998, Central Statistical Office. Persons who are entered in the Central Register of Vital Statistics (CPR) have been left out of consideration.
5. Practice census 1997.
6. In these tables and the tables in the text derived from them frequencies are given in all cases per 10 000 men, women or inhabitants, unless stated otherwise.
7. This must satisfy the following criteria (Pel, 1965):
 - a. An acute beginning, i.e. at most a prodromal stage of three to four days (including pre-existent infection of the respiratory organs at a non-pathogenic level);
 - b. The infection must be accompanied by a rise in rectal temperature to at least 38°;
 - c. At least one of the following symptoms must be present: cough, coryza, sore throat, frontal headache, retrosternal pain, myalgia.

Pel, J.Z.S. (1965) Proefonderzoek naar de frequentie en de aetiologie van griepachtige ziekten in de winter 1963-1964. (Huisarts en Wetenschap 8, 321).
9. Tacken, M., H. van den Hogen, W. Tiersma, D. den Bakker, e.a. LINH Programmatische preventie in de huisartspraktijk, Nijmegen, April 1998
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11. The calculations made in this chapter have been performed by Dr E. Ketting, Zeist.
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13. Bleker O.P., W.I. van der Meijden. Chlamydia trachomatis-infecties: complicaties bij de vrouw SOA-bulletin 13, (1992) 6, blz. 8-9.

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18. Rijksinstituut voor Volksgezondheid en Milieuhygiene Volksgezondheid Toekomst Verkenning. SDU Ruwaard, D., Kramers, P.G.M. Den Haag. Sdu Uitgeverij, 1993: 42-47.
19. Melker, H.E. de, M.A. Conyn-van Spaendonck, J.F.P. Schellekens Pertussis surveillance 1989-1995, RIVM, 1996.
20. Diekstra, R.F.W., en M. van Egmond. Suicide and attempted suicide in general practice. In The Dutch Sentinel Practice Network; relevance for public health policy, blz. 202. Nivel, Utrecht 1989.
21. A euthanasia declaration is a written request for euthanasia on certain conditions.
22. Bartelds A.I.M. Request for application of euthanasia. In: Bartelds A.I.M. Fracheboud J, van der Zee J. (eds). The Dutch Sentinel Practice Networks; relevance for public health policy. Utrecht, NIVEL, 1989.
23. Van der Maas P.J., J.J.M. van Delden, L. Pijnenborg, C.W.N. Looman. Euthanasia and other medical decisions concerning the end of life. The Lancet 1991; 338: 669-74
24. Pijnenborg L., J.J.M. van Delden, J.W.P.F. Kardaun, J.J. Glerum, P.J. van der Maas. Nationwide study of decisions concerning the end of life practice in the Netherlands. BMJ 1994; 309: 1209-9.
25. Van der Wal G., R.L.M. Dillmann. Euthanasia in the Netherlands. BMJ 1994; 308: 1346-9.
26. Van der Maas Paul J., Gerrit van der Wal, e.a. Euthanasia, physician-assisted suicide, and other medical practices involving the end of life in the Netherlands, 1990-1995. Special report from the Netherlands, Volume 335, number 22, 1996.
27. Van der Wal Gerrit, Paul J. van der Maas, e.a., Evaluation of the notification procedure for physician-assisted death in the Netherlands. The New England Journal of Medicine, 1996, 1706.

Explanatory notes pertaining to:

Bijlage 1	
Bijlage	- Appendix 1
Continue morbiditeits registratie, peilstations	- Continuous morbidity registration, - sentinel stations
Deelnemende artsen	- Participating general practitioners
Naam	- Name
Plaats	- Residence
Provincie	- Province
Comb.-praktijk	- Group practice
Apotheek-houdend	- With dispensary
Bijlage 2	
Bijlage	- Appendix 2
Weekstaat t.b.v. centrale registratie	- Weekly return for central registration
Continue morbiditeits registratie, peilstations	- Continuous morbidity registration, - sentinel stations
Proj. no.	- Project number
Verslagjaar	- Year under review
Code peilstations	- Code number sentinel stations
Week no.	- Number of the week
Rapport. dagen	- Number of days over which reporting took place
Regel no.	- Line number
Leeftijdsgroep	- Age group
Influenza (-achtig ziektebeeld)	- Influenza (-like illness)
Cervixuitstrijkje	- Cervical smear
eerste maal	- first time
herhaling	- repeat
geen bevolkingsonderzoek	- no mass screening
hondenbeten	- Dog bites
Herpes zoster	- Herpes zoster
Sterilisatie verricht	- Sterilization performed
Oestrogenen voorschrift	- Oestrogens prescribed
Suicide(poging)	- (Attempted) suicide
(Poli) klinische mammografie	- (clinical) mammography
na 1-1-1997 voor eerste maal	- Taken for the first time after 1-1-1997
herhalingsonderzoek	- Repeat examination
P.I.D.	- P.I.D.
Urethritis bij man	- Urethritis of the man
C.A.I.D.S.	- Concern about AIDS
Fysiek geweld	- Physical violence
Gastro-enteritis	- Gastro-enteritis
Prostaatlijden	- Prostate trouble

rectaal toucher

p.s.a.

verwijzing verdenking prostaatca

kinkhoest

Weeknummer

Opgemaakt d.d.

Aantal dagen gerapporteerd

(zie voetnoot¹)

Zie ommezijde voor voetnoot

1. Door vakantie, ziekte en andere oorzaken zal deze rapportage zich echter ook over minder dan 5 dagen kunnen uitstrekken. Het wordt van belang geacht om, zo mogelijk, ook tijdens het weekeinde waargenomen patiënten te rapporteren. (M.u.v. influenzapatiënten.)
2. Betreft uitsluitend nieuwe patiënten, ook telefonisch consult melden
3. Betreft rapportering van vrouwen bij wie om welke reden dan ook een cervixuitstrijkje is afgenomen
4. Elk uitstrijkje dat in het kader van het bevolkingsonderzoek herhaald wordt voor dat de oproeptermijn van 5 jaar is afgelopen
5. Bijvoorbeeld in het kader van pilcontrole, op verzoek van de vrouw, wegens klachten of anderszins buiten het kader van het bevolkingsonderzoek.
6. Bij hondenbeten s.v.p. vragenlijst aan patient meegeven
7. Indien het een patient(e) betreft uit een van de leeftijdsgroepen, waarvan het vak gerasterd is, dus jonger dan 20 jaar en ouder dan 49 jaar, tevens exacte leeftijd the exact age here. hierachter vermelden.
Leeftijd:.....
8. S.v.p. apart formulier invullen en bij de weekstaat voegen.

rectal touch

P.S.A.

referral to urologist

- whooping cough

- Number of the week

- Completed on

- Number of days over which reporting took place

- (See footnote number¹)

- For footnotes see reverse

1. As a result of vacation, sickness and other causes this reporting may extend over fewer than 5 days. It is considered to be of importance to report, if possible, patients observed during the weekend as well. (Influenza patients excluded.)
2. Relates solely to new patients. Report telephone calls as well.
3. Concerns reporting of women on whom a cervical smear was taken reason. If a cervical smear was
4. Each cervical smear taken as part of the mass screening before the end of the regular screening interval of 5 years.
5. For example as part of check-up for the pill, of the woman's request without for having complaints or as part of the mass screening.
6. In case of dog bites please hand out the questionnaire to the patient.
7. If a patient is concerned in one of the age groups whose box is filled in, younger than 20 years and older than 49 years, also give
Age:.....
8. Please complete a separate form and attach to the weekly return.

- | | |
|--|---|
| <p>9. S.v.p. apart formulier invullen en bij de weekstaat voegen.</p> <p>10. S.v.p. apart formulier invullen en bij de weekstaat voegen.</p> <p>11. S.v.p. apart formulier invullen en bij de weekstaat voegen.</p> <p>12. S.v.p. faeceskokker en enquêteformulier aan patiënt uitreiken</p> | <p>9. Please complete a separate form and attach to the weekly return.</p> <p>10. Please complete a separate form and attach to the weekly return.</p> <p>11. Please complete a separate form and attach to the weekly return.</p> <p>12. Please hand out questionnaire and faeces transport material to the patients</p> |
|--|---|

Tables (p 140 - p 145)

- | | |
|---|---|
| <p>Continue morbiditeits registratie peilstations</p> <p>Kwartaal</p> <p>Leeftijdsgroep</p> <p>Influenza (-achtig ziektebeeld)</p> <p>Cervixuitstrijkje</p> <p>bevolkingsonderzoek</p> <p>geen bevolkingsonderzoek</p> <p>Hondenbeten</p> <p>Herpes zoster</p> <p>Sterilisatie verricht</p> <p>Oestrogenen voorschrift</p> <p>Suicide(poging)</p> <p>(poli) klinische mammografie na 1-1-1997 voor de eerste maal</p> <p>Herhalingsonderzoek</p> <p>P.I.D.</p> <p>Urethritis bij man</p> <p>C.A.I.D.S.</p> <p>Fysiek geweld</p> <p>Gastro-enteritis</p> <p>Prostaatlijden</p> <p>rectaal toucher</p> <p>p.s.a.</p> <p>verwijzing verdenking prostaatca</p> <p>Kinkhoest</p> <p>Provinciegroepen</p> <p>Gr + Fr + Dr</p> <p>Ov + Gld + Fl</p> <p>Utr + NH + ZH</p> <p>Zld + NB + Lim</p> | <p>- Continuous morbidity registration sentinel stations</p> <p>- Quarter</p> <p>- Age group</p> <p>- Influenza (-like illness)</p> <p>- Cervical smear</p> <p>- mass screening</p> <p>- no mass screening</p> <p>- Dog bites</p> <p>- Herpes zoster</p> <p>- Sterilization performed</p> <p>- Oestrogens prescribed</p> <p>- (Attempted) suicide</p> <p>- (Clinical) mammography</p> <p>- Taken for the first time after 1-1-1997</p> <p>- Repeat examination</p> <p>- P.I.D.</p> <p>- Urethritis of the man</p> <p>- Concern about AIDS</p> <p>- Physical violence</p> <p>- Gastro-enteritis</p> <p>- Prostate trouble</p> <p>rectal touch</p> <p>P.S.A.</p> <p>referral to urologist</p> <p>- Whooping cough</p> <p>- Province group</p> <p>Groningen, Friesland, Drenthe</p> <p>- Overijssel, Gelderland, Flevoland</p> <p>- Utrecht, North Holland, South Holland</p> <p>- Zeeland, North Brabant, Limburg</p> |
|---|---|

Stedelijkheidsgraad

5

4-3-2

1

- Degree of urbanization
- Rural municipalities
- Municipalities with urban characteristics and urbanized municipalities
- Municipalities with a population of 100 000 or more

Voetnoot

N.B. Als gevolg van het afronden bij het berekenen van de relatieve frequenties kunnen kleine verschillen in de totalen zijn ontstaan

- Footnote
- N.B. As a result of rounding off when calculating relative frequencies, small differences may have occurred in the totals

