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morbidity  
registration  
sentinel stations  
the netherlands

**1990**

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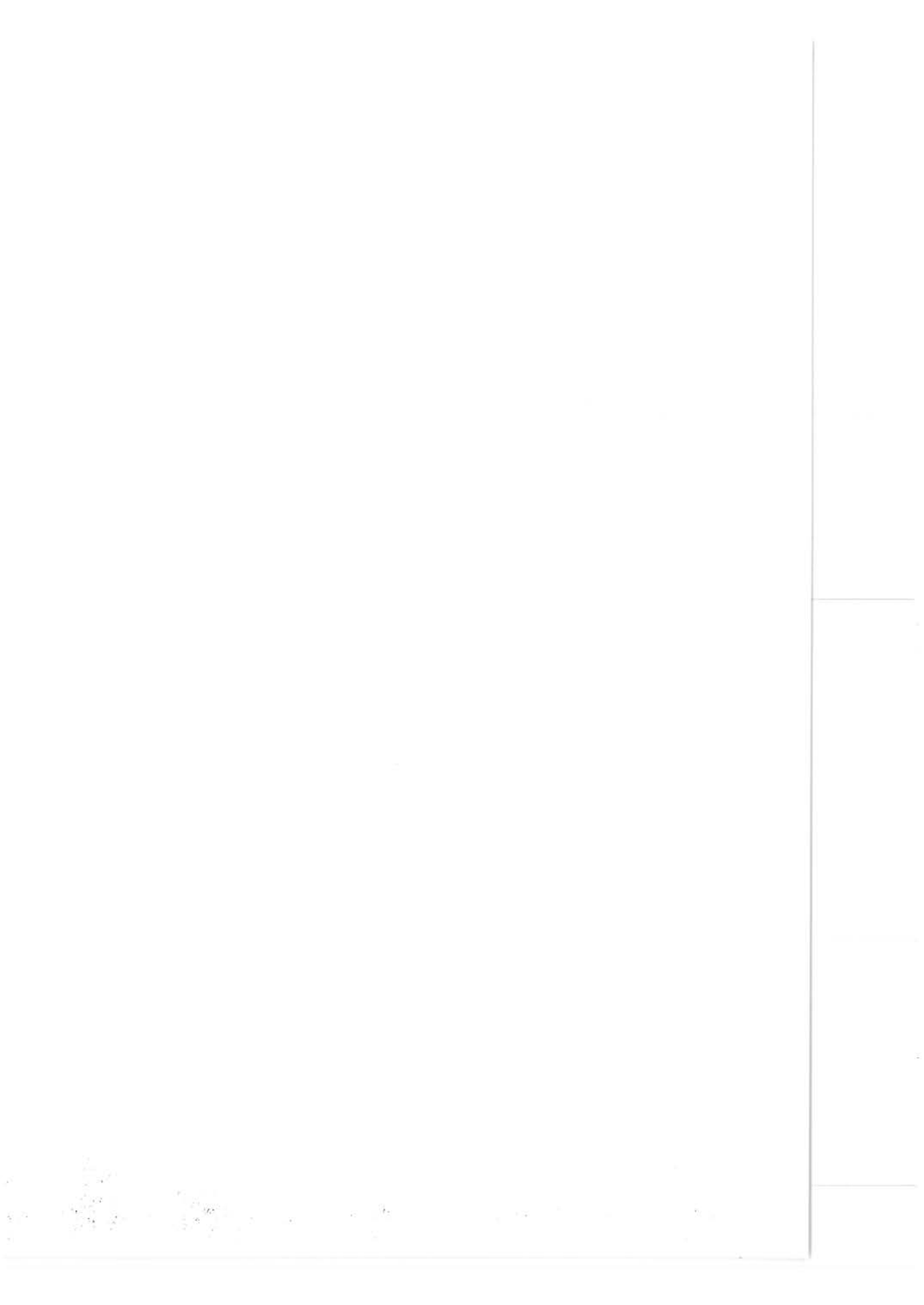
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## FOREWORD

The 1990 annual report lies before you.

A new element in the activities of the sentinel stations in recent years is the advent of international cooperation between sentinel station networks.

In 1986 the International Otitis Media Study took place. In 1990 the first publication on the results of this study appeared in the *British Medical Journal*.

In this report the results are given for the first time of registrations that were made under Eurosentinel. Eurosentinel is the collaboration between sentinel station networks in a number of EC countries and Switzerland coordinated by the Institute for Hygiene and Epidemiology in Brussels.

At the end of 1989 the physicians in these networks recorded the requests for blood tests for four weeks. The results of the investigation show considerable differences between the countries in the requests for blood tests by general practitioners. The differences between general practitioners within a country are also considerable, however.

In 1990 there was the joint registration of the requests for blood tests for H.I.V. antibodies and the incidence of measles and mumps. During the period 1-10-1990 - 1-4-1991, the influenza season, cooperation also took place. The results are discussed in the chapters on these subjects.

Finally, there are also the domestic subjects, a number of which have already been recorded for several years.

In the last three years the number of requests for application of euthanasia had remained more or less constant. In 1990 the spotter physicians reported more requests than in any year before.

Unique in the world is the development in the number of sterilizations performed, charted by means of the sentinel stations. The percentage of men sterilized at some time again fell somewhat in 1990; among women there had already been a decline in this percentage for several years.

A foreword cannot replace the report. Notice has been taken of a striking development within the sentinel stations: international cooperation.

It is our firm belief that this aspect of the Continuous Morbidity Registration Sentinel Stations also contributes to insight into the functioning of health care.

Prof. Dr. van der Zee,  
Chairman, Counselling Committee Sentinel Stations

- \*) Froom, J., L. Culpepper, P. Grob. Diagnosis and antibiotic treatment of acute otitis media: report from International Primary Care Network; British Medical Journal; Vol. 300, 1990, p. 582-586.
- \*\*\*) Van Casteren, V., Leurquin, P., Declerc, E. Study of the use of some selected groups of laboratory tests in general practice. Institute for Hygiene and Epidemiology, Brussels, 1991.

## 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. 144).

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. 17).

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, three conditions must be met:

1. a description of the importance of the subject is obligatory;
2. it must be possible to formulate strict and clear criteria with respect to the disease or occurrence;
3. application of these criteria may not be too time-consuming and it has to suit the practice of the general practitioner.

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. 145 and 146) 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.

In 1990 the contacts in the International Primary Care Network were continued. In this international network no research was performed in 1990.

Since the end of 1988 participation has been taking place in a second international network. Eurosentinel is a cooperative effort of sentinel station networks in countries of the European Community and Switzerland, organized by the Institute for Hygiene and Epidemiology, Brussels. The objective of this project is to promote the creation of sentinel station networks in countries of the European Community and then cooperation between these networks. In 1989 the first research project was performed by Eurosentinel: in October of that year the general practitioners in the various countries collected data on the blood tests requested by them.

The investigations in both the International Primary Care Network and Eurosentinel present the possibility of making comparisons between countries.



## COUNSELLING COMMITTEE

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

1. two representatives of the Ministry of Welfare, Public Health and Culture;
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 Chief Medical Office of Health;
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 1990 the committee functioned in the following composition:

Mrs Drs J.M. Bensing,<sup>2</sup>  
F.K.A. Fokkema, M.D.<sup>5</sup>  
P. van Leeuwen, statistician<sup>7</sup>  
C.A. Postema, M.D.<sup>4</sup>  
H.O. Sigling, M.D.<sup>5,6</sup>  
W.A. van Veen, M.D.<sup>1</sup>  
J.J. Zandvliet<sup>1</sup>  
Prof. Dr J. van der Zee, Ph.D.<sup>3</sup>

**Project leader:** A.I.M. Bartelds, M.D.  
**Secretary:** Mrs E. Colet-van Woezik  
Mrs M. Heshusius-van Valen

This committee met twice in 1990. It had one vacancy in that year.

## MEETING OF SPOTTER CO-WORKERS 1990

Contact between the registering physicians, their co-workers, the Counseling Committee, the topic keepers and the project leader is of great importance to a registration project like the Continuous Morbidity Registration Sentinel Stations. Every year, at the beginning of a new registration period, a meeting is held for that purpose.

An account is given of concluded registrations, problems with the collection of the data on subjects that have been on the weekly return for a number of years are discussed, and new topics on the weekly return are introduced.

In 1990 the annual meeting was held in a festive atmosphere. The Continuous Morbidity Registration Sentinel Stations had then been in existence 20 years.

The highspot of the meeting was the presentation of the first copy of the publication *The Dutch sentinel practice network; relevance for public health policy* by Prof. Dr J. van der Zee to Dr R.R.R. Huysman-Rubingh, the deputy chief officer of the Chief Medical Office of Health.

In her word of thanks Mrs Huysman-Rubingh noted the amount of work that had been performed in the twenty years of the project's existence. In her opinion the book presented to her was evidence of that.

Looking into the future, she saw that cooperation will come about between the national sentinel stations and the sentinel stations of the primary health services, which under the new legislation have acquired an important epidemiological task.

What is still the future for the Dutch sentinel stations has already been put into practice in France: a sentinel station network that utilizes electronic data transfer. Mr H. ten Hoopen, the NIVEL informatics adviser, had studied this French network and gave a demonstration of its possibilities with an on-line link.

Prior to these two special events at the meeting Mrs M. Moons discussed the first results of the registration of the consultations in which AIDS is brought up in the talk between the patient and the general practitioner. Her

text in adapted form has been published as an article in "Medisch Contact"<sup>17</sup>.

In conclusion the weekly return for the registration year 1990 was discussed.



The number of sentinel stations at the beginning of 1990 was 44. In the course of the year one sentinel station stopped and in one sentinel station one of the two physicians ceased practising. The number of general practitioners in the sentinel station practices was initially 61; later in the year 59.

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

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

Appendix 1 (p. 142-143) gives a survey of the general practitioners who took part in the sentinel station project during 1990. In 13 sentinel stations there is cooperation between two or more general practitioners, viz 10 times 2, twice between 3 practitioners and once between 4 practitioners. In January 1990 the percentage of general practitioners cooperating throughout the Netherlands was 45, and among the spotter physicians 39. There are 7 dispensing spotter physicians, 3 in urbanization group 1 and 4 in urbanization group 2, that is 16% of the total number of spotter physicians. For the Netherlands as a whole this percentage is 12<sup>2</sup>.

Tables 1 and 2 give a distribution of the number of spotter physicians and sentinel stations per province and urbanization group in the years 1981-1990. 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 (see 1981 report, p. 13).

Table 1: distribution of the spotter physicians (general practitioners) and sentinel stations per province group in the years 1981-1990<sup>3</sup>

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 GPs	sentinel stations	number of GPs	sentinel stations	number of GPs	sentinel stations	number of GPs	sentinel stations
1981	10	6	11	9	27	21	13	10
1982	10	6	11	9	27	21	13	10
1983	10	6	11	9	27	21	14	10
1984	10	6	11	9	27	21	14	10
1985	10	6	10	8	25	21	14	10
1986	10	6	10	8	26	21	14	10
1987	10	6	9	7	28	21	14	10
1988	10	6	10	8	28	21	14	10
1989	10	6	10	8	28	21	13	10
1990	10	6	10	8	28	20	13	10

Table 2: distribution of the spotter physicians (general practitioners) and sentinel stations per urbanization group in the years 1981-1990

urbanization group	1		2		3		Netherlands	
	rural municipalities		urbanized rural municipalities together with municipalities with urban characteristics		municipalities with a population of 100 000 or more			
	number of GPs sentinel stations		number of GPs sentinel stations		number of GPs sentinel stations		number of GPs sentinel stations	
1981	11	8	36	25	14	13	61	46
1982	11	8	36	25	14	13	61	46
1983	11	8	37	25	14	13	62	46
1984	11	8	37	25	14	13	62	46
1985	10	7	35	25	14	13	59	45
1986	10	7	36	25	14	13	60	45
1987	10	7	37	25	14	13	61	44
1988	9	6	39	26	14	13	62	45
1989	9	6	38	26	14	13	61	45
1990	10	6	37	25	14	13	61	44

## THE PRACTICE POPULATIONS

In 1989 a complete census of the practice populations took place; these details have been used for processing with effect from 1-1-1990. In 1991 a new census is planned.

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 (urbanization groups). An enquiry was held as to whether this aim is still being met. This proved broadly to be so, as the following surveys demonstrate.

The Dutch population increased in 1990 by 87 334 inhabitants (as per 1-1-1990).

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 <sup>4</sup>	number of patients of sentinel stations <sup>5</sup> (with percentages)
province group	A	1 594 041	22 774 (1.4%)
	B	3 036 140	24 410 (0.8%)
	C	6 611 369	62 227 (0.9%)
	D	3 649 388	33 823 (0.9%)
urbanization group	1	1 681 187	22 727 (1.3%)
	2	9 659 913	87 451 (0.9%)
	3	3 549 838	33 056 (0.9%)
sex	men	7 358 482	69 958 (0.9%)
	woman	7 534 092	73 276 (1.0%)
total		14 892 574	143 234 (1.0%)

Province group A (the northern provinces) and urbanization group 1 (rural municipalities) are relatively somewhat overrepresented.



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

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

With regard to the age groups a minor shift has occurred: in the youngest age groups, in comparison with the previous census, there are more subgroups with a percentage less than one; in the oldest age groups, on the other hand, such subgroups are fewer. This points to a low degree of aging of the sentinel station population; the population as it were grows along with the spotter physicians who are faithful to the project. However, care should be taken that this does not lead to distortion.

## 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 1990 it was 11 340 (41 weeks x 5 days x 44 sentinel stations/2 weeks x 5 days x 43 sentinel stations/9 weeks x 5 days x 42 sentinel stations). In 1990 a sentinel station ended its participation in the project at the beginning of the last quarter of the year. 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 reported days absolute	percentage
1981	11 960	10 520	88.0%
1982	11 960	10 627	88.8%
1983	11 960	10 515	87.9%
1984	11 960	10 546	88.2%
1985	11 700	10 340	88.4%
1986	11 700	10 284	87.9%
1987	11 660	10 035	86.1%
1988	11 700	10 307	88.1%
1989	11 700	10 380	88.7%
1990	11 340	9 997	88.2%

The percentage of reporting days is practically the same in 1990 as in previous years.

A breakdown by province and urbanization group may be seen in the

following table. No great differences prove to exist.

The cities are the lowest, 87.1%, and the eastern provinces the highest, 90%.

Per province group		Per urbanization group	
A	89.8%	1	90.7%
B	90 %	2	88.1%
C	86.4%	3	87.1%
D	89 %		

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 26 (maximum 44 x 5= 220).

Figure 2  
The number of days registered in 1990 per week.

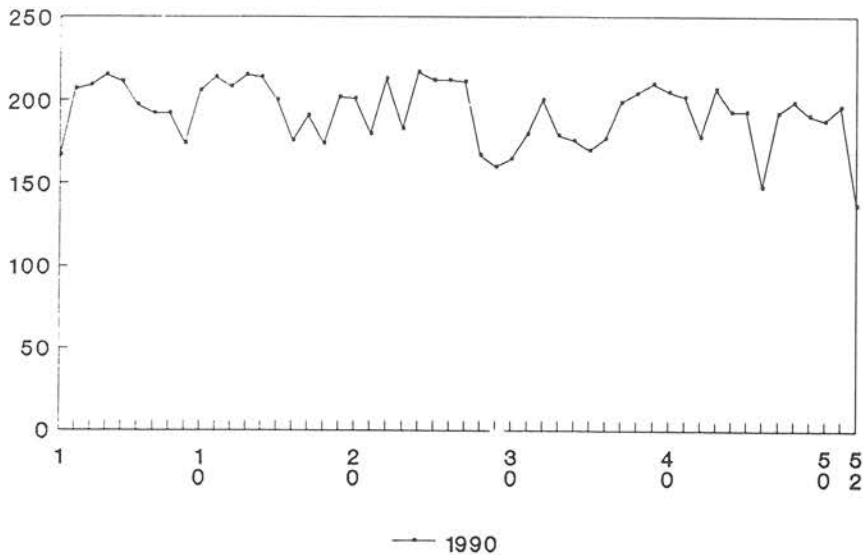


Table 5 presents the frequency distribution of the number of days not reported per sentinel station. The average number of non-reporting days per sentinel station in 1990 is 32, higher than in 1989.

A breakdown into single and group practices shows a clear difference here, viz 38 and 15 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									
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
0	2	1	2	2	1	0	0	1	1	2
1- 9	9	9	7	6	8	7	4	7	6	5
10-19	2	2	5	3	1	4	7	2	6	5
20-29	3	6	1	7	8	7	1	5	5	6
30-39	18	15	12	9	10	10	5	15	15	11
40-49	8	10	14	17	15	13	16	13	9	10
50-59	2	3	4	1	2	2	10	2	2	2
60-69	1	0	1	1	0	1	1	0	1	1
70-79	0	0	0	0	0	0	0	0	0	1
80-89	1	0	0	0	0	0	0	0	0	1
90-99	0	0	0	0	0	0	0	0	0	0
≥ 99	0	0	0	0	0	1	0	0	0	0
total number of sentinel stations	46	46	46	46	45	45	44	45	45	44
average	31	29	31	31	30	31	37	27	29	32
median	38	34.5	37	35	34	34.5	43	35	33	33

Further study of this table shows an improvement in reporting over the years. A major failure to report, i.e. more than 50 days per sentinel station, occurs in over 10% of the sentinel stations in 1990. This is a higher percentage than in 1988 and 1989. One physician ended his participation in

the project at the beginning of the last quarter. Another physician did not report in the last two months of the year.

## THE WEEKLY RETURN (Appendix 2, p. 144)

The questions on the weekly return for 1990 were composed as follows; it is stated in brackets in which year the topics were added to the return.

1. New cases of influenza(-like illness) (1970);
2. Referral for logopedics (1989)
3. Cervical smear (1976);
4. Sterilization of the man performed (1972);
5. Sterilization of the woman performed (1974);
6. Prescription of morning-after pill (1972);
7. Diabetes mellitus (1990);
8. (Attempted) suicide (1979);
9. Acute unusual headache (1988);
10. Pregnancy despite contraception considered adequate (1987);
11. Out-patient and clinical mammography (1988);
12. Concern about AIDS (1988);
13. Measles/mumps (1990).

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. 145-146) together with the years of registration.

## PROCESSING OF THE DATA ON THE WEEKLY RETURN

This report contains the results of the weekly return for 1990. The data were processed by the Computer Centre of the Ministry of Welfare, Public Health and Culture as usual.

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 urbanization group.

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 relative 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 148) the age structure as on 1 January 1990 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 here (p. 150-159):

Tables 1a, 1b, 1c and 1d: give the number of patients per 10 000 of the age group<sup>6</sup>.

Tables 2a, 2b, 2c and 2d: give the number of patients per 10 000 of the urbanization group.

Tables 3a, 3b, 3c and 3d: give the number of patients per 10 000 of the province group.



## INFLUENZA(-like illness)

Influenza<sup>7</sup> 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 1989-1990 and 1990-1991

Figs. 3.1-3.3 gives the numbers of new cases of influenza per 10 000 inhabitants per week for the Netherlands and per province and urbanization group for the 1989-1990 season<sup>8</sup>. Figs. 4.1-4.3 give the number of new cases of influenza for the 1989-1990 season. The progress of influenza in the first weeks of 1990 was already described in the 1988/1989 report.

Figure 3.1

Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, for the Netherlands, 1989-1990

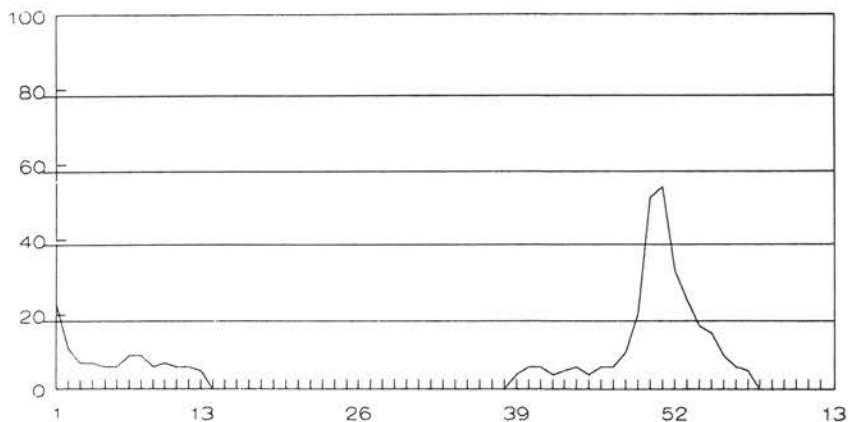


Figure 3.2

Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per urbanization group, 1989-1990

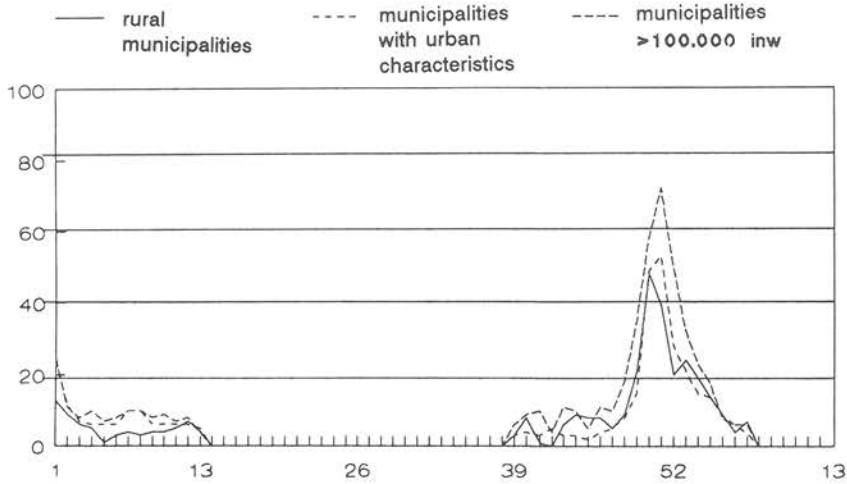


Figure 3.3

Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per province group, 1989-1990

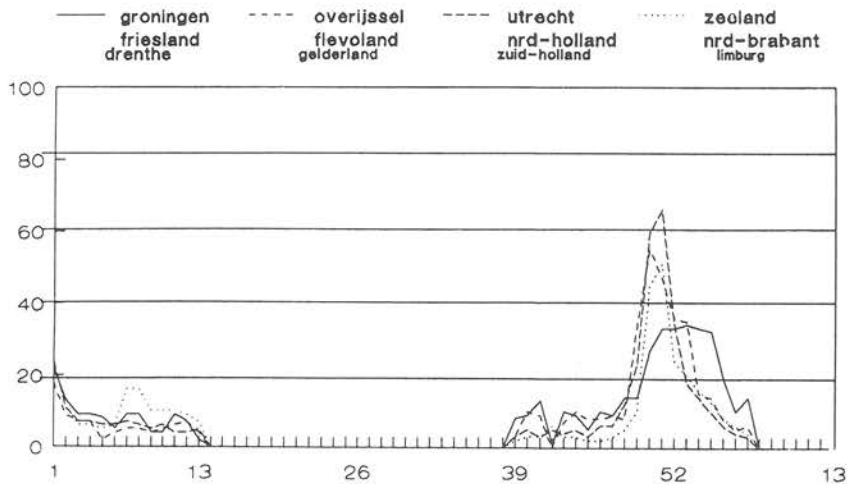


Figure 4.1

Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, for the Netherlands, 1990-1991 (up to and including week 13)

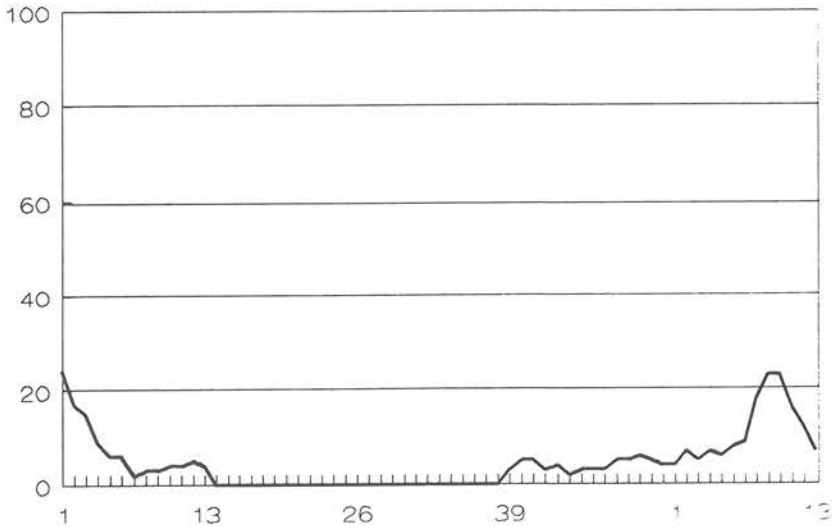


Figure 4.2

Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per urbanization group, 1990-1991 (up to and including week 13)

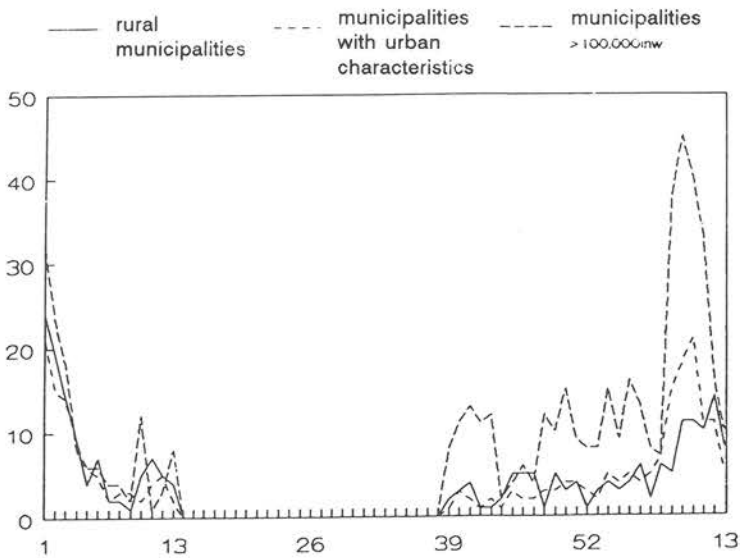
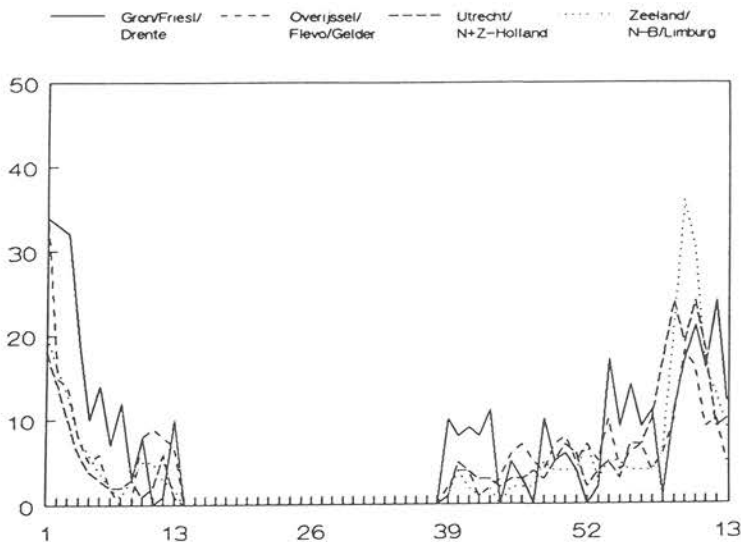


Figure 4.3

Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per province group, 1990-1991 (up to and including week 13)



#### 1989-1990 season

In the 1989-1990 season the start of the epidemic rise in influenza-like illnesses was situated at the end of the calendar year.

From week 48 of 1989 the incidence rates for the Netherlands were above 10 per 10 000 inhabitants. In week 51 the highest incidence of this season was reported: 54 per 10 000 inhabitants.

The highest incidence in the subgroups was found in the eastern provinces in week 51: 66 per 10 000, and in the cities: 72 per 10 000 inhabitants.

In the first weeks of 1990 the incidence of the reports of influenza-like illnesses fell quickly. In week 4 the number of reports was again below 10 per 10 000 inhabitants.

In the 1989-1990 season mainly strains of influenza A/subtype H<sub>3</sub>N<sub>2</sub> were isolated, but after the turn of the year influenza B as well.

#### 1990-1991 season

Otherwise than in the two preceding influenza seasons the epidemiological rise in influenza-like illnesses now lay again in the first quarter of the calendar year.

In week 8 of 1991 the weekly figure was for the first time above 10 per 10 000 inhabitants: 18 per 10 000 inhabitants. The highest incidence was reached in week 10: 24 per 10 000 inhabitants. In week 13 the number was again below 10 per 10 000: 7 per 10 000 inhabitants.

During these weeks above all influenza A (H<sub>1</sub>N<sub>1</sub>) was isolated. Influenza B viruses were also isolated.

Table 6: number of patients with influenza (-like illness), per 10 000 inhabitants, 1981-1990

year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
total per calendar year	491	497	396	502	464	630	365	399	410	225
highest weekly incidence per "season"	20	42	53	57	71	26	9	44	54	24

If we examine the epidemics of the past ten years, that of the 1986-1987 season was the mildest in that period. In the 1987-1988 season one may not speak of an influenza epidemic at all. In the 1988-1989 season an "influenza wave" occurred for the first time for years at the end of the calendar year. In the 1989-1990 season there was again an "influenza wave" at the end of the calendar year. In the 1990-1991 season most activity was seen in the second half of the first quarter.

#### Age and sex distribution

During the period of registration, no difference has ever been found in the frequency of influenza between men and women, so that a division is not included in the weekly return for this category.

The age distribution shows as in previous years that the general practitioner is consulted most frequently on influenza-like illnesses for the age group under 5 years. In the other groups the numbers are nearly identical.

This topic is to be maintained on the weekly return.

### 1990-1991 influenza season in Western Europe

From the end of September 1990 data on influenza(-like illnesses) have been passed on weekly by 10 sentinel station networks to the Central Facility of Eurosentinel in Brussels.

A survey of these networks is given in Table 7.

Table 7: Surveillance of influenza-like illness: participating networks

Name of network	No. of participants	Country
Médecins vigies/Peilpraktijken	38 GPs	Belgium
GROGs (Group Régionaux d'Observation de la Grippe)	253 GPs 51 pediatricians	France
RNTMT (Réseau National Télématique de Surveillance et d'Information sur les Maladies Transmissibles)	428 GPs	France
Sentinel Practice Network	69 GPs	Ireland
Peilstations	61 GPs	Netherlands
Medicos Sentinela	195 GPs	Portugal
Sistema de Vigilancia por Medicos Centinela	100 GPs	Spain-Basque Country
Red de Medicos Centinelas	15 GPs 5 pediatricians	Spain-Madrid Region
Sentinella	142 GPs	Switzerland
Weekly Returns Service	240 GPs	United Kingdom
GP Surveillance of Infections in Wales	138 GPs	United Kingdom

Most of these networks collect the data with the aid of a weekly return. The French RNTMT network uses electronic data communication; in the French GROGs network the physicians are approached by telephone every week for passing on the data.

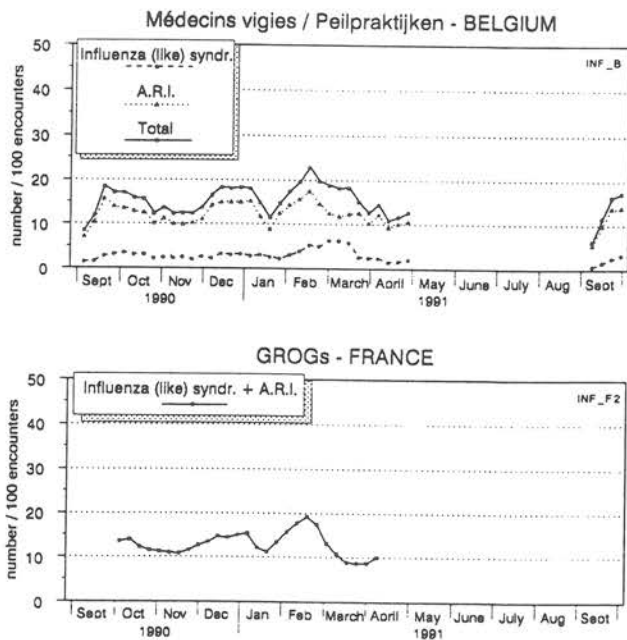
The latter approach, asking the spotter physicians by telephone about the number of reports of influenza(-like illnesses) in the preceding week has

also been the customary procedure in the Dutch sentinel stations from week 40 on.

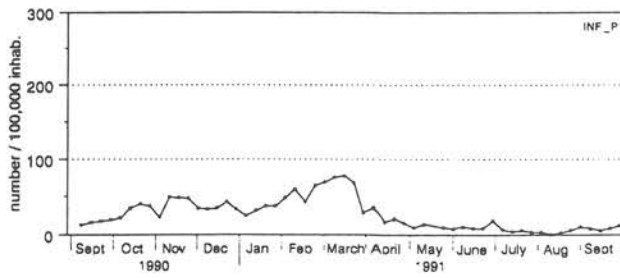
Criteria for the diagnosis of influenza(-like illnesses) are with the occasional exception used by all networks. In general an influenza(-like illness) is reported when there is: a sudden start of the complaints, fever, myalgia, coughing and other symptoms of an infection of the upper respiratory tract.

The coordinators of the network report weekly by telephone, fax or post to the Central Facility. The staff of Eurosentinel in Brussels process these data into graphs and a survey of all updated graphs is sent every week to the coordinators. In the case of a sudden or sharp increase in the number of reports in one or more networks, the coordinators get the information sent to them quickly by fax.

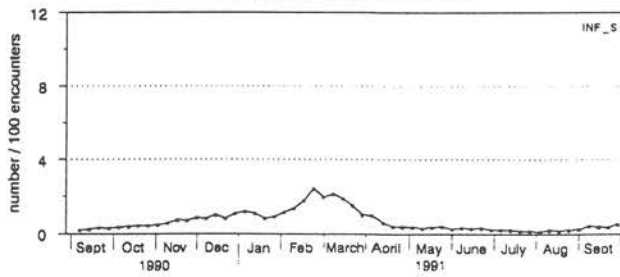
The survey over the period September 1990 - June 1991 of the joint registration within Eurosentinel appears in Figure 5.



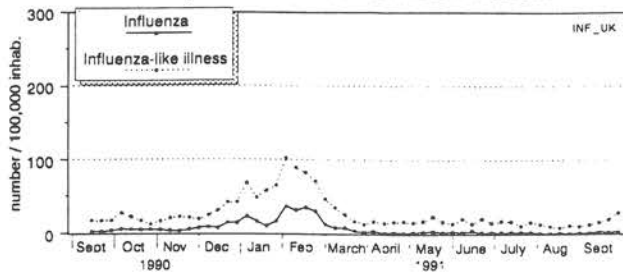
Medicos Sentinela - PORTUGAL



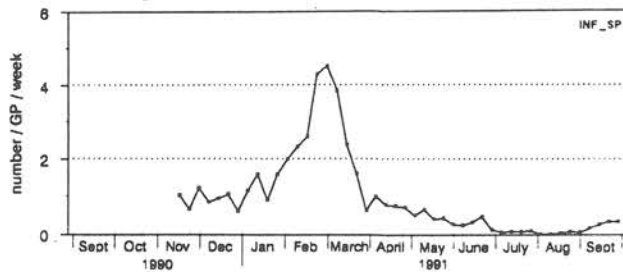
Sentinella - SWITZERLAND



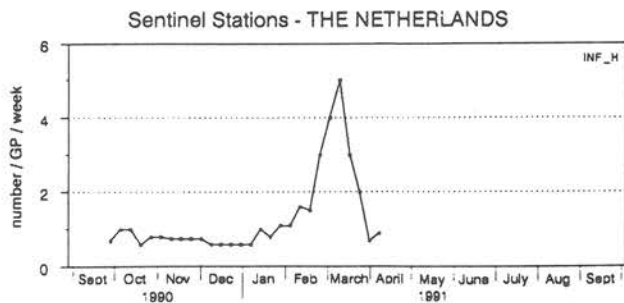
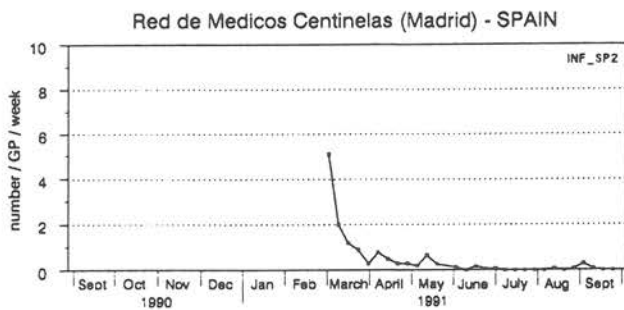
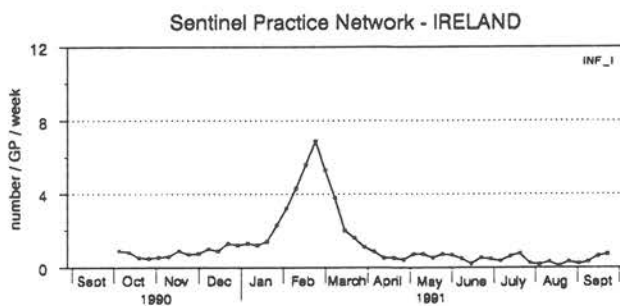
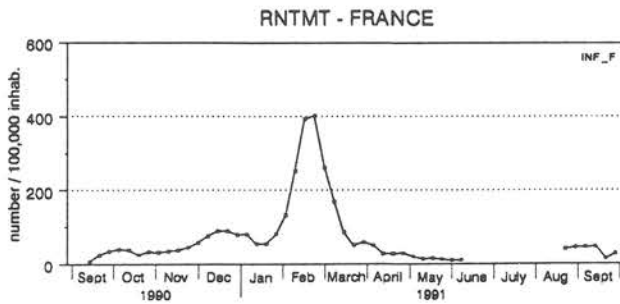
Weekly Returns Service - UNITED KINGDOM

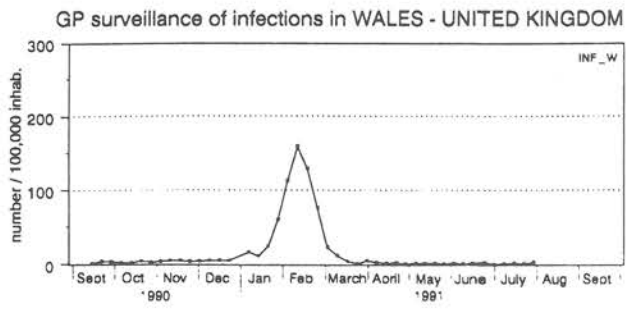


Sistema de Vigilancia por Medicos Centinela - BASQUE REGION









This registration will be continued in the 1991-1992 season.

## REFERRAL FOR LOGOPEDICS

Disturbances in the use of language (comprehension, speaking, reading and writing) are problems that severely impair the quality of life.

The few data that are available on the number of logopedic treatments give only a quantitative picture: there is an increase in the extent of logopedic aid.

In the light of the absence of a research tradition in this field it is important systematically to gather scientific knowledge, to investigate the effects of treatment and to do epidemiological and theory-developing research. A first step in this process is to acquire insight into the extent of the number of referrals for logopedics by the general practitioner and a number of aspects concerning the content and procedure thereof.

The spotter physicians are asked to register every patient for whom a referral to or authorization for logopedics is requested, both new referrals and an extension of a current treatment. On a supplementary registration form questions are asked about three subjects:

1. the disturbance(s) for which logopedics is requested,
2. whether this referral involves a first request or extension or repeat requests,
3. who is taking the initiative for the referral.

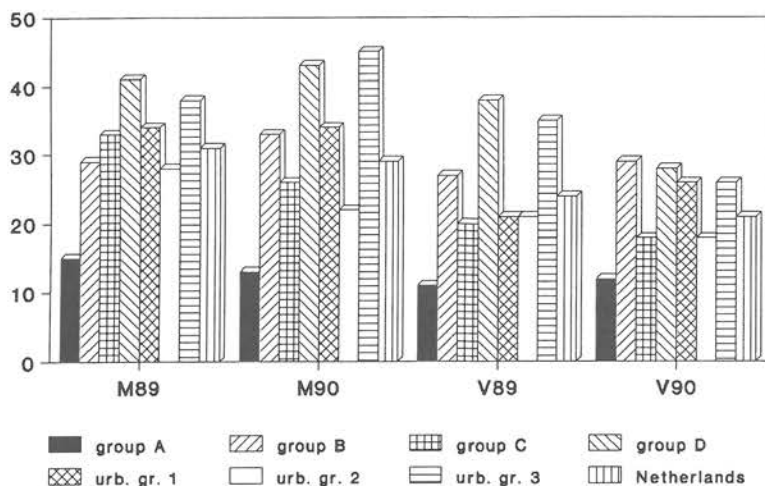
This supplementary investigation is under the direction of Dr J. Dekker (NIVEL) and is being performed in collaboration with members of the logopedics field of study at the Central Netherlands Polytechnic. Reporting takes place elsewhere.

Table 8 lists the numbers of referral for logopedics in 1989-1990 by province and urbanization group and for the Netherlands per 10 000 men and 10 000 women (cf. Figure 6). In the data presented here no distinction has been made between new referrals and repeat referrals. And "notifications" of registration are also registered, that is to say the general practitioner is informed about a referral by for instance a school doctor.

Table 8: number of referrals for logopedics by province and urbanization group and for the Netherlands per 10 000 men and per 10 000 women in 1989-1990

		province group				urbanization group			Netherlands
		A	B	C	D	1	2	3	
1989	M	15	29	33	41	34	28	28	31
1990		13	33	26	43	34	22	45	29
1989	F	11	27	20	38	21	21	35	24
1990		12	29	18	28	26	18	26	21
1989	M+F	13	28	26	40	28	24	37	28
1990		12	31	22	35	30	20	35	25

Figure 6  
Number of referrals for logopedics per province and urbanization group and for the Netherlands, per 10 000 men and per 10 000 women, 1989-1990



More men than women are referred for logopedics: respectively 31 and 24 in 1989 and 29 and 21 per 10 000 in 1990.

The fewest referrals for logopedics are made in both years in the northern provinces, and the most in the southern provinces. There is a considerable

difference: a factor of three.

So great a difference is not found between the urbanization groups. Most referrals are made for logopedic treatment in the cities, and the fewest in the towns and the urbanized rural municipalities.

The smallest number of referrals for logopedics takes place in the 3rd quarter of 1990: 5 per 10 000 inhabitants. Otherwise the differences between the quarters are slight.

### Age distribution

Table 9 gives the age distribution of the men and women who were referred for logopedics in 1989-1990.

Table 9: number of referrals for logopedics per age group per 10 000 men and 10 000 women in 1989-1990

Age group	1989	1990	1989	1990	1989	1990
	M		F		M+F	
≤ 10	170	161	102	93	138	128
10-19	27	30	16	23	22	27
20-29	17	9	25	14	20	12
30-39	10	15	13	10	12	12
40-49	( 1)	6	10	8	6	7
50-59	10	8	10	2	10	5
60-69	( 4)	-	10	13	7	7
70-79	(13)	16	16	20	15	19
≥ 79	( 8)	-	(16)	(8)	14	( 5)

The age distribution of the referrals for logopedics reflects the age-specific nature of the disturbances for which logopedics is usual.

Below the age of 10 those are the language (development) disturbances, possible preverbal disturbances, stuttering and cluttering and speech (development) disturbances. The number of boys that are referred is clearly larger than the number of girls.

At a later age it is above all the aphasic disturbances and dysarthria that play a part.

The further analysis of the supplementary data will give a more detailed insight into the background to this age distribution.

The topic has been removed from the weekly return in 1991.

## CERVICAL SMEAR

Taking of a cervical smear was placed on the weekly return for the first time in 1976. The aim was to obtain insight into the extent of this work outside the mass screening for cervical cancer. However, it must be well realized that the spotter physicians are not a random group of general practitioners, which may be of influence here. But a study in which the presence or otherwise of trends is examined is most definitely meaningful.

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 1990 that therefore means that a smear is reported as a repeat smear when the spotter physician himself already has taken a smear from the woman in question after 1 January 1988. This period is identical with the present interval between two mass screenings.

This topic has acquired a somewhat changed objective, since in March 1982 the then 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.

Enquiry among the spotter physicians revealed that mass screening for cervical cancer was in fact a reality on 1990 in 39 of the sentinel stations. In 1988 mass screening was a fact in only 22 of the 45 sentinel stations.

In Table 10 the total number of smears taken has been subdivided by indication for taking the smear, including the repeat smears.

Table 10: number of smears taken by spotter physicians by indication for taking a smear, per 10 000 women, 1981-1990

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
complaints and/or symptoms	57	57	65	57	62	65	59	76	72	55
"preventive" spotter physician's initiative	184	171	174	204	197	230	192	176	170	144
"preventive", woman's initiative	110	126	120	132	127	168	153	193	351	433
repeat smear	159	170	168	182	184	170	211	246	237	273
total	510	524	527	575	570	633	615	691	830	905

The total number of smears (905 per 10 000 women) was considerably higher in 1990 than in any year before. 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 also 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 number of smears on account of complaints and/or symptoms has since 1980 been at a level of some 60 per 10 000 women. Only 1988 and 1989 displayed a higher level: approx. 75 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 or symptoms will therefore be higher.

The subcategory repeat smears has increased further: from 246 in 1988 and 237 in 1989 per 10 000 women to 273 in 1990.



Since 1987 the subcategory repeat smear has also been subdivided into: smears on account of complaints and/or symptoms, preventive on the initiative of the general practitioner and preventive on the initiative of the woman. In 1987-1989 a practically constant number of approx. 60 repeat smears per 10 000 women were taken on account of complaints and/or symptoms. In 1990 70 repeat smears per 10 000 women were taken on account of complaints and/or symptoms. The greater part of these repeat smears were taken among women in the 30-54 age group.

The total number of first smears taken on preventive indication, i.e. on the initiative of both the general practitioner and the woman, kept on increasing in the years 1987-1990 from 345 to 577 per 10 000 women.

These subcategories make it possible to calculate the number of women who are reached by the general practitioner via this method. The number of women who are reached in this way at least once every three years may be seen in the total of Table 11. In this table only the numbers of first smears per 10 000 women are included, with a subdivision by indication for taking the smear and by province and urbanization group (see also Figures 7 and 8). The total number of first smears rose further in 1990, notably in the category "preventive, woman's initiative": in 1987 153 per 10 000 women as against 433 per 10 000 women in 1990. In 1989 and 1990 this category in particular increased considerably. If a woman comes with a request for a smear after having been notified to attend the mass screening for cervical cancer, that is tallied in this category. For, even if the woman is "called up" under the mass screening to have a smear taken, it is her decision to have this done or not done by the family doctor. On the doctor's initiative a smear is being taken less and less frequently (144 per 10 000 women in 1990 as against 230 in 1986).

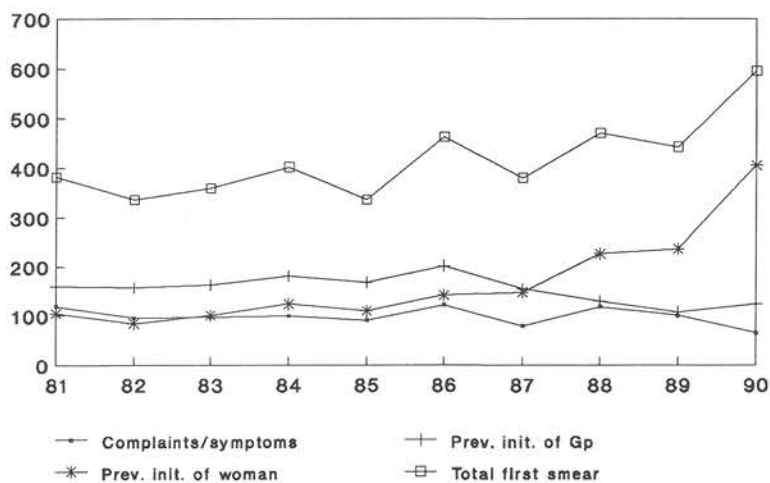
Table 11: number of "first" cervical smears taken per province group and urbanization group, by indication for taking a smear and for the Netherlands, per 10 000 women, 1981-1990

		province group				urbanization group			Nether-lands
		A	B	C	D	1	2	3	
complaints and/or symptoms	1981	119	59	41	52	73	39	95	57
	1982	95	65	44	58	78	37	98	57
	1983	97	99	49	53	90	44	105	65
	1984	99	97	37	45	78	42	84	57
	1985	90	92	45	52	85	49	78	62
	1986	121	106	42	43	93	54	75	65
	1987	79	92	46	48	79	49	69	59
	1988	117	127	56	51	118	58	96	76
	1989	100	127	54	48	102	57	90	72
	1990	65	95	43	41	66	52	56	55
"preventive" general practitioner's initiative	1981	159	189	223	112	239	147	247	184
	1982	157	146	183	174	203	148	212	171
	1983	162	202	175	156	237	138	226	174
	1984	180	206	217	190	229	161	308	204
	1985	167	232	196	195	235	151	288	197
	1986	201	210	248	229	243	186	334	230
	1987	154	175	204	202	173	162	278	192
	1988	128	112	179	255	128	161	261	179
	1989	107	118	201	189	131	143	271	170
	1990	124	149	154	136	161	106	233	144
"preventive" woman's initiative	1981	104	112	125	80	107	113	104	110
	1982	84	129	149	98	115	117	157	126
	1983	100	130	137	88	131	111	136	120
	1984	123	128	145	113	142	124	147	132
	1985	109	105	147	116	121	116	157	127
	1986	141	155	201	134	155	158	205	168
	1987	147	165	179	101	169	132	194	153
	1988	226	154	233	130	137	174	292	195
	1989	236	240	456	283	234	380	340	351
	1990	406	338	502	404	350	448	456	433
total	1981	382	360	389	244	419	299	446	351
	1982	336	340	376	330	396	302	467	354
	1983	359	431	361	297	458	293	367	359
	1984	402	431	399	348	449	327	539	393
	1985	366	429	388	363	441	316	523	386
	1986	463	471	491	406	491	398	614	463
	1987	380	432	429	351	421	343	541	404
	1988	471	393	468	436	383	393	649	450
	1989	443	485	711	520	467	580	701	593
	1990	595	632	699	581	577	606	745	632

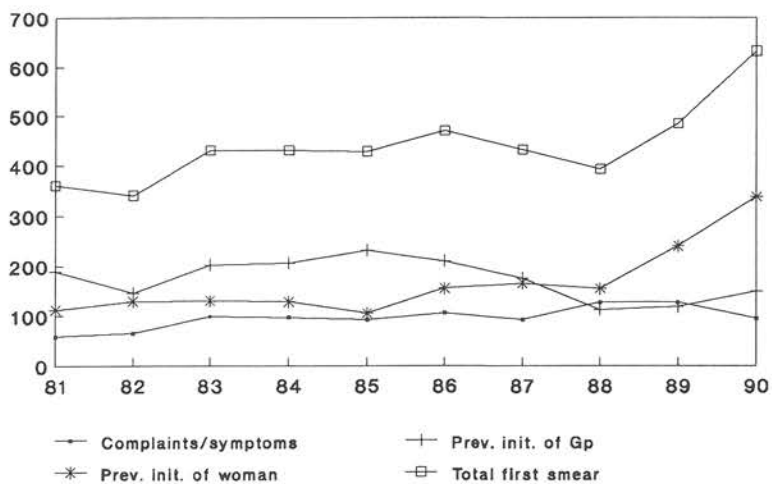
Figure 7

Number of cervical smears taken per province group by indication for taking a smear, per 10 000 women, 1981-1990

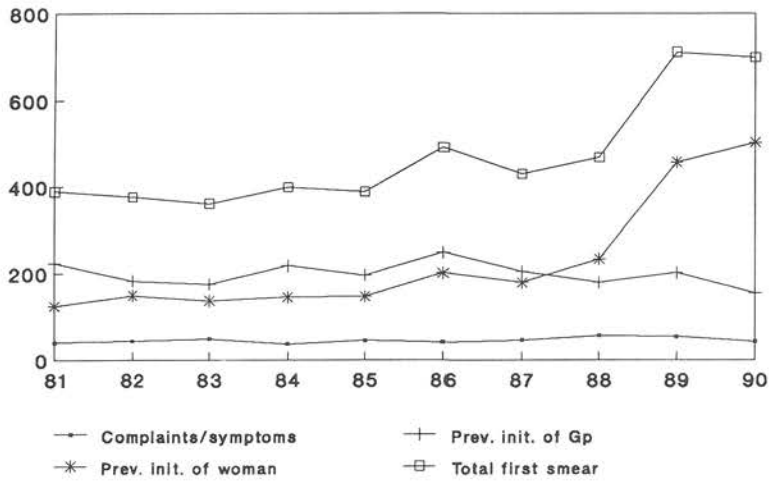
province group A



province group B



province group C



province group D

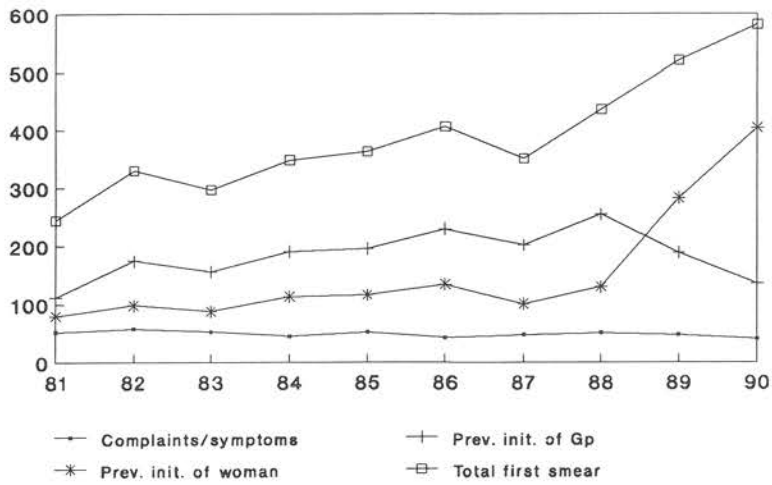
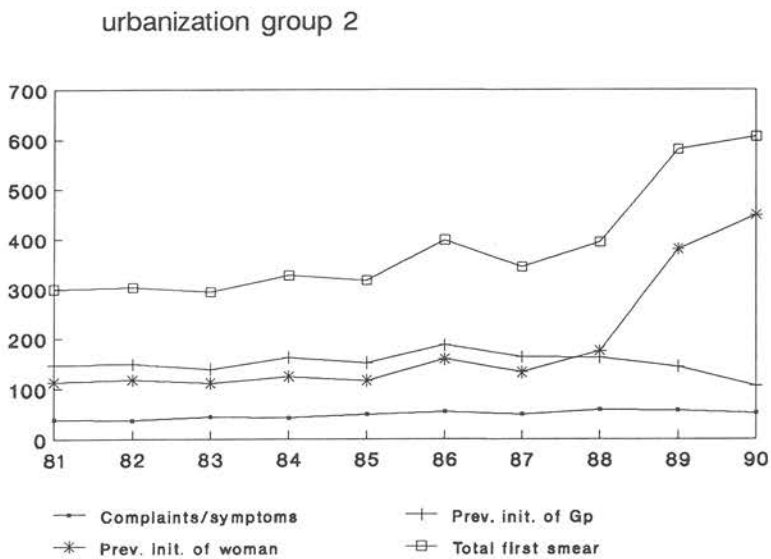
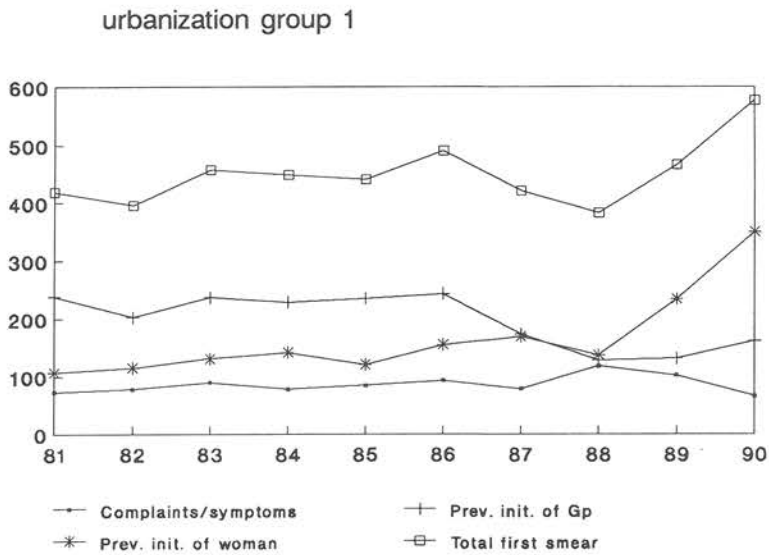
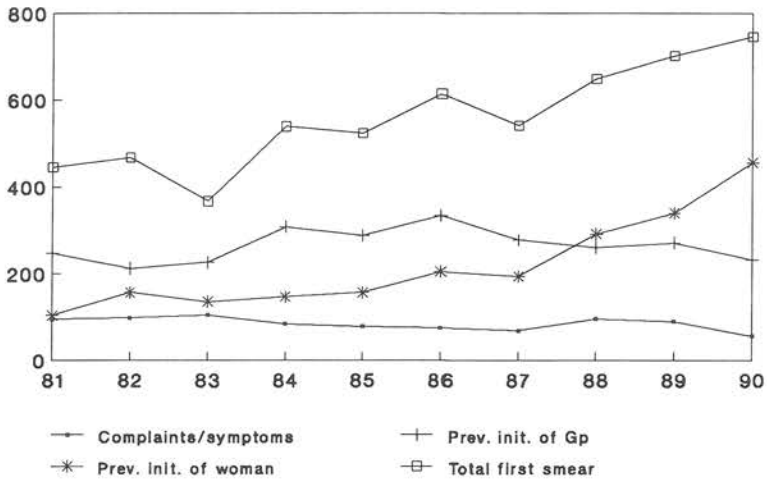


Figure 8

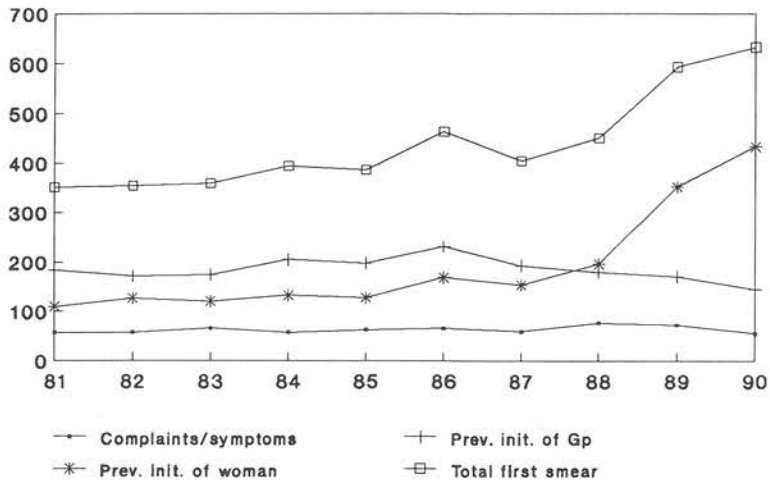
Number of cervical smears taken per urbanization group and for the Netherlands, by indication for taking a smear per 10 000 women, 1981-1990



urbanization group 3



Netherlands



### Age distribution

Table 12 gives a survey of the number of "first" smears by age group per 10 000 women (cf. Fig. 9).

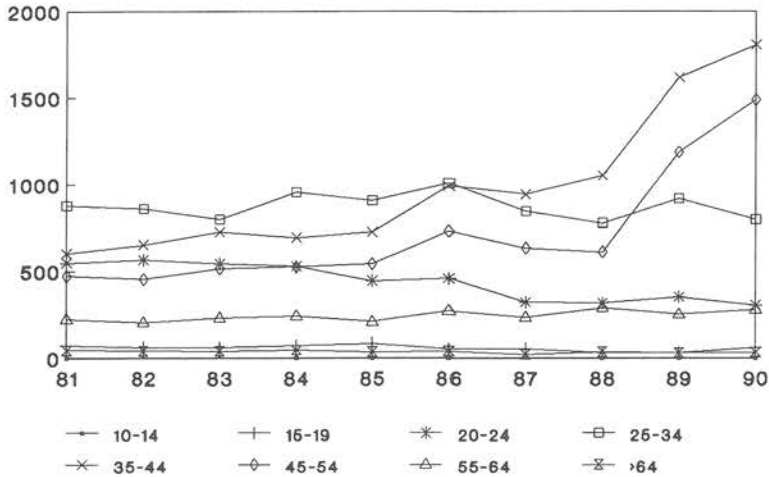
Table 12: number of "first" smears taken by spotter physicians by age group, per 10 000 women, 1981-1990

	age group							
	10-14	15-19	20-24	24-34	35-44	45-54	55-64	≥64
1981	(2)	72	548	879	602	473	225	47
1982	-	64	565	859	651	455	207	43
1983	-	63	543	797	724	515	233	42
1984	(2)	72	529	957	693	525	244	48
1985	(2)	86	446	908	724	543	212	38
1986	(2)	54	459	1008	991	729	273	42
1987	-	57	323	845	943	634	236	24
1988	(2)	33	319	777	1050	612	292	38
1989	(2)	32	353	919	1616	1187	253	32
1990	(2)	61	306	797	1805	1487	279	34

The increase in the number of "first" smears taken from 1987 onwards is, as expected, found in the 35-54 age group. In the 25-34 age group lower numbers have occurred from 1987 onward in comparison with the years 1984-1986.

Figure 9

Number of 'first' cervical smears taken by age group, per 10 000 women, 1981-1990



The numbers of first smears taken on medical indication, compared with 1989, are lower in practically all age groups. Only in the 55-64 age group were more first smears taken in 1990 on account of complaints and symptoms.

The number of preventive smears on the initiative of the spotter physician has been falling strongly among young women since 1986. This is remarkable for the age group lying outside the mass screening (see Table 13).

The smears taken at the woman's request are increasing strongly in the age groups between 35 and 54 years. The increase in the younger age groups seems to be turning in 1990. Repeat smears were taken somewhat more often in nearly all age groups in 1990 than was the case in 1989. With an increased number of first smears that is to be expected.

Table 13 gives a breakdown by age and indication for taking a smear, including the repeat smear.



Table 13: number of smears taken by spotter physicians by age group and by indication for taking the smear, per 10 000 women, 1981-1990

		age group						
		15-19	20-24	25-34	35-44	45-54	55-64	≥65
complaints and/ or symptoms	1981	16	90	127	106	72	46	17
	1982	16	92	130	97	85	31	17
	1983	19	88	117	153	96	51	18
	1984	14	44	123	110	98	36	19
	1985	20	71	128	129	93	32	14
	1986	14	67	117	131	11	63	16
	1987	13	63	94	124	110	51	11
	1988	11	72	126	170	148	51	9
	1989	13	75	123	151	125	54	12
	1990	27	57	73	114	89	64	10
preventive general practitioner's initiative	1981	47	339	460	291	253	94	13
	1982	38	318	422	292	214	79	16
	1983	29	357	410	288	230	85	14
	1984	50	400	533	287	222	97	20
	1985	53	374	506	297	238	87	7
	1986	35	310	580	405	325	100	10
	1987	26	196	483	345	265	70	5
	1988	16	146	431	327	303	99	4
	1989	(6)	146	345	399	290	75	6
	1990	19	129	293	267	296	78	13
preventive woman's initiative	1981	9	119	292	205	148	85	17
	1982	10	155	307	262	156	97	10
	1983	15	98	270	283	189	97	10
	1984	8	85	287	296	205	111	9
	1985	13	76	274	298	212	93	17
	1986	(5)	82	311	455	293	110	18
	1987	18	64	268	431	269	115	8
	1988	7	101	345	550	305	94	25
	1989	13	132	451	1067	808	125	15
	1990	15	120	422	1423	1102	138	10
repeat smear	1981	(6)	68	279	454	385	119	14
	1982	(6)	89	304	468	387	135	8
	1983	(3)	60	255	539	397	132	8
	1984	5	65	318	446	444	136	15
	1985	7	82	296	457	461	146	19
	1986	-	64	325	459	369	125	9
	1987	(8)	79	353	532	483	154	15
	1988	6	78	408	612	607	123	12
	1989	12	86	282	657	624	137	13
	1990	(5)	79	293	789	734	143	17

Table 13: number of smears taken by spotter physicians by age group and by indication for taking the smear, per 10 000 women, 1981-1990 (continuation)

		age group						
		15-19	20-24	25-34	35-44	45-54	55-64	≥65
total	1981	78	616	1158	1056	858	344	61
	1982	70	654	1163	1119	842	342	51
	1983	66	603	1052	1263	912	365	50
	1984	77	594	1275	1139	969	380	63
	1985	93	603	1204	1181	1004	358	57
	1986	54	523	1333	1450	1098	398	53
	1987	65	402	1198	1432	1127	390	39
	1988	40	397	1310	1659	1363	367	50
	1989	44	437	1201	2274	1847	391	46
	1990	60	385	1081	2593	2221	423	50

For both the total number of smears and the "first" smears the percentage is increasing for the 35-54 age group (see Table 14). A decrease may be noted among both women younger than 35 years and older than 54. From 1987 onward there is already an increase in the percentage of smears in the 35-54 age group. The further increase in 1989 and 1990 seems to be above all the result of the new form of mass screening for cervical cancer that got started in 1989. With the indication "woman's initiative" the increase is the greatest in the 35-54 age group. This initiative has probably been strongly stimulated by the letter addressed to women in this age group as part of the new mass screening.

Table 14: proportional distribution of smears taken per age group for all sentinel stations (as percentages), 1984-1990

per age group total number of smears				
year	≤ 35	35-54	≥ 54	total
1984	45.9	46.8	7.4	100
1985	42.2	48.6	9.2	100
1986	42.5	49.8	7.6	100
1987	35.8	55.0	9.2	100
1988	36.1	57.4	6.5	100
1989	27.0	66.0	7.0	100
1990	24.0	71.0	5.0	100

per age group "first smear"				
year	≤ 35	35-54	≥ 54	total
1984	52.5	40.7	6.8	100
1985	48.7	42.8	8.5	100
1986	45.4	47.1	7.5	100
1987	40.0	51.5	8.5	100
1988	39.7	53.6	6.7	100
1989	29.7	63.8	6.5	100
1990	25.0	70.0	5.0	100

The results of this topic will continue to be of importance until the introduction of the national information system for the mass screening for cervical cancer that is currently being developed on the instructions of the Ministry of Welfare, Public Health and Culture.

This topic has been maintained on the weekly return in amended form in 1991.

## 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 subjects sterilization of the woman and prescription of morning-after pill, 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.

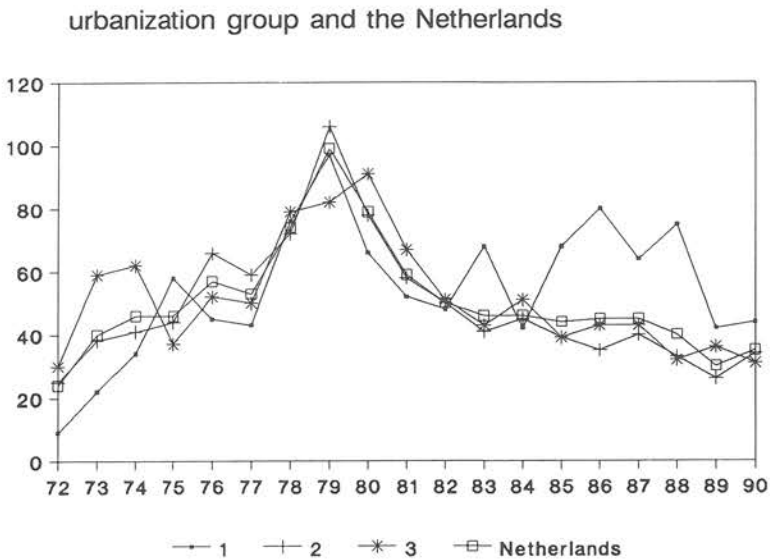
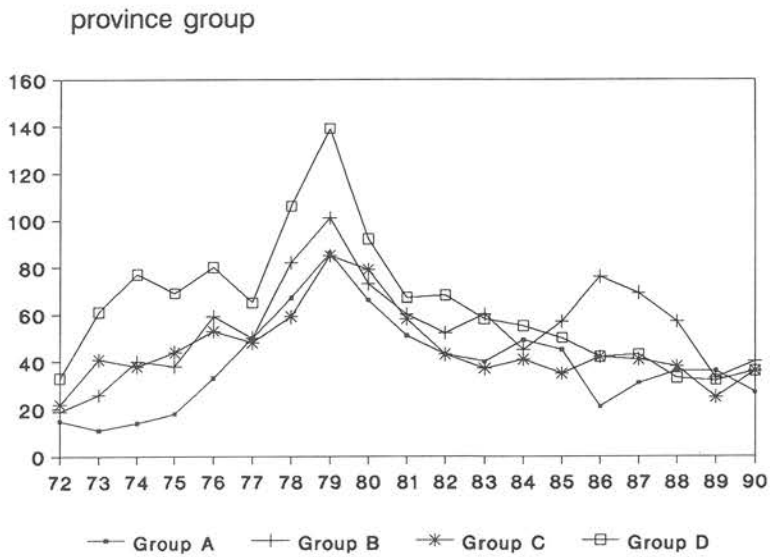
The number of sterilizations of men performed per 10 000 of all men and per province group and urbanization group is given in Table 15 (cf. Fig. 10).

Table 15: number of sterilizations of men performed, per province group and urbanization group per 10 000 men, 1981-1990

	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
1981	51	60	58	67	52	58	67	59
1982	43	52	43	68	48	50	51	50
1983	40	60	37	58	68	41	43	46
1984	49	45	41	55	42	45	51	46
1985	45	57	35	50	68	39	39	44
1986	21	76	42	42	80	35	43	45
1987	31	69	41	43	64	40	43	45
1988	36	57	38	33	75	33	32	40
1989	36	33	25	32	42	26	36	30
1990	27	40	36	36	44	34	31	35

Figure 10

Number of sterilizations of men performed, per province and urbanization group and for the Netherlands, per 10 000 man, 1972-1990



After peaks around 1979 the number of sterilizations had 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 the number is higher again: 35 per 10 000 men.

After extrapolation one arrives at 26 000 sterilizations for the whole Netherlands in 1990. However, there is little difference between the quarters.

As also stated in the previous reports, if no other factors play a part one may expect in the course of time a stabilization as the result of the end of a "historical catching-up effect" coming into sight.

If in 1990 over 28 000 sterilizations of men had been performed (the "replacement factor"), the percentage of men sterilized at some time would have remained the same as that in 1989. As in reality 26 000 operations were performed, there was a slight further fall in 1990 in the percentage of men sterilized at some time. This percentage of males in the Dutch population who, statistically speaking, belong to the fertile age category, decreased from 12.3% in 1989 to 12.2% in 1990<sup>9</sup>.

In Figure 12 (see page 53) the number of sterilizations per 10 000 men of all subgroups together per year is compared with that of women. There proves to be close agreement.

#### **Age distribution**

The age-specific distribution of the number of sterilizations performed per 10 000 men is given in Table 16 (cf. Fig. 13 see p. 54).

Table 16: number of sterilizations of men performed, by age group, per 10 000 men, 1981-1990

	age group					
	15-19	20-24	25-34	35-44	45-54	55-64
1981	-	7	175	197	24	8
1982	-	9	125	185	27	(3)
1983	-	(6)	119	159	33	(3)
1984	-	8	105	157	36	(3)
1985	-	-	110	151	25	(5)
1986	-	(2)	110	145	34	(3)
1987	-	(2)	85	160	35	(6)
1988	-	(2)	78	139	33	(3)
1989	-	-	56	121	19	-
1990	-	(2)	57	135	29	(2)

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 2.2% in 1990.

From 1986 the figures are available divided into five annual groups. Table 16.A gives the data in five-year age groups.

Table 16.A: number of sterilizations performed on men by age group, per 10 000 men, 1986-1990

	age group						
	20-24	25-29	30-34	35-39	40-44	45-49	50-54
1986	(2)	30	191	167	122	62	(6)
1987	(2)	32	139	219	111	66	(3)
1988	(2)	27	128	166	111	66	-
1989	-	20	92	149	75	37	-
1990	(2)	15	98	175	94	49	(9)

Sterilizations of men are performed above all between the ages of 30 and 45; the largest number of sterilizations is performed between 35 and 39. Except for the age group of 25-29 an end seems to have come in 1990 to the declining trend in the number of sterilizations performed on men. In the 35-44 age group there is again an increase, for the first time in years.

A cumulative calculation shows that in the Netherlands since 1971 at least 674 500 sterilizations of men have been performed, that is on 8.4% of the total 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 1991 weekly return.



## STERILIZATION OF THE WOMAN

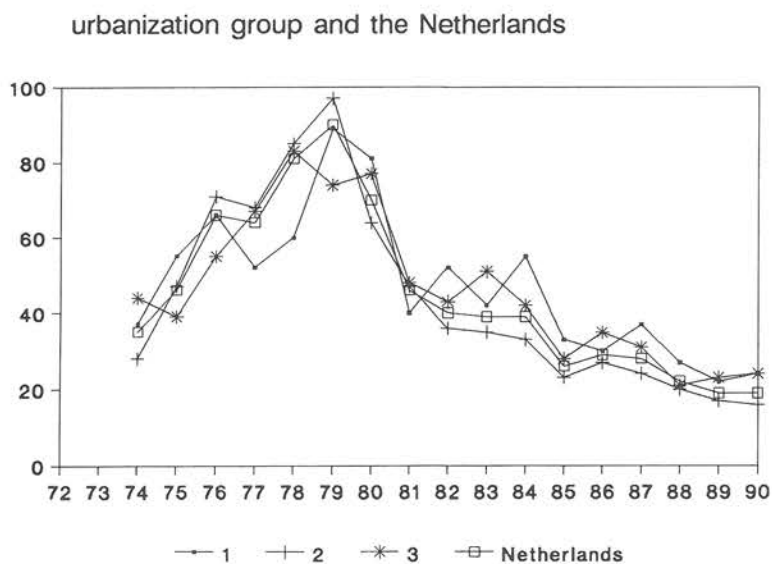
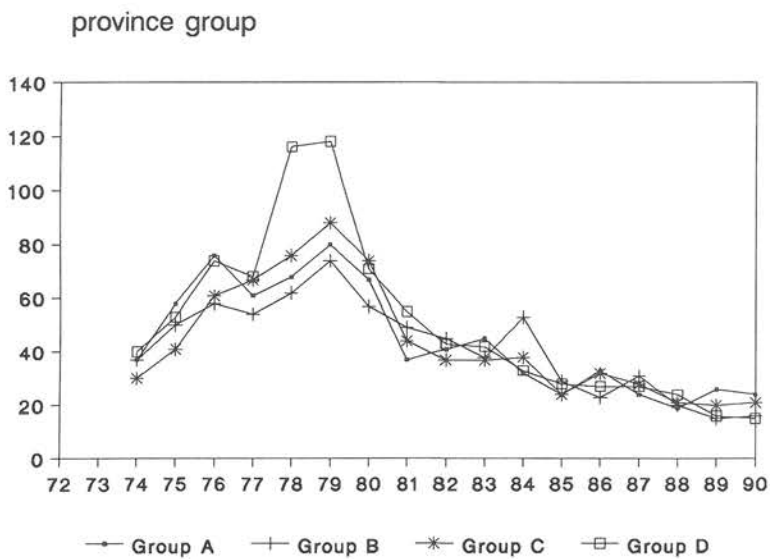
Sterilization of the woman performed was placed on the weekly return in 1974 (of the man performed in 1972). In 1990 19 sterilizations per 10 000 women were performed; in 1989 this was also 19. Extrapolation of these figures to the whole of the Netherlands yields a number of 14 000 sterilizations in 1990.

The number of sterilizations of women performed per 10 000 of all women and per province group and urbanization group is given in Table 17 (cf. Fig. 11).

Table 17: number of sterilizations of women performed, per province and urbanization group, and for the Netherlands per 10 000 women, 1981-1990

	province group				urbanization group			Netherlands
	A	B	C	D	1	2	3	
1981	37	49	44	55	40	47	48	46
1982	41	45	37	43	52	36	43	40
1983	45	38	37	42	42	35	51	39
1984	32	53	38	33	55	33	42	39
1985	24	29	24	28	33	23	28	26
1986	33	23	32	27	30	27	35	29
1987	24	31	28	27	37	24	31	28
1988	19	20	21	24	27	20	21	22
1989	26	15	20	16	22	17	23	19
1990	24	16	21	15	24	16	24	19

Figure 11  
 Number of sterilizations of women performed, per province and urbanization group and for the Netherlands, per 10 000 women, 1972-1990



Since 1988 the number of sterilizations of women has remained at the same level. In the various subgroups a number of fluctuations do occur, but the tendency is the same in each subgroup.

Fig. 12 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.

### Age distribution

The age-specific distribution of the number of sterilizations performed per 10 000 women is given in Table 18 (cf. Fig. 13).

Figure 12

Number of sterilizations performed per 10 000 men and 10 000 women, for the Netherlands, 1972-1990

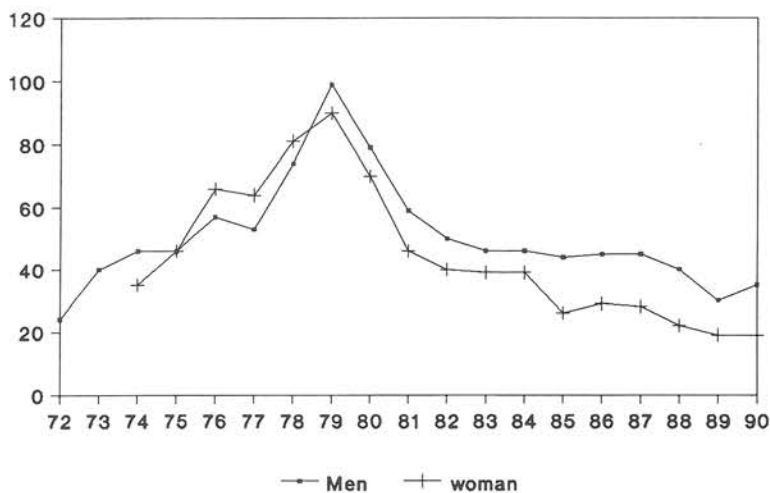


Figure 13

Number of sterilization performed by age group, per 10 000 men and women, 1972-1990

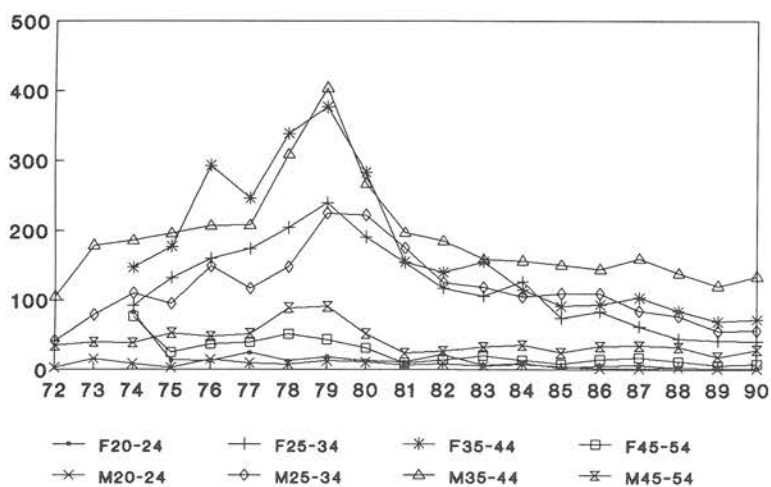


Table 18: number of sterilizations of women performed, by age group per 10 000 women, 1981-1990

	age group					
	10-14	15-19	20-24	25-34	35-44	45-54
1981	(2)	-	11	154	155	10
1982	-	-	22	117	140	14
1983	-	-	7	106	156	21
1984	-	-	10	127	115	14
1985	-	-	(3)	75	92	9
1986	-	(2)	6	84	94	15
1987	-	-	7	63	104	18
1988	-	-	(3)	45	85	12
1989	-	(2)	(2)	43	70	(7)
1990	-	-	(2)	42	73	9

From 1986 the figures are available divided into five annual groups. Table 18.A gives the data in five-year age groups.

Table 18.A: number of sterilizations performed on women by age group, per 10 000 women. 1986-1990

	age group						
	20-24	25-29	30-34	35-39	40-44	45-49	50-54
1986	(6)	25	143	118	70	29	-
1987	(7)	28	97	118	90	33	(3)
1988	(3)	7	81	115	54	21	(3)
1989	(2)	26	59	89	52	13	-
1990	(2)	19	64	92	54	18	-

Sterilization of women is performed above all between the age of 30 and 45; the highest number of sterilizations is performed between 35 and 39.

An end seems to have come to the declining trend of recent years. The declining trend was present in all age groups.

A cumulative calculation shows that in the Netherlands since 1973 sterilization has been performed on at least 538 500 women, i.e. 7.1% 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 has since risen via 18.5 in 1980, 22.4 in 1984 to 23.0 in 1986. In 1987 it fell slightly for the first time. This fall continued in 1988, 1989 and 1990. In 1990 this percentage was 22.1. The number of sterilizations (of men **and** women) that ought to have been performed in 1990 on the basis of this calculation to keep the total percentage equal to that of 1989 was 54 500. In reality this number was only 40 000 (26 000 men and 14 000 women). 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 9.9 in 1990. Since in 1989 for the first time the number of sterilizations of men remained below the replacement value, one can now clearly speak of a decreasing popularity of sterilizations as a method of birth control. Accord-

ding 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 conception 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.

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 1.8% in 1990. Since 1985 there has now also been a considerable decline among the 30-34 age group of women (from 13.8% in 1985 to 6.7% in 1990). In the 35-44 age group the decline is much less (from 21.2% in 1985 to 19.3% in 1990).

The topic sterilizations has been maintained on the weekly return for 1991.

## PRESCRIPTION OF MORNING-AFTER PILL

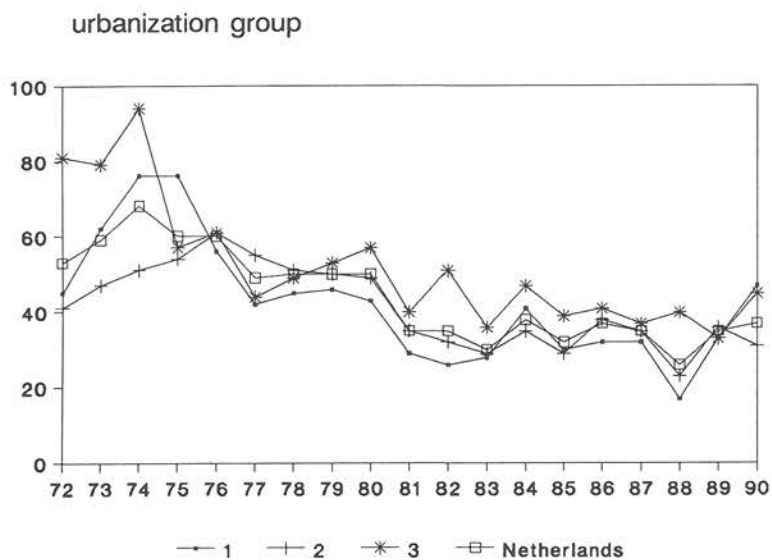
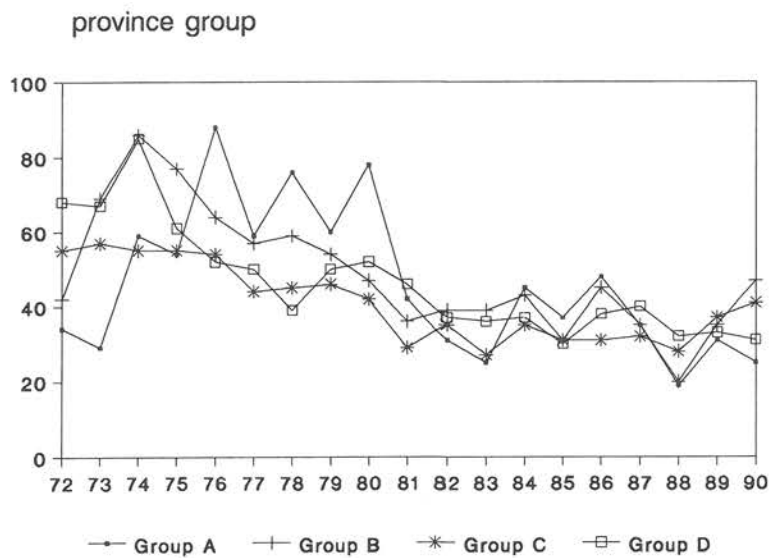
In 1972 the spotter physicians were asked for the first time to report when they prescribed the morning-after pill.

Table 19 gives the frequency with regard to the prescription of the morning-after pill, per province and urbanization group and for the Netherlands (cf. Fig. 14).

Table 19: number of prescriptions of the morning-after pill, per province and urbanization group per 10 000 women, 1981-1990

	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
1981	42	36	29	46	29	35	40	35
1982	31	39	35	37	26	32	51	35
1983	25	39	27	36	28	29	36	30
1984	45	43	35	37	41	35	47	38
1985	37	31	31	30	30	29	39	32
1986	48	45	31	38	32	38	41	37
1987	35	35	32	40	32	35	37	35
1988	19	20	28	32	17	23	40	26
1989	31	35	37	33	33	36	33	35
1990	25	47	41	31	47	31	45	37

Figure 14  
 Number of prescriptions of the morning-after pill, per province and urbanization group, per 10 000 women, 1972-1990





Since 1981 the number of prescriptions issued for the morning-after pill has fluctuated around 35 per 10 000 women. 1988 formed an exception to this. At practice level a check has been made for the 1988 anomaly. For each practice the report, for 1987, 1988 and 1989 have been compared with each other. There proves to be no question of distortion by a few practices, neither for the decline from 1987 to 1988 nor for the rise from 1988 to 1989.

In 1988 25 spotter physicians wrote fewer prescriptions for the morning-after pill, 10 wrote more and in 9 practices the figures for 1987 and 1988 were the same.

In 1989 the number of prescriptions rose compared with 1988 in 30 sentinel stations. In 12 sentinel stations fewer prescriptions were written; in 2 sentinel stations the same number of prescriptions was issued in 1988 and 1989.

The temporary decrease in the number of prescriptions of the morning-after pill in 1988 occurred in practically all age, province and urbanization groups.

On the basis of our data it cannot be determined what made 1988 such a special year as regards the prescriptions of the morning-after pill.

In 1990 the number of prescriptions is again in the neighbourhood of 35 per 10 000 women.

### **Age distribution**

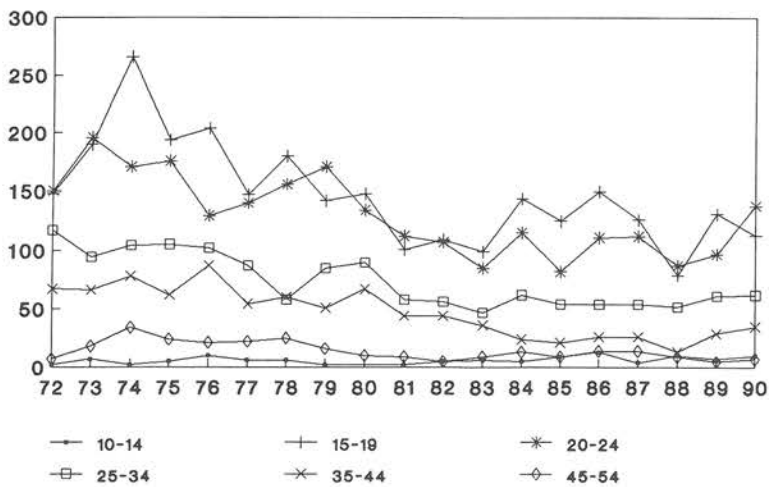
Table 20 gives the age distribution of prescription of the morning-after pill (cf. Fig. 15).

Table 20: number of prescriptions of the morning-after pill, by age group, per 10 000 women, 1981-1990

	age group					
	10-14	15-19	20-24	25-34	35-44	45-54
1981	( 2)	101	112	58	44	9
1982	( 5)	109	107	56	44	(5)
1983	( 6)	99	85	47	36	9
1984	( 5)	144	115	62	24	13
1985	9	125	82	54	21	9
1986	13	150	111	54	26	14
1987	( 4)	126	112	54	26	14
1988	10	79	87	52	13	9
1989	( 7)	131	97	61	29	(5)
1990	(10)	113	138	62	35	(7)

Figure 15

Number of prescription of the morning-after pill by age group, per 10 000 women, 1972-1990



Because a 5-year age group is too broad a classification for the younger age, it is requested that reports on those under the age of 20 state the exact age, and with effect from 1980 also for patients older than 50 years. Reports above 50 years did not occur in 1990.

The absolute numbers under 20 years are given in Table 21.

Table 21: absolute numbers of prescription of the morning-after pill for women under 20 years, 1981-1990

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11 years	-	-	1	-	-	-	-	-	-	-
12 years	-	-	-	-	-	-	-	-	-	-
13 years	1	1	1	1	1	-	-	-	1	-
14 years	-	1	2	2	4	5	2	1	-	4
15 years	13	12	5	7	3	7	6	1	2	5
16 years	9	14	16	21	18	16	15	9	12	6
17 years	14	17	23	21	32	30	11	10	7	13
18 years	17	16	15	28	15	15	11	3	4	10
19 years	16	16	7	12	6	8	16	22	49	10
total	70	78	70	92	79	81	61	46	75	48

The data in Table 21 seem to suggest that the age at which prescriptions are issued for the morning-after pill is moving upward somewhat. In 1988 and 1989 in the 10-20 age group it was above all the 19-year-old women who were given a prescription. This tendency seems to be changing in 1990. Just as in the years up to 1986, the emphasis is again on the somewhat younger ages (17-18-year-olds).

However, Table 19 shows that in 1990, for the first time for years, the morning-after pill is being prescribed more often in the 20-24 age group than in the 15-19 group. The extrapolation of the frequencies found for the morning-after pill to the Dutch population appear on p. 124.

From 1983 onwards, at the request of Dr M.R. van Santen, now a gynaecologist in Karlsruhe, Germany, formerly of Utrecht, it was also requested that the kind of pill prescribed be noted. This was to investigate whether the "new" morning-after pill (now 2x2 tablets with 0.250 mg levonorgestrel and 0.050 mg ethinylestradiol, on one day) has displaced the "old" one (5 mg ethinylestradiol for 5 days). This proves to be the case. In 1980 5 mg EE

was still being used in practically 100% of the cases; in 1986 that percentage was only 15 according to this registration.

In the course of 1986 publications appeared in which doubt was cast on the effectiveness of the "new morning-after pill"<sup>10</sup>. Others too published on the greater risk of failure of the "alternative 2x2" methods<sup>11</sup>. It was concluded in those publications that the risk of failure is acceptably small; failure with these "alternative 2x2" methods proves attributable above all to their **difficulty in use**. It has also been suggested that a five-day treatment protects more than one coitus.

In 1987 the physicians again administered 5 mg ethinylestradiol to the women for five days in 30% of the prescriptions. Within a year's time a major change has thus occurred here. In 1988 the percentage of prescriptions for 5 mg ethinylestradiol was 29, and in 1989 23.

In 1990 the percentage does not fall further; on the contrary, in 28% of the cases 5x5 mg EE is prescribed.

It would now seem that the general practitioner is making more effort accurately to give the correct indication (one coitus) and to prescribe only the correct pills. Confidence in the morning-after pill thus seems to have been restored in this way.

However, some caution in interpretation continues to be called for. Further, there are indications that self-medication is increasingly occurring with the "new morning-after pill" because these morning-after pill tablets are easily obtainable. Incorrect use, such as several times per cycle, after more than one unprotected coitus or use of the wrong tablet, is conceivable. This registration establishes how often the general practitioner is asked to prescribe the morning-after pill.

The question has been maintained on the 1991 weekly return, with reporting of the product prescribed.

## DIABETES MELLITUS

Diabetes mellitus is one of the most frequently occurring chronic diseases, which on account of the necessary checks on therapy and complications lays a considerable claim to health care. Because the disease occurs notably at an advanced age and the greying of the population is increasing, the general practitioner will in the future be confronted more and more frequently with the care for patients with diabetes mellitus.

The importance of diabetes mellitus in general practice has been endorsed by the Netherlands Society of General Practitioners, which in 1968 compiled the standard for the diagnosis and treatment of diabetes mellitus type II. In these guidelines it is advised to check the patient once every three months to a limited extent and once a year in detail.

As a result of the "Future Scenario Research into Chronic Diseases", of which diabetes mellitus forms part and which is being performed by the Centre for Epidemiology of Utrecht State University (Prof. Dr ir. D. Kromhout, Dr H. Verkleij and drs D. Ruwaard), the subject has been placed on the 1990 weekly return<sup>12</sup>.

The goal of the investigation is to obtain more insight into the claim that patients with diabetes mellitus make on health care. Information is sought on the incidence, prevalence and the occurrence of acute deregulation. In a supplementary questionnaire the spotter physicians report the way in which the diagnosis has been made, which doctor is treating the patient, and how, and the occurrence of complications and the risk factors for their development.

In the period 1980-1983 the topic diabetes mellitus likewise appeared on the weekly return. By comparison with the results from the period 1980-1983 it can be discovered whether and to what extent there is a rise in the number of patients and the share of the general practitioner in the treatment of patients with diabetes mellitus.

The diagnosis diabetes mellitus is certain, according to the WHO criteria from 1985, in the event of evident complaints (polyuria, thirst, hunger, loss of weight, dizziness etc.) and one deviant blood sugar value or two abnor-

mal values without complaints (measured on different days).

Deviant blood sugar values are a fasting capillary blood sugar  $\geq 6.7$  mmol/litre and/or a capillary blood sugar  $\geq 11.1$  mmol/litre two hours after burdening with a carbohydrate-rich breakfast: two cups of heavily sugared tea and two slices of bread thickly spread with jam.

Extensive reporting on this registration takes place elsewhere. Here in the first instance the incidence registered in 1990 and the occurrence of acute deregulation are reported on. Reporting on the prevalence will take place in the following report when all the supplementary questionnaires have been processed. A check on double reports and incorrect reports, notably confusion of incident and prevalent cases, has still to be made.

In Table 22 the incidence of diabetes mellitus and the occurrence of acute deregulation thereby are shown by province and urbanization group and for the Netherlands per 10 000 men, per 10 000 women and per 10 000 persons.

Table 22: incidence of diabetes mellitus and the occurrence of acute deregulation by province and urbanization group and for the Netherlands, per 10 000 men and per 10 000 women, 1990

		provincegroup				urbanizationgroup			Nether-lands
		A	B	C	D	1	2	3	
incidence	1990 M	26	16	20	24	13	19	33	21
	F	14	18	24	25	14	20	33	22
	M+F	20	17	22	24	13	19	33	21
acute dere-									
gulation	1990 M+F	6	4	4	5	2	5	5	4

As regards the incidence, no difference is established between men and women. There are no great differences between the province groups. Differences are, however, established between the urbanization groups; there is a clear gradient from rural regions to cities. The incidence in the cities is more than twice that in rural regions.

### Age distribution

Table 23 gives the age-specific distribution of the incidence of diabetes mellitus and the occurrence of acute deregulation.

Table 23: Incidence of diabetes mellitus and the occurrence of acute deregulation by age group per 10 000 men and per 10 000 women, 1990

age group	incidence		acute deregulation
	M	F	M+F
≤ 10	( 1)	( 1)	0
10-19	( 4)	( 2)	0
20-29	5	( 2)	2
30-39	6	( 2)	2
40-49	13	23	2
50-59	41	37	8
60-69	55	55	6
70-79	120	88	23
≥ 79	97	85	27

As expected, the incidence of diabetes mellitus increases with age. The highest incidence is in the 70-79 age group. Above the age of 79 the relative number of people with diabetes mellitus falls again somewhat.

The number of cases of acute deregulation of diabetes mellitus is low at a young age; at greater ages the number is considerably higher.

### Comparison with 1980-1983

As a criterion, in 1980 a blood sugar value 2 hours after a carbohydrate-rich meal of 10 mmol/litre was still being used. This related to the new patients. From 1981 onwards the limit was raised to 11.0 mmol/litre.

In Table 24 the 1980-1983 figures are compared with those of 1990. The incidence rates of 1980-1983 are averages.

Table 24: incidence of diabetes mellitus by province and urbanization group and for the Netherlands per 10 000 inhabitants, 1980-1983 and 1990

	province group				urbanization group			Netherlands
	A	B	C	D	1	2	3	
incidence 1980-'83	11	12	12	13	9	11	14	12
1990	20	17	22	24	13	19	22	21

The comparison of the occurrence per age group of new patients with diabetes mellitus between 1980-1983 and 1990 is made in Table 25.

Table 25: incidence of diabetes mellitus by age group per 10 000 inhabitants, 1980-1983 and 1990

age group	incidence	
	1980-'83	1990
≤ 5	(0)	0
5- 9	(2)	(3)
10-14	(2)	(3)
15-19	(1)	(3)
20-24	(2)	4
25-34	3	3
35-44	7	9
45-44	20	30
45-54	26	46
55-64	52	87
total	12	21

Compared with the period 1980-1983 the incidence in 1990 has nearly doubled.

This topic is maintained in 1991.



## (ATTEMPTED) SUICIDE

In consultation with 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 (hospital), 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 so the definition.

The Chief Office also 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 90, 90, 96, 83, 89 and 67 in 1985-1990.

The number of attempts per province and urbanization group 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. This was the case in 1988 and 1989 too, namely 12 and 10 per 10 000 inhabitants respectively.

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 and urbanization group, per 10 000 inhabitants, 1981-1990

	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
1981	6	4	7	7	3	7	7	6
1982	10	5	9	6	2	6	15	8
1983	16	5	11	8	4	8	16	10
1984	4	4	9	9	4	5	15	7
1985	6	3	8	5	2	6	11	6
1986	8	5	7	6	5	4	15	7
1987	6	6	8	7	5	5	14	7
1988	9	4	7	5	3	5	12	6
1989	6	9	6	8	7	6	10	7
1990	5	6	4	7	4	5	7	5

#### Age distribution

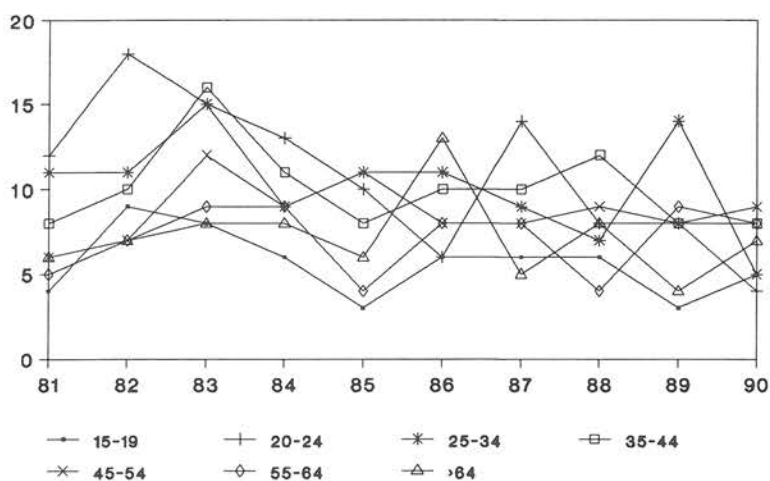
Table 27 gives the frequency of (attempted) suicide per 10 000 inhabitants by age group (see also Fig. 16).

Table 27: number of reports of (attempted) suicide by age group, per 10 000 inhabitants, 1981-1990

	age group							
	10-14	15-19	20-24	25-34	35-44	45-54	55-64	≥64
1981	(2)	4	12	11	8	6	5	6
1982	-	9	18	11	10	7	7	7
1983	-	8	15	15	16	12	9	8
1984	-	6	13	9	11	9	9	8
1985	(1)	3	10	11	8	11	4	6
1986	(4)	6	6	11	10	8	8	13
1987	-	6	14	9	10	8	8	5
1988	-	6	8	7	12	9	4	8
1989	-	(3)	8	14	8	8	9	4
1990	(1)	5	(4)	5	8	9	8	7

Figure 16

Number of reports of (attempted) suicide by age group, per 10 000 inhabitants, 1981-1990



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. The 25-34 age group and the over-65s have displayed fluctuations of this kind in recent years.

This topic has been maintained on the weekly return for 1991.

## ACUTE UNUSUAL HEADACHE

There are indications that a subarachnoidal haemorrhage is preceded by a "warning leak"<sup>13</sup>. This warning bleeding could be a minor haemorrhage in the aneurysmal wall without this leading to a rupture or a haemorrhage as the result of a small, non-continuing rupture. This warning leak is said to express itself in the form of an acute, unusual and violent headache such as the patient has never experienced before.

It is expected that the prognosis of a subarachnoidal haemorrhage is more favourable if the "warning leak" is identified and treated. The patient is still in good condition and the "haemorrhage" as yet of limited size. Neurosurgical intervention in that situation is simpler than when a haemorrhage of greater size has occurred.

The investigation in which the above indications of the occurrence of a "warning leak" were found was a case-control study among hospital patients: patients who had been admitted with a subarachnoidal haemorrhage and, as controls, patients admitted on account of a cerebral infarction and 100 patients who had been admitted for non-neurological reasons.

Among the second control group an acute unusual very violent headache did not occur in the anamnesis. In the control group of neurological patients the occurrence was significantly less.

Besides the question about the incidence of acute unusual violent headache in general practice there is the question whether this acute unusual headache is also followed by a subarachnoidal haemorrhage within a year. Headache is not an unusual complaint that is presented to the general practitioner; can the general practitioner in fact recognize in the midst of this noise the acute violent unusual headache as a signal? Is that possible?

Dr E. Wijdicks, a neurologist with the Neurology Department of the Utrecht Teaching Hospital, is in charge of registration of this topic. Every patient who consults the general practitioner with an acute unusual headache should be reported.

Criteria for the registration are:

- headache that comes about from one second to another or becomes of maximum intensity within one minute, **and**

- is very violent and unusual **and**
- lasts at least an hour.

The localization of the headache is not important; other symptoms may occur (brief loss of consciousness, nausea and/or vomiting, a drooping eyelid and possible double vision).

In a supplementary questionnaire further data of the patient are recorded. If the patient is referred, the researchers (Dr E. Wijdicks and Mrs F. Linn) contact the neurologist to whom the patient has been referred.

Reporting on this part of the investigation is done elsewhere.

Table 28 gives the numbers of patients with an acute unusual and violent headache per province and urbanization group and for the Netherlands per 10 000 inhabitants.

Table 28: numbers of patients with acute unusual and violent headache per province and urbanization group and for the Netherlands per 10 000 men and per 10 000 women, 1988-1990

		province group				urbanization group			Netherlands
		A	B	C	D	1	2	3	
1988	M	4	3	1	1	4	2	1	2
1989		1	2	1	3	1	2	3	2
1990		0	3	1	1	2	1	1	1
1988	F	1	3	3	2	3	2	3	2
1989		1	1	1	3	1	1	1	1
1990		0	3	2	2	5	1	1	1
1988	M+F	2	3	2	2	3	2	2	2
1989		1	1	1	3	1	2	1	1
1990		0	3	1	1	3	1	1	1

With this limited incidence it is not responsible to pronounce on the differences between the subgroups. In table 28 all frequencies refer to less than 5 reports and brackets should be placed.

### Age distribution

Table 29 lists the numbers of patients with acute unusual violent headache by age and sex.

Table 29: number of patients with acute unusual violent headache per age group per 10 000 men and per 10 000 women 1988-1990

Age group	1988		1989		1990	
	M	F	M	F	M	F
≤ 10	-	-	-	-	-	-
10-19	(2)	(1)	(2)	-	-	-
20-29	(1)	(2)	(1)	(1)	(1)	-
30-39	(5)	(4)	(2)	(1)	-	(1)
40-49	(3)	(2)	(2)	(1)	(3)	(3)
50-59	-	(4)	(1)	-	(3)	(5)
60-69	-	(7)	(4)	(5)	(4)	(2)
70-79	(1)	-	(2)	(2)	(3)	-
≥ 79	-	-	-	(4)	-	(3)

According to the registration up to now acute unusual and violent headache does not occur below the age of 10.

No specific age distribution seems to exist for this problem.

The topic is maintained on the weekly return for 1991. From the beginning of 1990 the number of general practitioners involved in this registration has been considerably expanded. This expanded registration is report on elsewhere. The latter has been rendered possible partly by a subsidy from the Netherlands Heart Foundation.

## PREGNANCY DESPITE CONTRACEPTION CONSIDERED ADEQUATE

In the Netherlands there is a large degree of acceptance and use of methods of contraception considered adequate. A low number of women who have abortus provocatus performed in comparison with other countries is the result.

The 1988 Family Planning Survey of the Central Bureau of Statistics shows that in that year 43% of the women in the 18-37 age group used the pill or contraceptive injection, 5% an IUD, in 10% of the relations either the man or the woman was sterilized, in 7% a condom was used and in 5% another method of contraception, such as the pessary, the rhythm method or coitus interruptus.

In the age group in question 5% of the women were pregnant, 3% proved infertile and finally 22% used no contraception<sup>14</sup>. The latter was in most cases because one wanted to have a child or because one had no sexual relation.

In opting for a method of contraception one of the criteria is the degree of reliability. The reliability of the method used is one aspect of this and the correct use of the method another. When contraception fails it is often not clear beforehand where the cause lies. Research into the causes of the failure of contraception and into pregnancy as a result of this takes place regularly<sup>15</sup>.

However, this research was often performed among women who had approached one of the abortion clinics participating in the Permanent Abortion Registration by Stimezo Nederland for the termination of an undesired pregnancy.

This group of women is not representative of those women who become pregnant as a result of the failure of contraception. For a number of women will decide to accept the pregnancy and have the child.

Consultation with Dr E. Ketting, at the time researcher for Stimezo Nederland and now working with the Netherlands Institute for Socio-Sexological Research, and Dr M.R. Santen, now a gynaecologist in Karlsruhe Germany, and formerly of Utrecht, led to the decision to place the topic failing contraception on the weekly return.



The spotter physicians were asked to register when a woman was found to be pregnant despite adequate measures to avoid pregnancy. Adequate measures do not include use of a pessary or the application of the rhythm method or coitus interruptus.

By means of a supplementary questionnaire the spotter physician registers the length of pregnancy, the woman's situation, the method of contraception used, the possible cause of failure and, as far as known, the course of the pregnancy (spontaneous abortion, abortus provocatus, intention to allow the pregnancy to go to term).

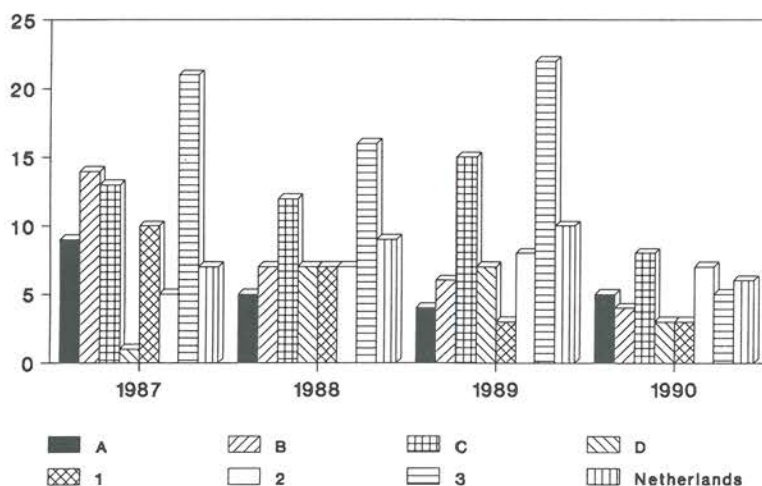
In Table 30 the numbers of women with a pregnancy despite adequate contraception are given per province and urbanization group per 10 000 women and for the Netherlands. The figures relate to the fertile age (cf. Fig. 17).

Table 30: number of women with a pregnancy despite contraception considered adequate per province and urbanization group per 10 000 women of 10-49 years and for the Netherlands in 1987-1990

	province group				urbanization group			Netherlands
	A	B	C	D	1	2	3	
1987	9	14	13	1	10	5	21	7
1988	5	7	12	7	7	7	16	9
1989	4	6	15	7	3	8	22	10
1990	5	4	8	3	3	7	5	6

Figure 17

Number of women with a pregnancy despite contraception considered adequate per province group and urbanization group and for the Netherlands, per 10 000 women, 1987-1990



Caution should be observed in the use of these data. In the absolute sense the event occurs infrequently and not regularly.

The figures for 1987-1989 create the impression that the failure of contraception considered adequate occurs more in the west of the country and in the cities. In 1990 this pattern is not conformed for the cities.

### Age distribution

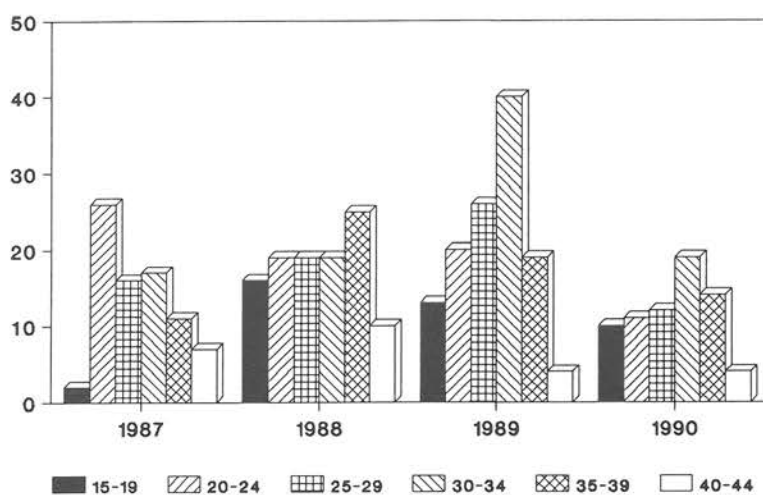
Table 31 gives the occurrence of pregnancy despite adequate contraception per age group per 10 000 women in 1987-1990 (cf. Fig. 18).

Table 31: number of pregnancies despite contraception considered adequate per age group per 10 000 women in 1987-1990

	age group					
	15-19	20-24	25-29	30-34	35-39	40-44
1987	(2)	26	16	17	11	7
1988	16	19	19	19	25	10
1989	13	20	26	40	19	(4)
1990	10	11	12	19	14	(4)

Figure 18

Number of women with a pregnancy despite contraception considered adequate per age group, per 10 000 women, 1987-1990



In this registration in 1987-1990 no pregnancies despite contraception considered adequate occurred below the age of 15 years and above the age of 44 years.

## 1990

Of the in total 40 pregnancies reported, 17 went to term, one spontaneous abortion occurred and in the case of one woman an operation was necessary on account of an extra-uterine gravidity (after sterilization). The remaining pregnancies were or were to be terminated. In one situation it had not yet been decided at the time of registration about the course of the pregnancy. Of the unmarried women, 12 out of the 20 had the pregnancy terminated; 8 pregnancies went to term.

Of the 20 pregnancies that despite contraception occurred in a marital relationship, 9 were terminated. Likewise 9 pregnancies of married women went to term; one spontaneous abortion and one extra-uterine gravidity occurred.

These data are the first ever collected in the Netherlands to give an impression of whether abortion is opted for or not in an unplanned pregnancy after use of contraception considered adequate.

The results over the period 1987-1990 show that some 55% of the women opt for abortion and 35% for letting the pregnancy go to term. Of the unmarried women, nearly two thirds opt for termination of the pregnancy, as do nearly 40% of the married women.

In 1991 this topic is maintained on the weekly return.

## 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. Data resulting from the two projects strongly suggest well-organized for breast cancer for woman older than 50 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 acceptability 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 in the period 1990-1993.

The number of mammograms made annually in the Dutch hospitals is not properly known. On estimate the number for 1987 was between 176 000 and 259 000. Even less is known about the indications on the basis of which examinations have been requested.

The Ministry of Welfare, Public Health and Culture 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 will for the time being not be enabled to participate in the screening, in anticipation of the results of further research.

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 may be of the opinion that they should qualify for mammography.

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 1989. If at any time after 1 January 1989 a mammogram has been made for a woman and such an examination is performed **again**, this should be registered under the subgroup "repeat examination". Both subgroups have a further subdivision by area of indication: complaints and symptoms on the one hand and purely preventive considerations on the other.

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.

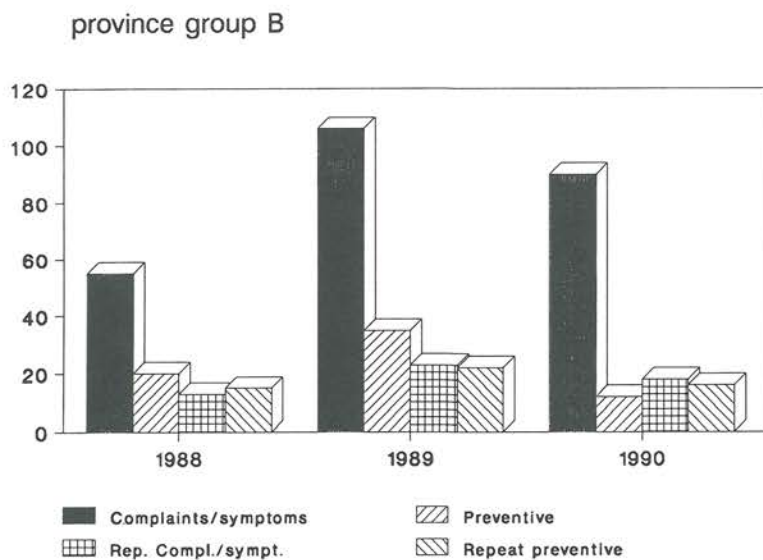
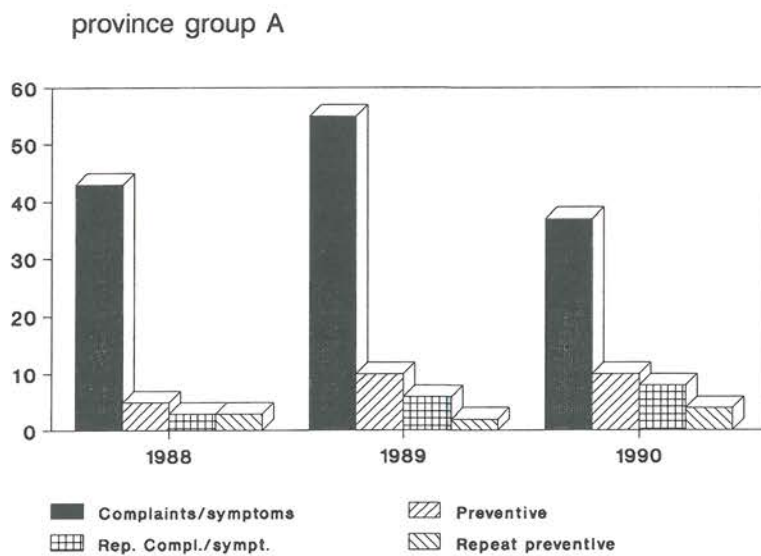
The data of this registration are made available to the group that is performing the investigation into the costs and effects of mass screening for breast cancer for the Ministry of Welfare, Public Health and Culture (Project leader Prof. Dr P.J. van der Maas, Social Health Care Institute, Erasmus University, Rotterdam<sup>16</sup>).

Table 32 gives the numbers of mammograms per province and urbanization group and for the Netherlands (cf. Figs 19 and 20).

Table 32: number of mammograms per province and urbanization group and the Netherlands per 10 000 women in 1988 - 1990

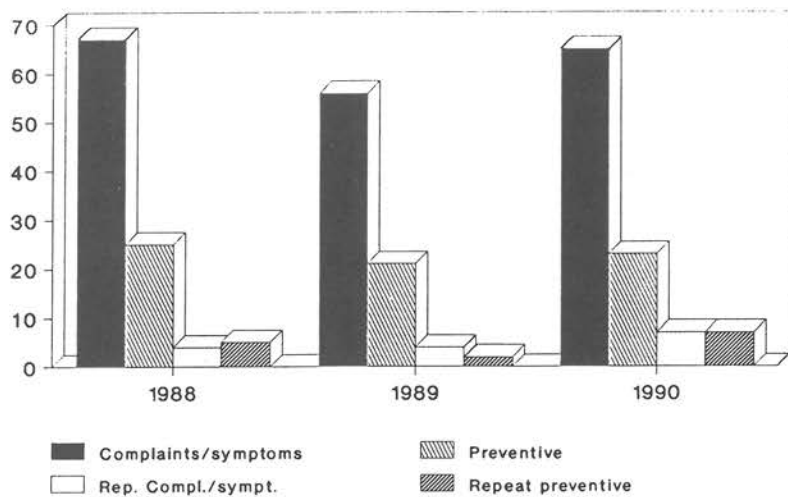
		province group				urbanization group			Netherlands
		A	B	C	D	1	2	3	
first mam-									
mography									
complaints/	1988	43	55	67	69	60	62	62	62
symptoms	1989	55	106	56	70	112	56	69	67
	1990	37	90	65	109	88	68	85	75
"preventive"	1988	5	20	25	12	20	17	19	18
	1989	10	35	21	14	42	15	18	20
	1990	10	12	23	16	14	19	16	17
repeat mam-									
mography									
complaints/	1988	3	13	4	9	12	6	4	6
symptoms	1989	6	23	4	7	20	6	7	8
	1990	8	18	7	10	24	7	7	9
"preventive"	1988	3	15	5	8	14	5	4	6
	1989	2	22	2	8	21	4	4	7
	1990	4	16	7	6	19	6	3	8
total	1988	54	103	101	98	106	90	89	92
	1989	73	186	83	99	195	80	98	102
	1990	59	136	102	141	145	100	111	109

Figure 19  
 Number of mammograms per province group, per 10 000 women, 1988-1990





province group C



province group D

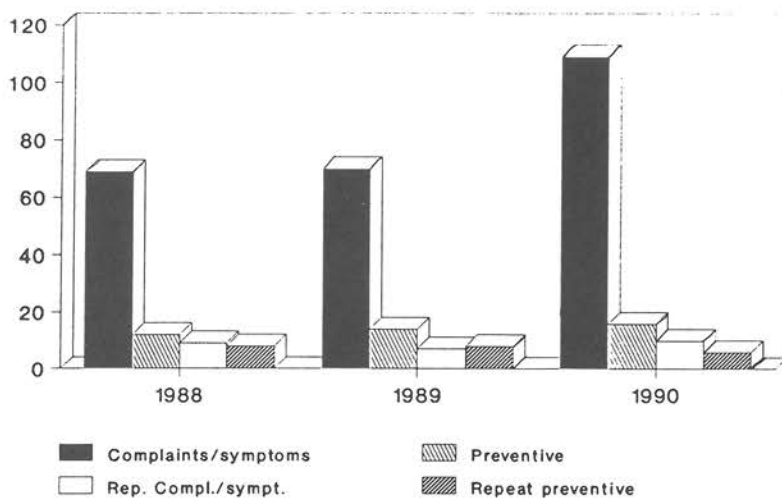
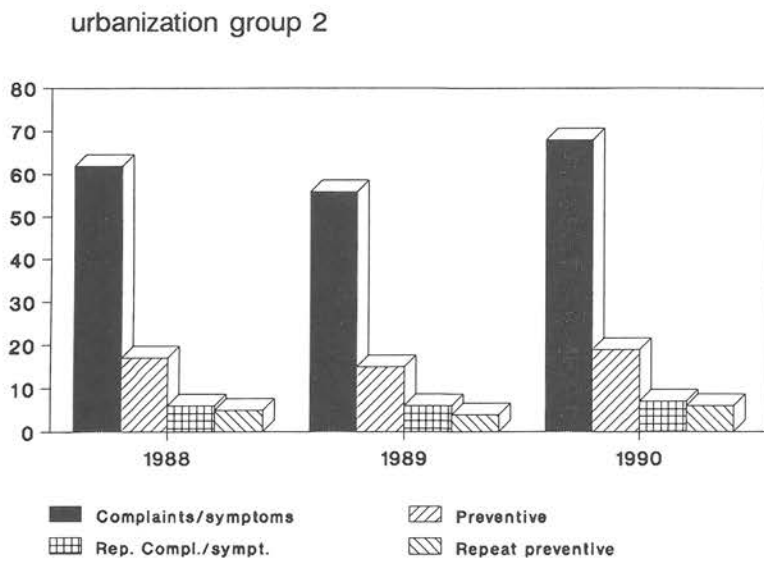
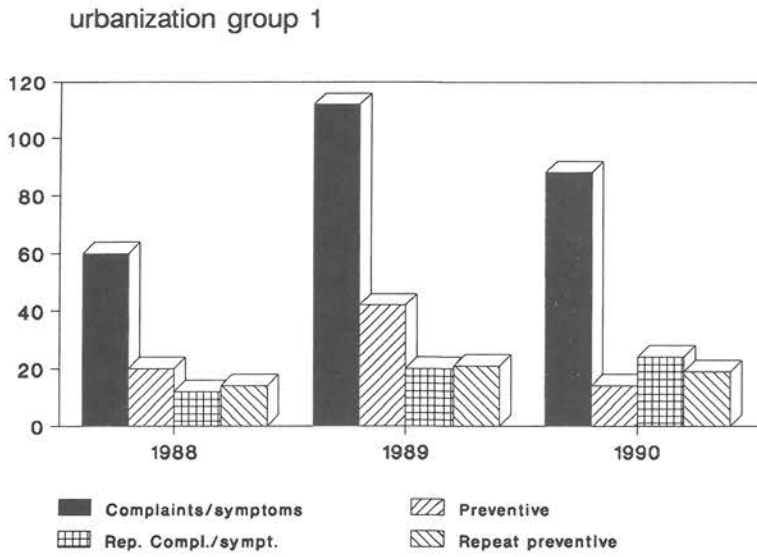
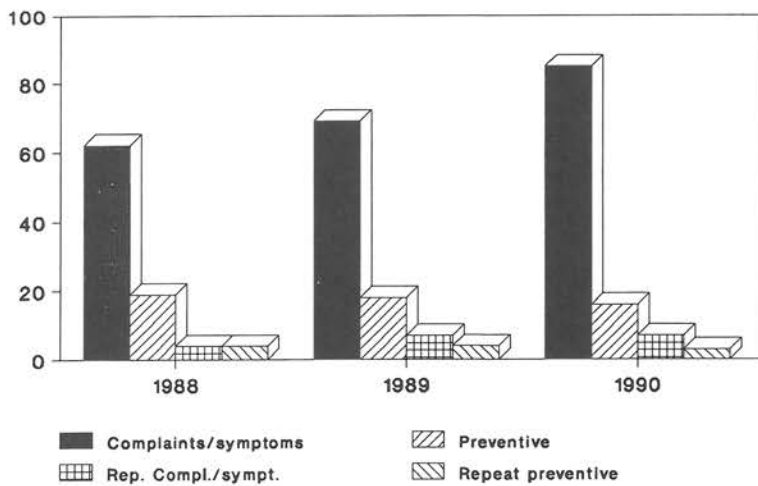


Figure 20

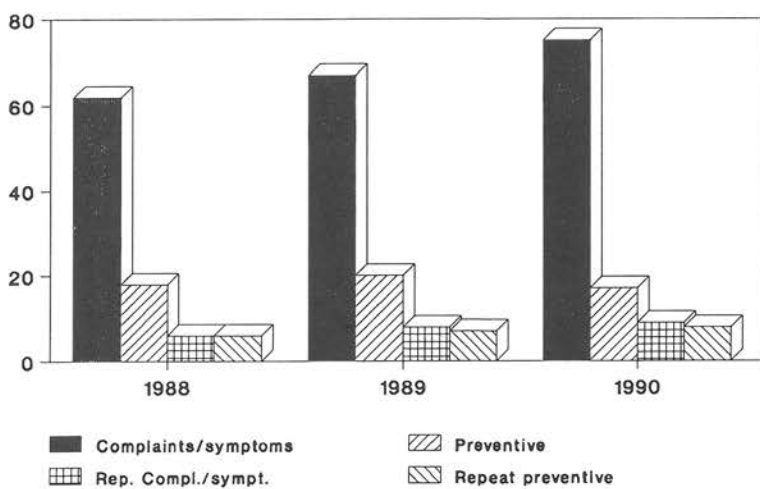
Number of mammograms per urbanization group and for the Netherlands per 10 000 women, 1988-1990



urbanization group 3



Netherlands



In the eastern provinces more mammograms are requested in most indication groups than in the other provinces.

Most mammograms are requested in the eastern and southern provinces. Only in the group of **first** preventive mammograms do the western provinces display the highest figures.

The number of mammograms in the east and south of the country and in the rural municipalities is relatively high. In the rural municipalities and the cities about the same number of first mammograms are requested, whereas the repeat mammograms are requested at least three times as much in the rural municipalities.

The total number of mammograms in 1990 is seven percent higher than in the previous year. This increase proves to occur above all in the southern provinces and in the cities. Nearly a quarter of the mammograms have been registered as preventive.

Table 33 lists the numbers of mammograms by age group per 10 000 women.

Table 33: number of mammograms by age group per 10 000 women for 1988 - 1990

age group	indication for first mammography						repeat mammography					
	compl./sympt.			("preventive")			compl./sympt.			("preventive")		
	1988	1989	1990	1988	1989	1990	1988	1989	1990	1988	1989	1990
15-19	( 4)	( 6)	13	-	-	( 2)	-	-	( 2)	( 2)	-	-
20-24	32	34	24	( 2)	( 5)	( 4)	( 2)	( 2)	( 2)	-	-	-
25-29	61	66	57	11	14	12	( 2)	( 5)	12	( 2)	( 2)	-
30-34	114	98	94	30	26	10	10	11	12	( 6)	( 6)	( 2)
35-39	135	138	159	35	51	27	14	16	20	(11)	18	10
40-44	145	181	190	50	42	40	18	24	18	12	18	28
45-49	134	174	160	45	39	29	18	16	18	16	21	18
50-54	92	104	159	32	55	45	14	14	27	( 9)	14	15
55-59	75	92	115	20	35	59	( 9)	14	12	(12)	17	22
60-64	65	74	82	31	28	33	( 3)	( 6)	10	( 9)	(12)	29
65-69	53	35	56	18	(11)	10	( 4)	( 4)	14	-	( 4)	( 4)
70-74	33	21	57	( 4)	(13)	26	( 4)	( 8)	-	( 4)	-	-
75-79	(10)	31	26	( 5)	-	-	( 5)	(10)	-	( 5)	-	-
80-84	( 7)	-	29	-	-	-	-	-	-	( 7)	-	-
≥ 84	-	( 9)	(9)	-	-	-	-	-	-	-	-	-

The registration shows that mammograms are requested above all in the age groups between 35 and 50 years. This "worried-well" pattern is the same for the two years in which registration has been performed so far.

Above the age of 50 an increase does occur in the number of mammograms. It is remarkable that above all complaints and/or symptoms are the reason for requesting mammograms.

The majority of the mammograms requested by the spotter physicians lie outside those age groups that are covered by the proposed mass screening (see also Table 34).

Table 34: proportional distribution of mammograms by three age groups.  
Percentages

age distribution, total number of mammograms				
year	≤50	50-69	≥69	total
1988	73	24	3	100
1989	72	25	3	100
1990	65	31	4	100
age distribution, "first" mammograms				
1988	74	24	2	100
1989	73	25	2	100
1990	65	30	5	100
age distribution, "first preventive" mammograms				
1988	70	28	2	100
1989	65	33	2	100
1990	53	42	5	100

In 1991 the topic is maintained on the weekly return.

## CONCERN ABOUT AIDS

General practitioners are confronted in their practice with AIDS patients and seropositivity to only a limited extent. Only general practitioners in Amsterdam and a few other cities and the occasional general practitioner outside these will have in their practice patients who are suffering from AIDS or who are seropositive.

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 HIV.

It is considered important to obtain insight into these phenomena.

In 1988 the topic "Concern about AIDS" started. In the Eurosentinel project sentinel station networks from various European countries are simultaneously registering a number of data that relate to the anxiety among the population about AIDS, insofar as this leads to a visit to a general practitioner.

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 in 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 topic will appear on the weekly return for several years.

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 the 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 HIV 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 elsewhere<sup>17</sup> (M. Moons and L. Peters, Netherlands Institute for Research into Primary Health Care).

Table 35 lists the number of consultations in which AIDS comes up for discussion, by province and urbanization group and for the Netherlands, per 10 000 inhabitants, 1988-1990.

Table 35: numbers of consultations in which AIDS comes up for discussion, by province and urbanization group and for the Netherlands, per 10 000 inhabitants, 1988-1990

	province group				urbanization group			Netherlands
	A	B	C	D	1	2	3	
1988	7	9	13	8	5	8	21	10
1989	10	11	18	15	4	13	27	15
1990	8	8	21	22	4	15	30	16

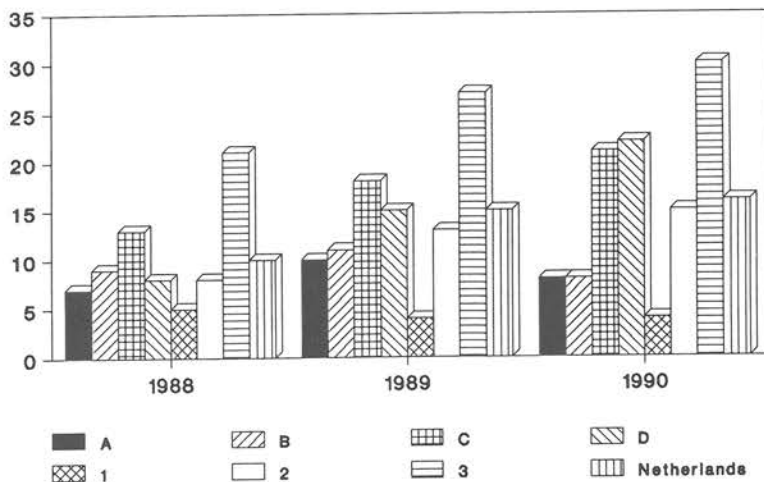
There is an increase in consultations on AIDS from 10 in 1988 to 16 per 10 000 inhabitants in 1990. General practitioners in the western provinces are confronted more with questions about AIDS than elsewhere in the Netherlands. In 1990 AIDS came up for discussion with the general practitioner clearly more often in the southern provinces too. This applies even more strongly to the general practitioners in the cities (see Figure 21).

The first supplementary data show that nearly 60% of all consultations are made by a man. Among those who ring the AIDS info line the percentage of men is higher: 67<sup>18</sup>.



Figure 21

Number of consultations in which AIDS comes up for discussion, per province and urbanization group and for the Netherlands, per 10 000 inhabitants, 1988-1990



### Age distribution

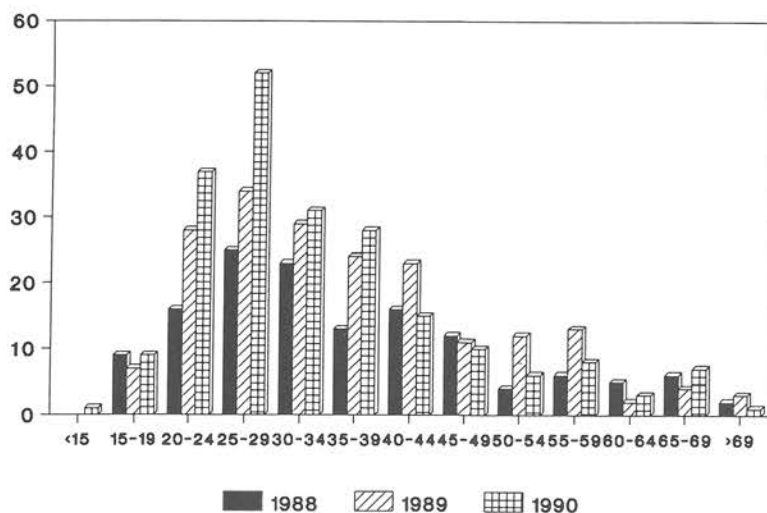
Table 36 gives the number of consultations in which AIDS comes up for discussion per 10 000 inhabitants per age group, for both sexes together (cf. Fig. 22).

Table 36: number of consultations in which AIDS comes up for discussion per age group, per 10 000 inhabitants, 1988-1990

Age group	1988	1989	1990
≤ 15	-	-	(1)
15-19	9	7	9
20-24	16	28	37
25-29	25	34	52
30-34	23	29	31
35-39	13	24	28
40-44	16	23	15
45-49	12	11	10
50-54	4	12	(6)
55-59	6	13	8
60-64	(5)	(2)	(3)
65-69	(6)	(4)	(7)
≥ 69	(2)	(3)	(1)

Figure 22

Number of consultations in which AIDS comes up for discussion per age group, per 10 000 inhabitants, 1988-1990



The majority of the questions about AIDS put to general practitioners are asked in the 20-44 age group: in 1988 75%, in 1989 79% and in 1990 84%. The annual report of the AIDS info line for 1988-1990 likewise gives a high percentage: about 70% of those ringing it are between 20 and 50 years. In our registration no seasonal influence has been established; the quarterly figures are at the same level during the years.

The topic has been maintained on the weekly return for 1991. Registration under Eurosentinel is also being continued for 1991.

### **Eurosentinel<sup>19</sup>**

Eurosentinel is a project in which networks of spotter physicians in various European countries cooperate.

In 1990 the number of requests for a test on H.I.V. antibodies was registered by six networks in five countries.

On each patient who requests a test a number of data are recorded: age, sex, risk factors present and reason for the request in the absence of risk factors.

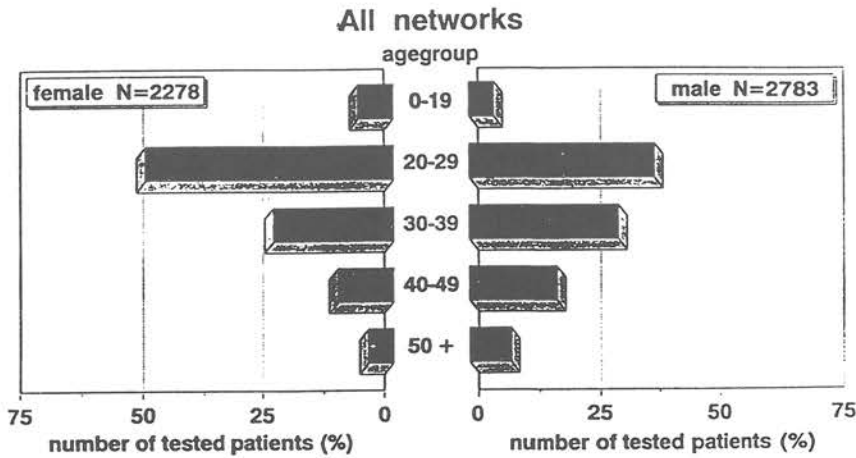
The same data are recorded when it is not the patient who asks for a test but the general practitioner who takes the initiative for this.

The data presented here relate to those patients on whom a test has been performed. The in themselves interesting data on patients who request a test but, after consultation with the physician, decide not to go ahead with it are left out of consideration here.

The age and sex distribution of all patients tested in the six networks is shown in Figure 23.

Figure 23

Age and sex distribution of the patients tested on H.I.V. antibodies in all networks.



The general m/f sex ratio is 1.1.

Of all tested patients, 87% are between the ages of 19 and 50. Of all tested women, 60% are younger than 30 years; for the men this percentage is 40. The pattern of the age distribution is comparable for all networks. The Spanish network forms an exception. In this network 23% of the number of tested patients are younger than 15 years. In the other networks that is some 2%.

An explanation of this age distribution and the exception that the age distribution forms to this in the Spanish network probably lies in the principal reasons for requesting an H.I.V. test (see Table 37).

Table 37: Principal reasons for requesting an H.I.V. test by country and by person taking the initiative for the test

test ordered by GP	Country		test asked by patient			
	%	N	N	%		
prenatal screening	27	411	Belgium	464	35	heterosex. contact "at risk"
heterosex. contact "at risk"	24				29	anxiety
screening before marriage	40	627	France/	464	22	screening before marriage
prenatal screening	23		RNTMT		17	heterosex. contact "at risk"
screening before marriage	35	150	France/	111	23	anxiety
heterosex. contact "at risk"	19		Aquitaine		21	heterosex. contact "at risk"
prenatal screening	69	16	The	104	65	heterosex. contact "at risk"
symptoms sugg. for HIV inf.	19		Netherlands		10	homo- or bisex. behaviour
I.V. drug use	34	51	Spain	29	50	I.V. drug use
prenatal screening	18				14	administrative reason
symptoms sugg. for HIV Inf.	30	427	Switzerland	1320	30	anxiety
heterosex. contact "at risk"	25				33	heterosex. contact "at risk"

The differing pattern in Spain consists in the relatively large number of tested persons using intravenous drugs, or at least stating that reason.

In France testing for H.I.V. antibodies takes place above all as part of the screening for venereal disease before marriage. However, this specific pattern of applications has no effect on the age distribution of the tested patients.

Of all tests performed on H.I.V. antibodies under this registration only a fraction are positive also after confirmation. The percentage of positive tests varies from 2.7 in the French national network to 0.1 in the Dutch sentinel station practices.

## MEASLES AND MUMPS

From the Regional Office for Europe of the World Health Organization the urgent request was directed to Eurosentinel to make a start with the registration of new cases of measles and mumps (B. Bytchenko, M.D., Regional Office for Communicable Diseases and R.P. Prohorskas, M.D., Statistician).

Communicable diseases still form a threat to the populations of the industrialized countries. In 1984 the European member-states of the World Health Organization decided that in accordance with objective 5 of Health for All-2000 "by the year 2000, there should be no indigenous measles, poliomyelitis, neonatal tetanus, congenital rubella, diphtheria, congenital syphilis or indigenous malaria in the region".

Although in an earlier registration of measles it had been possible to demonstrate the success of the vaccination programme introduced against measles and many reports of mumps were not expected either in view of the degree of vaccination of Dutch children, it was decided to agree to the proposals of the World Health Organization and Eurosentinel and to participate in the registration.

The request is to report all new cases of measles and mumps, stating the way in which the diagnosis has been made: clinical and/or by means of supplementary serological examination.

In 1990 6 cases of mumps were reported.

In none of these cases was further laboratory examination performed to confirm the clinical diagnosis.

Of these 6 patients, 2 had been vaccinated; the others had not. The age of these four non-vaccinated patients was between 5 and 37 years. The patients who had been vaccinated were 2 and 12 years.

One patient with measles was reported. This patient was younger than 14 months. There was no confirmation of the clinical diagnosis.

### **Measles and mumps in Western Europe**

In several countries sentinel station networks of general practitioners are involved in the surveillance of measles and mumps.

Frequent objectives of this surveillance are:

- following the trend in the incidence,
- registering the frequency and the severity of possible complications, and
- if possible studying the effect of the vaccination programmes against these disorders.

The objective of the registration under Eurosentinel is the international comparison of these epidemiological characteristics of measles and mumps.

From January 1990 data were collected in 10 sentinel station networks on new cases of measles and in 8 networks data on new cases of mumps (Table 38).

Table 38: Participating sentinel station networks and numbers of general practitioners involved

Name of network	No. of participants	Country
Médecins vigies/Peilpraktijken	38 GPs	Belgium
GROGs (Groupes Régionaux d'Observation de la Grippe)	253 GPs 51 pediatricians	France
RNTMT (Réseau National Télématic de Surveillance et d'Information sur les Maladies Transmissibles)	428 GPs	France
Sentinel Practice Network	69 GPs	Ireland
Peilstations	61 GPs	Netherlands
Medicos Sentinela	195 GPs	Portugal
Sistema de Vigilancia por Medicos Centinela	100 GPs	Spain-Basque Country
Red de Medicos Centinelas	15 GPs	Spain-Madrid Region
	5 pediatricians	
Sentinella	142 GPs	Switzerland
Weekly Returns Service	240 GPs	United Kingdom
GP Surveillance of Infections in Wales	138 GPs	United Kingdom

Data have been registered of natural cases of measles and mumps (those cases are excluded that have occurred in relation to a vaccination). The cases of measles and mumps diagnosed on clinical criteria have been registered. The age and sex of the patient, the vaccination status and the possible occurrence of complications are asked about.

#### Results of the registration of measles

The results of the registration of measles are shown in Tables 39, 40 and 41.



Table 39: Number of measles cases per network and number of cases per GP and per year.

	Mean weekly No. partic. GPs	No. measles cases	No. month recording	No. cases/ GP/year
Belgium	112	56	12	0.5
France/RNTMT	104 <sup>1</sup>	288	12	2.8
France/Aquitaine	48 <sup>2</sup>	66	12	1.4
Ireland	38	183	12	4.8
Portugal	64	12	12	0.2
Spain/Castilla	144	152	7	1.8 <sup>3</sup>
Spain/Basque	100	3	2	-
Switzerland	135	60	12	0.4
The Netherlands	61	1	12	0
United Kingdom/Wales	136	93	12	0.7

<sup>1</sup> Number of GPs equivalent to full time participations

<sup>2</sup> Number of GPs having connected at least twice a month

<sup>3</sup> Extrapolation up to 12 months

Table 40: Age distribution of measles cases per network (%)

	N	≤1	1-4	5-9	10-14	15-19	≥19
Belgium	56	6	49	16	18	9	2
France/RNTMT	436	4	36	48	9	3	1
France/Aquitaine	66	6	24	36	23	8	3
Ireland	183	8	57	30	4	1	2
Portugal	12	0	(17)	( 8)	(33)	(33)	( 8)
Spain/Castilla	152	3	22	30	33	8	5
Spain/Basque <sup>1</sup>	3	-	-	-	-	-	-
Switzerland	60	5	20	23	12	22	18
The Netherlands <sup>1</sup>	1	-	-	-	-	-	-
United Kingdom/Wales	93	23	46	18	4	4	4

<sup>1</sup> Too few cases

Table 41: Measles cases with complications, vaccination status of these cases and complication rates per network

	Number of cases with complic.	No. vacc. total No. complic./	Complication rate (%)
Belgium	8	0/7	14
France/RNTMT	not recorded	-	-
France/Aquitaine	not recorded	-	-
Ireland	not recorded	-	-
Portugal*	( 2)	(1/2)	(17)
Spain/Castilla	8	1/7	5
Spain/Basque*	0	-	-
Switzerland	1	0/1	2
The Netherlands*	0	-	-
United Kingdom/ Wales	11	3/9	12

\* Too few cases

Between the various sentinel station networks considerable differences exist in the number of cases per physician and per year. This denominator is the best one that is available at present within Eurosentinel.

In the table with the percentage age distribution of the reported measles cases the results of the Swiss network are striking. A relatively high percentage of the patients are 15 years or older.

This result is regarded as a side-effect of an only partially performed vaccination programme. In Switzerland vaccination against mumps, measles and rubella is highly controversial among both the population and the physicians.

For the rest the reports of measles must be handled with some care. In Switzerland serological examination was performed in 41% of the reports. In only four of the 24 blood tests was it possible to confirm the diagnosis serologically, in one test a marginal value was found and in 13 of the 24 blood tests no antibodies against measles could be found.

This finding is not a new one; in both the USA and Canada a discrepancy was found between the clinical and serological diagnosis of measles.

### Results of the registration of mumps

In Tables 42, 43 and 44 the number of reports of mumps, the age distribution of the reported patients and the number of complications are shown.

Table 42: Number of mumps cases per network and number of cases per GP and per year

	Mean weekly No. partic. GPs	No. mumps cases	No. month recording	No. cases/ GP/year
Belgium	62	86	12	1.4
France/RNTMT	104 <sup>1</sup>	208	12	2.0
Ireland	31	33	9	1.4 <sup>2</sup>
Portugal	65	73	12	1.1
Spain/Castilla	110	77	7	1.2 <sup>2</sup>
Switzerland	135	109	12	0.8
The Netherlands	61	6	12	0.1
United Kingdom/ Wales	136	74	12	0.5

<sup>1</sup> Number of GPs equivalent to full time participants

<sup>2</sup> Extrapolation up to 12 months

Table 43: Age distribution of mumps cases per network (%)

	N	≤1	1-4	5-9	10-14	15-19	≥19
Belgium	86	0	20	44	16	6	14
France/RNTMT	347	0	26	50	8	4	12
Ireland	33	0	36	21	18	3	21
Portugal	73	0	12	53	14	11	10
Spain/Castilla	77	1	31	29	18	8	13
Switzerland	109	2	20	29	19	7	22
The Netherlands*	6	-	-	-	0	-	-
United Kingdom/Wales	74	0	41	39	8	3	10

\* Too few cases

Table 44: Mumps cases with complications, vaccination status of the cases and complication rate per network

	Number of cases with complic.	No. vacc. total No. complic.	Complications rate (%)
Belgium	2	1/2	2.2
France/RNTMT	5	1/5	1.5
Ireland	not recorded	-	-
Portugal	4	1/2 <sup>1</sup>	6
Spain/Castilla	8	3/8	10
Switzerland	3	0/3	3
The Netherlands <sup>2</sup>	-	-	-
United Kingdom/ Wales	7	2/7	10

<sup>1</sup> Vaccination status only known for 2 of the 4 cases with complications

<sup>2</sup> Too few cases

With mumps too there are major differences in the degree of occurrence between the various sentinel station networks. The Dutch sentinel stations hardly report mumps at all; in the National French Network general practitioners still see a number of cases per year.

In the age distribution it is striking that a relatively large proportion of the patients in several networks are 19 years or older. This percentage varies from approx. 10 to approx. 20. The percentage of reported complications varies per network: from 1.5 in the French network to over 10 in the Irish network and the provincial network in Castilla y Leon in Spain.

The registration of measles and mumps under Eurosentinel is to be continued in 1991. The Dutch sentinel stations have ceased further participation in the registration of these topics.

## EUROSENTINEL

Investigation into the requests for a limited number of blood tests in general practice.

Eurosentinel is a cooperative project of sentinel station networks in a number of countries of the European Community and Switzerland.

It is an EC project under the Medical and Public Health Research Programme and is financially supported by the COMAC-Health Services Research.

The project started in 1988 and has a term of three years. Meanwhile the Final Report on the project has been published<sup>20</sup>.

The CMR Sentinel Stations the Netherlands have participated intensively in this cooperation. The indirect effects may be read in the chapters on influenza, concern about AIDS and measles and mumps.

In this chapter an account is given of the investigation into the requests for laboratory examinations by general practitioners that took place in October-November 1989.

### **Formulation of the question**

At the beginning of the Eurosentinel project it was stated that the project would not be confined to registering health problems. The possibility of more research-oriented projects has been kept open.

One of the objectives of the project is to test the possibility of performing such research without asking too much of the participating networks.

A frequently occurring event in general practice was sought that could be studied in a short time in a relatively simple way.

The choice fell on requests for blood tests as a routine procedure in general practice that is at the same time linked to the increase in costs in health care. The variation between physicians in the use of diagnostic facilities is a point of attention in this. The investigation could make a contribution to insight into the use of the laboratory by physicians.

As this is an international investigation, the hypothesis has been made that no differences exist between the national sentinel station networks in the extent to which blood tests are performed on persons by general practitio-

ners.

It would be endeavoured:

1. to describe and compare the "national" rates for requesting blood tests by general practitioners,
2. to relate these data to the characteristics of the health care system in the various countries, and
3. if possible to formulate hypotheses with regard to a number of characteristics of the physicians and the practices and requests for blood tests.

### Set-up and method

In the sentinel station networks in a number of countries (see Table 45) all face-to-face contacts of general practitioners with patients for 4 weeks in October-November 1989 are registered. This number of contacts has been used as the denominator.

Table 45: The following networks have participated in the project

Name of the network	Country	Number of participating GP's	Total number of GP's members
Huisartsenpeilpraktijken/ Médecins vigies	Belgium	49	±170
Sentinel Practice Network	Ireland	29	69
Centro Studi e Ricerche in Medicine	Italy	48	60
Generale-Mario Negri Inst. Medicos Sentinela	Portugal	51	104
Red Espanola de Atencion	Spain	70	200
Sentinella	Switzerland	31	±118
Peilstations	The Netherlands	51	63
Weekly Returns Service	United Kingdom	13	240

For all patients for whom the general practitioner has had a blood test performed a number of further details have been recorded: age, sex, face-to-face contacts (yes or no) and which of a limited number of blood tests has been requested.

On the general practitioners and the practices a number of background data have been registered: age, sex, year of graduation, single or group practice, location of the practice in respect of the laboratory and hospital and the degree of urbanization of the municipality in which the practice is established.

The data on the doctor-patient contacts and the blood tests requested are sent weekly to the national coordinators. The data are input at national level. They are sent on diskette to the Eurosentinel coordinators' centre, where the material is analysed with the aid of the EPIINFO software package.

## Results

### The spotter physicians.

In total 342 spotter physicians have been involved in the study. The average age of the physicians is nearly 39. Three quarters of them are men.

Between the eight countries there are considerable differences in the age and sex structure of the physicians in the sentinel station networks (see Table 46).

Table 46: Age and sex distribution of the selected GPs

Country	Sex	Belgium N=49	Ireland N=29	Italy N=48	Portugal N=51	Spain N=70	Switzerland N=31	The Netherl. N=51*	U.K. N=13*
<30 y	M	2 (4.1)	1 (3.4)		1 (2.0)	2 (2.9)		1 (2.0)	
	F								
30-39 y	M	15 (30.1)	18 (62.1)	35 (72.9)	18 (35.3)	43 (61.4)	8 (25.8)	8 (15.7)	5 (38.5)
	F	1 (2.0)	2 (6.9)	9 (18.8)	30 (58.8)	20 (28.6)		2 (3.9)	
40-49 y	M	18 (36.7)	5 (17.2)	2 (4.2)		3 (4.3)	19 (61.3)	24 (47.1)	4 (30.8)
	F	1 (2.1)	1 (3.4)	1 (2.1)	1 (2.0)	2 (2.9)	2 (6.5)	4 (7.8)	
50-59 y	M	11 (22.4)	1 (3.4)				2 (6.5)	7 (13.7)	2 (15.4)
	F								
≥60 y	M	1 (2.1)		1 (2.1)	1 (2.0)			4 (7.8)	1 (7.7)
	F		1 (3.4)						
Mean (years)		42.90	38.07	36.94	35.29	34.51	42.61	44.78	43.00

\* 1 male GP : agegroup not mentioned.

In Spain, Portugal, Italy and Ireland the spotter physicians are young compared with the others. In Portugal the largest number of female general practitioners is found: more than 50%. In the United Kingdom not a single female general practitioner took part in the study.

In Spain, Italy and Portugal some 90% of the spotter physicians graduated after 1975. In Ireland that percentage is 67. In the other countries a considerable proportion of the physicians graduated more than 15 years ago: in Belgium, the United Kingdom, Switzerland and the Netherlands about 60%.

The sentinel station networks in Belgium, Italy and Switzerland consist largely of single practices (60% or more). In Ireland, Spain and the Netherlands this percentage is 40. In Portugal and the United Kingdom the physicians work in often large group practices or health centres (4 or more general practitioners).

Most spotter physicians in the various networks work in areas with a population of between 2000 and 50 000 persons. In Ireland and Spain relatively more practices are in rural municipalities: 50 and 30% respectively. In Belgium, Spain, the Netherlands and the United Kingdom the percentage of sentinel stations in areas with more than 50 000 inhabitants is around 40.

Distances from a laboratory and from a hospital differ considerably in the various countries.

In Ireland the distance from a hospital or laboratory for 50% of the sentinel station practices is more than 10 kilometres. In Italy and the Netherlands the sentinel station practices are often less than 5 kilometres away from a laboratory or hospital.

In Italy and Portugal the patients go almost always to the laboratory for blood to be taken. In other countries blood is also taken in the practices and delivered to the laboratory by personnel from the laboratory, someone from the practice or the patient himself or herself.

The performance of blood tests by personnel from the practice in their own practice is of infrequent occurrence in Spain. In Switzerland and the Netherlands some 80% of the general practitioners perform blood tests in their own practice.



### The doctor-patient contacts: the denominator

In total 156 021 doctor-patient contacts have been processed. These patients were seen by 342 spotter physicians during 1310 working weeks of physicians. The number of contacts per physician averaged 119 per week, varying from 76 in Portugal to 141 in the United Kingdom.

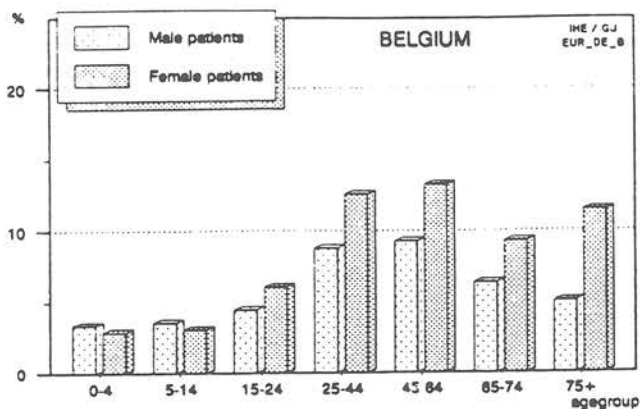
In Belgium a considerably larger number of doctor-patient contacts occur in the patient's home: nearly 50%. In the other countries that percentage varies from 4-5 in Portugal, Spain and Switzerland to between 10 and 15 in Ireland, the United Kingdom, Italy and the Netherlands.

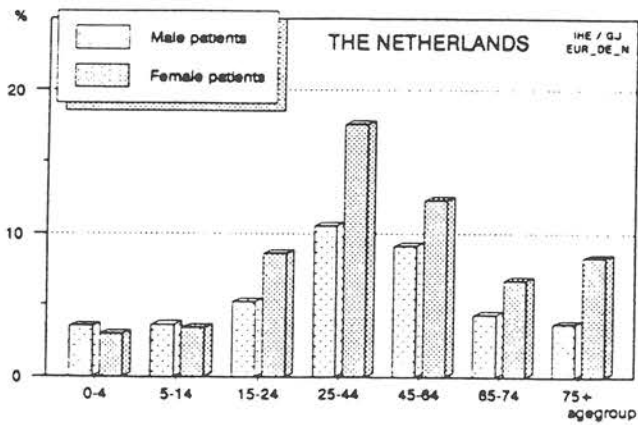
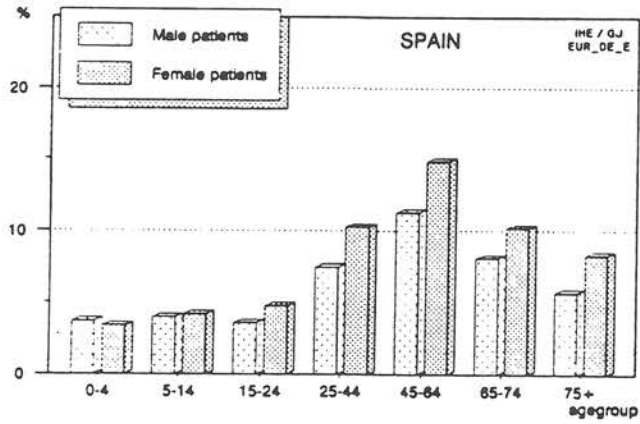
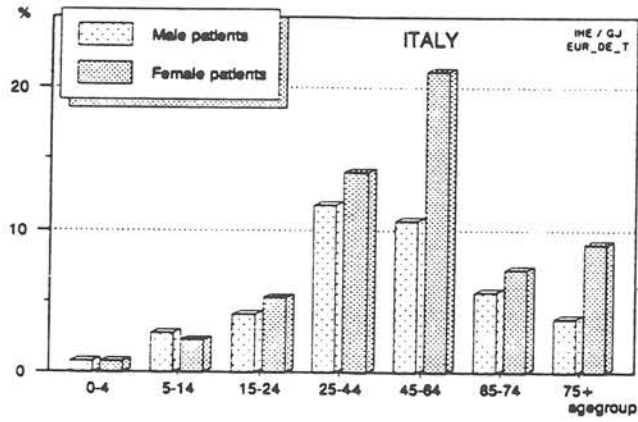
In the age and sex distribution of the doctor-patient contacts the women of 25-64 years form the largest group in all countries. This percentage varies from 25 in Spain to 36 in Portugal (Figure 24).

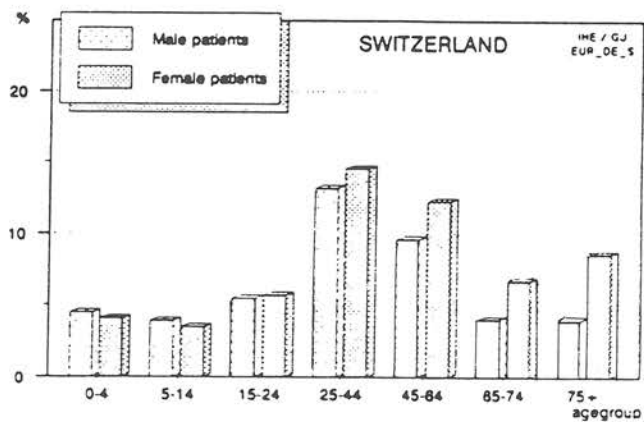
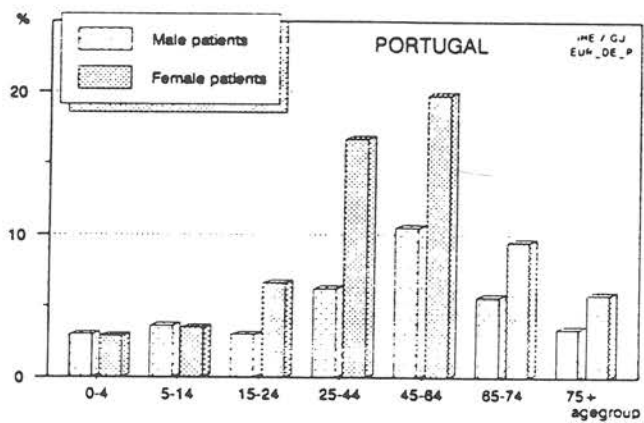
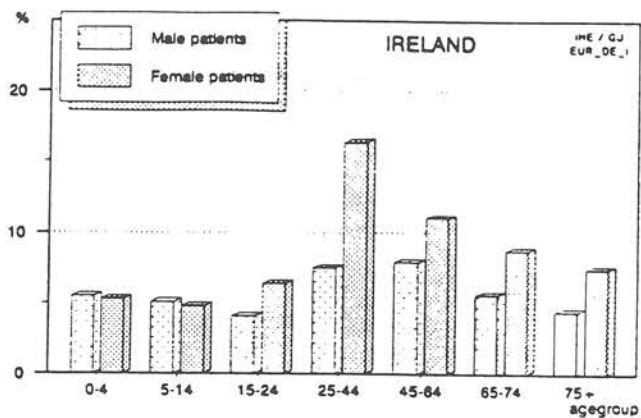
The man/woman ratio for all countries together is 0.69; it varies from 0.55 in Portugal to 0.80 in Switzerland.

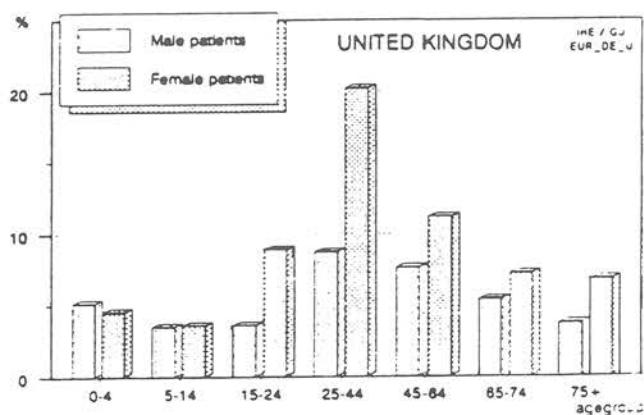
In Italy the percentage younger than 15 years that visit the family doctor is the lowest. The percentage is the highest in Ireland and the United Kingdom.

Figure 24 Age and sex distribution of the doctor-patient contacts.









### Blood test requested

#### Number of patients tested.

The number of patients for whom a blood test has been requested is shown in Table 47.

Table 47: Number of tested patients, ( $\geq 1$  test) and number of tests per tested patient

Agegroup	Sex	Belgium	Ireland	Italy	Portugal	Spain	Switzerland	The Netherl.	U.K.
0-4	M	7	1	8	11	20	16	15	2
	F	3	3	6	13	21	46	20	
5-14	M	19	13	29	50	48	42	26	3
	F	26	7	15	45	50	44	37	5
15-24	M	40	13	58	53	42	47	52	11
	F	96	60	160	123	108	93	141	22
25-44	M	142	60	217	127	144	187	125	18
	F	248	147	418	307	229	246	325	64
45-64	M	271	91	329	198	263	264	166	40
	F	338	122	406	374	369	292	248	43
65-74	M	144	48	140	103	122	150	75	27
	F	239	56	185	149	191	192	152	33
75+	M	76	24	63	42	54	88	59	17
	F	195	57	156	70	131	182	136	23
Total number of tested patients		1,844	702	2,190	1,665	1,792	1,934	1,577	308
Number of patient contacts		26,109	14,760	22,163	13,695	33,321	12,679	26,803	6,491
Age and sex standardized number of patients tested per 100 patient contacts		7.1	5.2	9.6	12.0	5.5	16.1	6.0	5.1
Age and sex standardized number of tests per tested patient		4.10	2.14	3.66	3.62	3.70	2.06	2.11	1.55

For comparison of the numbers of tested patients in the various countries the results have been standardized for the age and sex distribution of the doctor-patient contacts per country.

The percentage of tested patients varies from 5.1 in the United Kingdom to 16.1% in Switzerland. The average percentage for all countries is 7.7.

The average number of tests per patient for whom a blood test has been requested varies from 1.5 in the United Kingdom to 4.1 in Belgium. The data show that, although in Switzerland a blood test is performed for a considerable percentage of the patients, the Swiss physicians are selective in the choice of a test. In Belgium, when a blood test is requested, a combination of blood tests is often performed.

### Number of blood tests

Table 48 gives the number of blood tests per group of tests per country.

Table 48: Total number of each test group per country

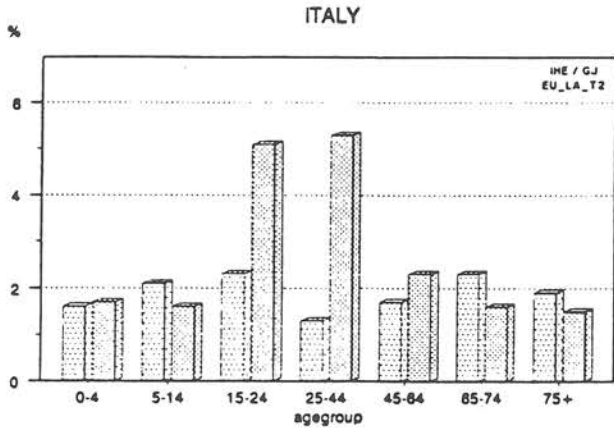
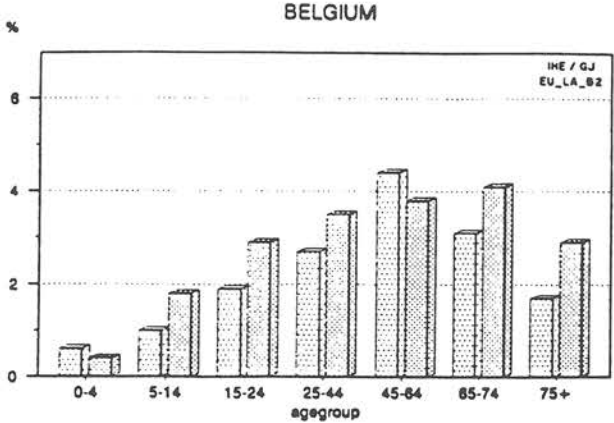
	Belgium	Ireland	Italy	Portugal	Spain	Switzerland	The Netherl.	U.K.
Hb/Blood count	1,219 (16.3%)	440 (29.5%)	1,407 (17.3%)	1,433 (23.6%)	1,264 (19.3%)	1067 (25.3%)	1010 (30.2%)	154 (32.7%)
Iron/IBC/Ferritin	780 (10.4%)	30 (2.0%)	555 (6.8%)	142 (2.3%)	288 (4.4%)	57 (1.3%)	67 (2.0%)	5 (1.1%)
Cholesterol	894 (12.0%)	182 (12.2%)	1012 (12.4%)	747 (12.3%)	1,118 (17.0%)	457 (10.8%)	287 (8.6%)	31 (6.6%)
Other lipid tests	723 (9.7%)	76 (5.1%)	889 (10.7%)	566 (9.3%)	965 (14.7%)	237 (5.6%)	125 (3.7%)	16 (3.4%)
Sugar	1,197 (16.0%)	150 (10.1%)	1,408 (17.3%)	1253 (20.7%)	1,263 (19.2%)	714 (16.9%)	553 (16.5%)	47 (10.0%)
Liver function tests	974 (13.0%)	159 (10.7%)	1,070 (13.2%)	395 (6.5%)	615 (9.4%)	496 (11.7%)	416 (12.4%)	26 (5.5%)
Thyroid function tests	361 (4.8%)	107 (7.2%)	158 (1.9%)	92 (1.5%)	47 (0.7%)	47 (1.1%)	138 (4.1%)	37 (7.9%)
Other blood tests	1,320 (17.7%)	344 (23.1%)	1,656 (20.4%)	1,435 (23.7%)	1004 (15.3%)	1,148 (27.2%)	746 (22.3%)	155 (32.9%)
Total	7,468	1,488	8,135	6,063	6,564	4,223	3,342	471

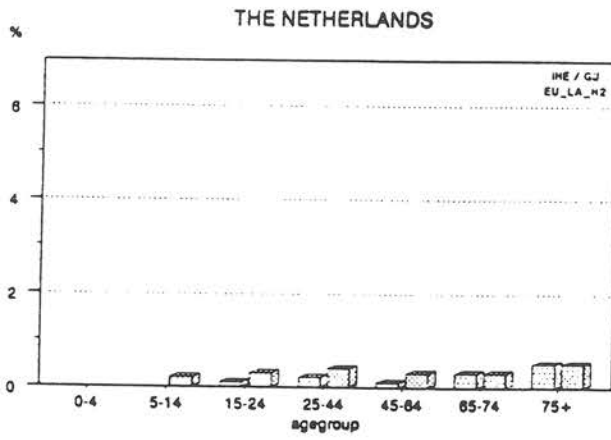
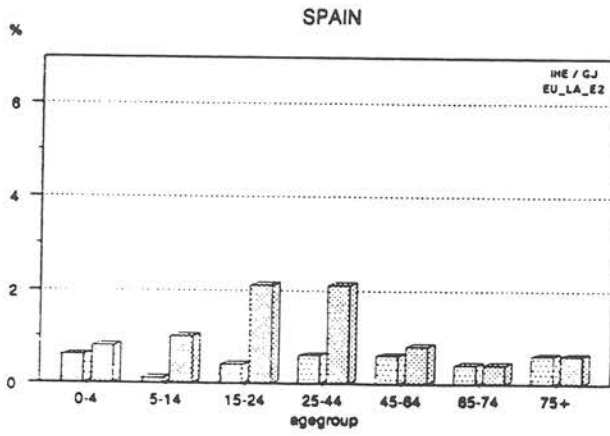
Once again considerable differences are found between the countries. The variation in the percentage of specific blood tests shows that differing diagnostic strategies are used in the different countries.

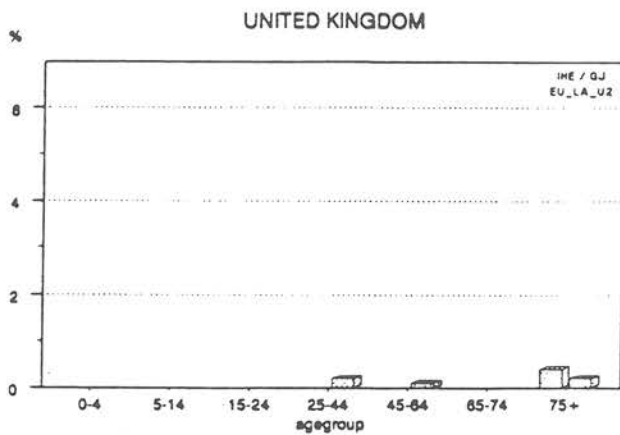
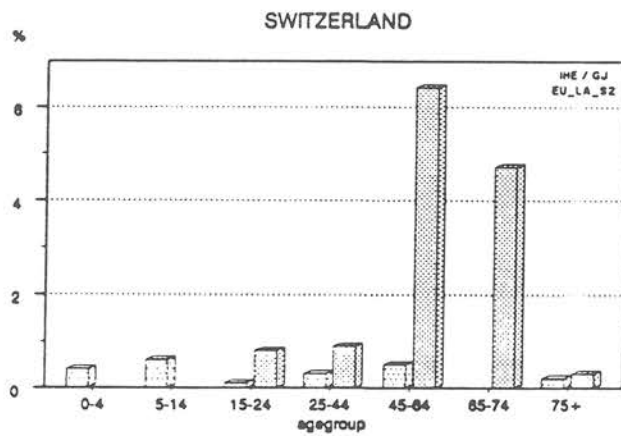
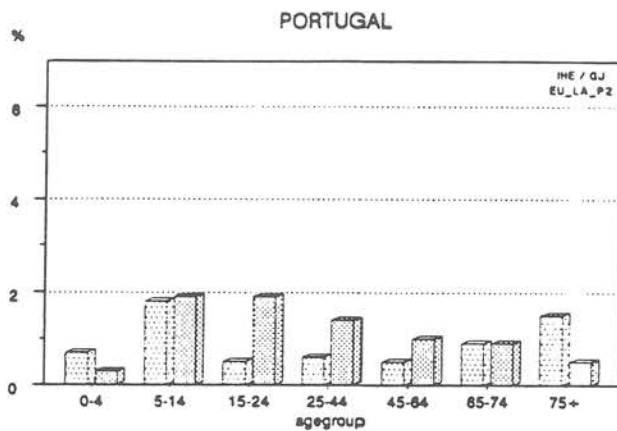
The request percentages for the individual tests or groups of blood tests per age and sex and per country clearly show these differences. Two examples.

Figure 25 shows the request percentages for iron/iron binding capacity/ferritin and Figure 26 the percentages for cholesterol examination.

**IRON/IBC/FERRITINE** Male Female









# CHOLESTEROL

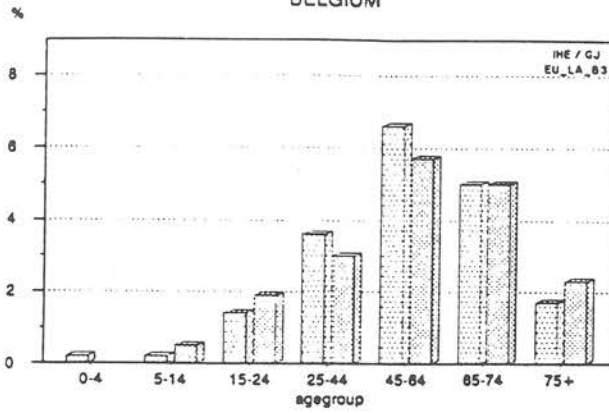


Male

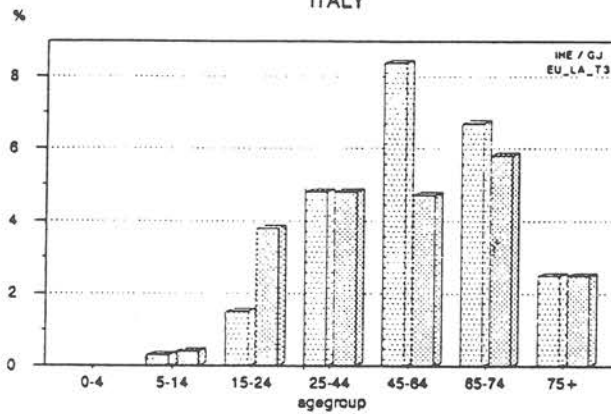


Female

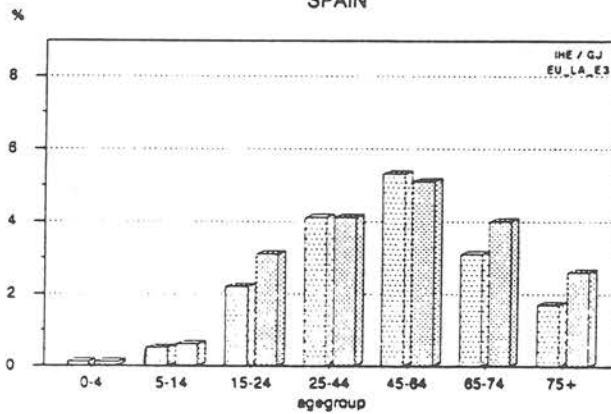
## BELGIUM



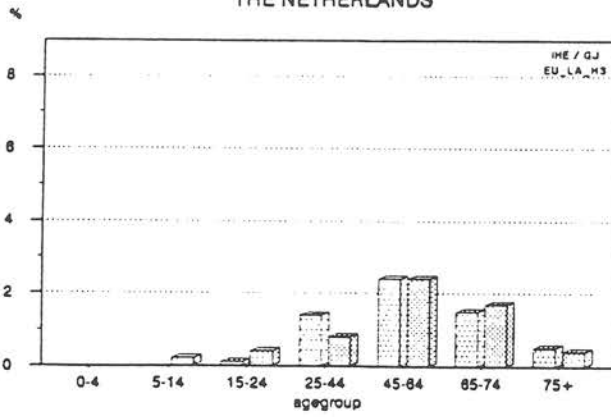
## ITALY



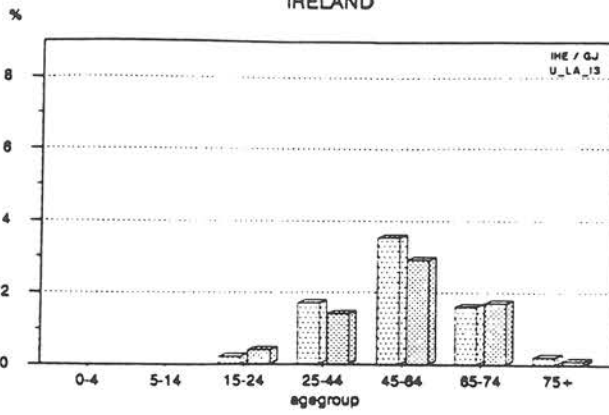
## SPAIN



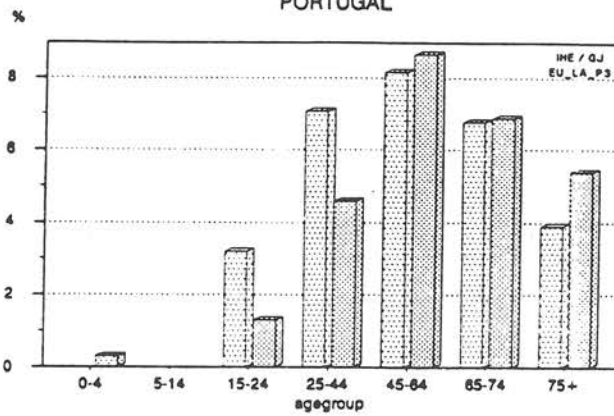
### THE NETHERLANDS

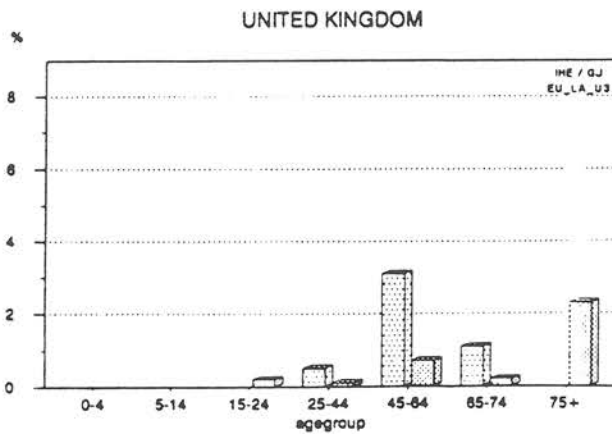
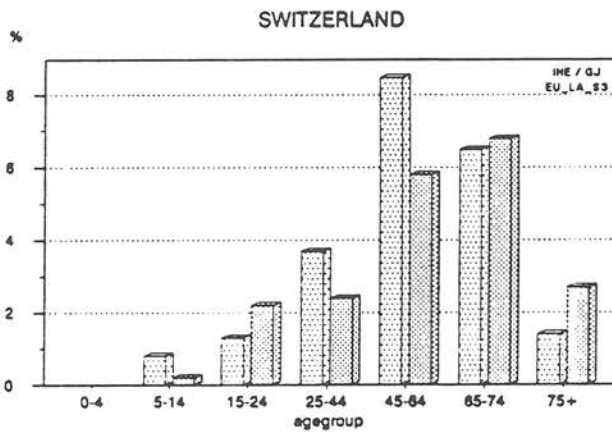


### IRELAND



### PORTUGAL





The Final Report on this study naturally contains similar surveys for all selected blood tests.

**Connection between characteristics of the physician and the practice and the requests for blood tests.**

To answer the question whether there is a connection between the number of requests for blood tests and characteristics of the general practitioner and the organization of the practice the general practitioners have been divided into three groups: physicians who request few, an average number of and many blood tests.

Statistically significant relations have been found between requests for blood tests and the form of the practice (i.e. single or group practice), the degree of urbanization of the practice area and the distance between the practices and the hospital.

The result shows that physicians working in group practices in urban areas with facilities a relatively short distance away request more blood tests than physicians working in single practices in rural municipalities at a greater distance from a hospital.

No links are found between the characteristics of the physicians (age, sex, years since graduation) and requests for blood tests.

## 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 selected 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 'cervical smear' question; it is quite feasible that the spotter physicians differ from the typical general practitioner in this respect. In the '(attempted) suicide' question 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<sup>21</sup>.

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, 1981-1990 (Central Bureau of Statistics)\*

year	men	women	total
1981	7 048	7 159	14 207
1982	7 082	7 204	14 286
1983	7 103	7 237	14 340
1984	7 125	7 269	14 394
1985	7 150	7 305	14 455
1986	7 184	7 345	14 529
1987	7 224	7 391	14 615
1988	7 273	7 441	14 714
1989	7 317	7 488	14 805
1990	7 358	7 535	14 893

\* 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 number)		
	year	M	F	total	M	F	total***
influenza	1981			491			697 000
	1982			497			710 000
	1983			396			568 000
	1984			502			722 000
	1985			464			671 000
	1986			630			915 000
	1987			365			533 000
	1988			399			591 000
	1989			410			607 000
	1990			225			335 000
cervical smear -with com- plaints and/ or symptoms	1981		57			41 000	
	1982		57			41 000	
	1983		65			47 000	
	1984		57			41 000	
	1985		62			45 000	
	1986		65			48 000	
	1987		59			43 500	
	1988		76			56 500	
	1989		72			54 000	
	1990		55			41 500	

\* for footnotes see page 126

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***
-"preventive", general prac- titioner's initiaive	1981		184			132 000	
	1982		171			123 000	
	1983		174			126 000	
	1984		204			148 000	
	1985		197			144 000	
	1986		230			169 000	
	1987		192			142 000	
	1988		176			131 000	
	1989		170			126 500	
	1990		144			108 500	
-"preventive", woman's initiative	1981		110			79 000	
	1982		126			91 000	
	1983		120			87 000	
	1984		132			96 000	
	1985		127			93 000	
	1986		168			124 000	
	1987		153			113 000	
	1988		193			143 000	
	1989		351			263 000	
	1990		433			326 000	

\* for footnotes see page 126



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)	1981		159			114 000	
	1982		170			122 000	
	1983		168			121 000	
	1984		182			132 000	
	1985		184			134 000	
	1986		170			125 000	
	1987		211			156 000	
	1988		246			183 000	
	1989		237			177 000	
	1990		273			205 000	
cervical smear total	1981		510			365 000	
	1982		524			377 000	
	1983		527			381 000	
	1984		575			417 000	
	1985		570			416 000	
	1986		633			465 000	
	1987		615			455 000	
	1988		691			514 000	
	1989		830			622 000	
	1990		905			682 000	

\* for footnotes see page 126

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***
sterilization	1981	59	46		42 000	33 000	74 000
	1982	50	40		35 000	29 000	64 000
	1983	46	39		33 000	28 000	61 000
	1984	46	39		33 000	28 000	61 000
	1985	44	26		32 000	19 000	51 000
	1986	45	29		32 500	21 500	54 000
	1987	45	28		32 500	20 500	53 000
	1988	40	22		29 500	16 500	46 000
	1989	30	19		22 000	14 000	36 000
	1990	35	19		26 000	14 000	40 000
cumulative					673 500 <sup>1</sup>	538 500 <sup>2</sup>	
morning-after pill prescribed	1981		35			25 000	
	1982		35			25 000	
	1983		30			22 000	
	1984		38			28 000	
	1985		32			23 000	
	1986		37			27 000	
	1987		35			26 000	
	1988		26			19 500	
	1989		35			26 000	
	1990		37			28 000	

\* for footnotes see page 126

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***
diabetes	1980			13			18 000
mellitus	1981			12			17 000
incidence	1982			12			17 000
	1983			11			16 000
	1990	21	22	21	15 000	16 000	31 000
prevalence	1980			125			176 000
	1990	88	121	105	65 000	91 000	156 000
acute							
dergulation	1990			4			6 000
(attempted)	1981			6			8 500
suicide	1982			8			11 500
	1983			10			14 500
	1984			7			10 000
	1985			6			8 750
	1986			7			10 600
	1987			7			10 250
	1988			6			9 000
	1989			7			10 250
	1990			5			7 500
pregnancy	1987		7			5 000	
despite ade-	1988		9			6 500	
quate contra-	1989		10			7 500	
ception	1990		6			4 500	

\* for footnotes see page 126

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***
mammograms							
first mammo-							
gram							
-complaints/	1988		62			46 000	
symptoms	1989		67			50 000	
	1990		75			56 500	
-preventive	1988		18			13 500	
	1989		20			15 000	
	1990		17			13 000	
repeat mammo-							
grams							
-complaints/	1988		6			4 500	
symptoms	1989		8			6 000	
	1990		9			7 000	
-preventive	1988		6			4 500	
	1989		7			5 000	
	1990		8			6 000	
mammograms	1988		92			68 500	
total	1989		102			76 000	
	1990		109			82 000	

\* 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.

## 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 1990 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.

The spotter physicians are informed of the beginning of the year of the coming investigations. 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'<sup>22</sup>.

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

This table does not require much explanation.

In 1990 the number of requests was 45. Of the patients making a request for application of euthanasia, 80% have a malignity.

The number of patients nursed at home is 40; three patients live in a nursing home. Two patients were at home but were admitted to hospital in a later phase of the illness.

42 of the 45 patients requested direct euthanasia; in the case of 28 requests the request was supported by a written "euthanasia declaration".

## Requests for application of euthanasia 1976-1990

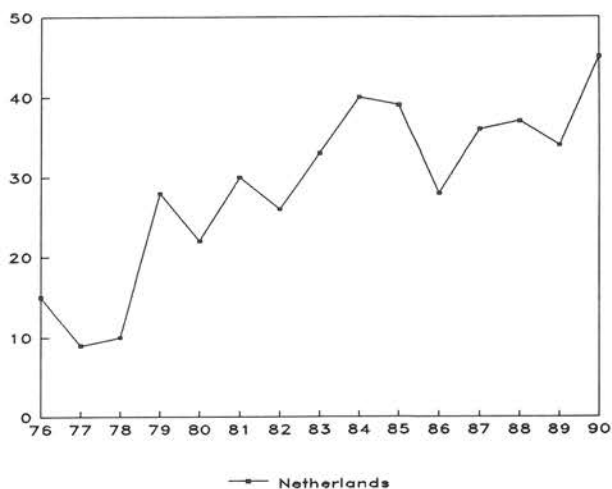
The distribution of the number of requests per province and urbanization group and per sex may be found in Table 49 (cf. Fig. 27).

Table 49: absolute number of patients who requested the general practitioner to apply active euthanasia by sex, per province and urbanization and for the Netherlands 1976-1990

absolute			province group				urbanization group			Netherlands
	M	F	A	B	C	D	1	2	3	
1976	5	10	1	2	11	1	4	7	4	15
1977	6	3	1	2	5	1	3	2	4	9
1978	6	4	3	2	4	1	2	8	-	10
1979	13	15	5	6	15	2	4	18	6	28
1980	10	12	2	3	16	1	3	12	7	22
1981	20	10	4	4	13	9	3	20	7	30
1982	17	9	2	6	17	1	3	7	16	26
1983	15	18	7	4	19	3	5	14	14	33
1984	24	16	5	2	25	8	3	24	13	40
1985	19	20	3	6	25	5	1	24	14	39
1986	14	14	3	5	16	4	3	15	10	28
1987	19	17	1	8	22	5	3	17	16	36
1988	19	18	3	1	22	11	1	23	13	37
1989	21	13	7	1	21	5	6	17	11	34
1990	28	17	14	2	22	7	4	24	17	45

Figure 27

Absolute number of patients who requested the general practitioner for the application of active euthanasia, for the Netherlands, 1976-1990



The average number of requests for euthanasia and the scatter per province and urbanization group are given in Table 50 and Table 51.

Table 50: average number of requests per sentinel station by province group 1976-1990

	province group			
	A	B	C	D
number of sentinel stations	6	7	20	10
average number of requests	10	6	12	6
scatter	0 - 21	2 - 21	0 - 21	2 - 14

Table 51: average number of requests per sentinel station by degree of urbanization 1976-1990

	degree of urbanization		
	1	2	3
number of sentinel stations	6	24	13
average number of requests	7	8	12
scatter	2 - 18	0 - 21	1 - 23

These data show 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 52.



Table 52: absolute number of patients who requested the general practitioner for application of active euthanasia by age group, 1976-1990

	≤55	55-64	65-74	75-84	≥84	total
1976	2	4	3	3	3	15
1977	2	3	2	2	-	9
1978	3	2	3	2	-	10
1979	3	7	12	2	4	28
1980	2	5	5	7	3	22
1981	8	4	5	10	3	30
1982	-	6	10	8	2	26
1983	3	10	9	9	2	33
1984	5	13	9	10	3	40
1985	8	8	9	11	3	39
1986	7	3	12	3	3	28
1987	6	9	8	9	4	36
1988	6	7	11	10	4	37
1989	4	6	12	11	-	34
1990	7	5	13	16	4	45

### Survey of the reported requests

In the collection published on the occasion of the twentieth anniversary of the Continuous Morbidity Registration Sentinel Stations the requests reported up to the end of 1987 are described: in total 316 requests<sup>23</sup>.

Meanwhile the data are known on 432 requests for application of euthanasia. Of these requests, 236 were made by a man.

Insight into the disorders for which application of euthanasia is requested has been obtained by using the International Classification of Diseases (1975, 9th revision) 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 and leukemia,
- 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 53.

Table 53: disorders for which euthanasia was requested, 1976-1990

	n	%
malignant neoplasms	305	70
cardio-vascular disease	33	8
chronic obstructive pulmonary disease	23	6
symptoms and incompletely described diseases	27	6
other diseases	44	10
total	432	100

The distribution of the disorders for which euthanasia was requested by age is given in Table 54.

Table 54: percentage of requests per disorder of the total number of reports by age (absolute numbers between parentheses), 1976-1990

	≤54		55-64		65-74		75-84		≥ 85	
	%	n	%	n	%	n	%	n	%	n
malignant disorders	81	(54)	87	(76)	87	(105)	55	(64)	15	(6)
cardio-vascular disease	0	(0)	1	(1)	2.5	(3)	16	(19)	24	(10)
chronic obstructive pulmonary disease	1	(1)	5	(4)	2.5	(3)	9	(10)	12	(5)
symptoms and incompletely described diseases	3	(2)	2	(2)	1	(1)	4	(5)	42	(17)
other diseases	15	(10)	5	(4)	7	(9)	16	(18)	7	(3)
	100 (67)		100 (87)		100 (121)		100 (116)		100 (41)	

At relatively younger age 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 advanced stages of terminal renal insufficiency and 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 55 gives the percentage distribution of the number of requests for application of euthanasia by patients younger and older than 65 per disorder.

Table 55: percentage of requests for application of euthanasia by patients younger and older than 65 by disorder, 1976-1990 (n=absolute numbers of requests)

	≤ 64		≥ 65		total	
	%	(n)	%	(n)	%	(n)
all disorders	36	(154)	64	(278)	100	(432)
all malignancies	43	(130)	57	(175)	100	(305)
cardio-vascular disease	3	( 1)	97	( 32)	100	( 33)
chronic obstructive pulmonary disease	22	( 5)	78	( 18)	100	( 23)
symptoms and incompletely described diseases	15	( 4)	85	( 23)	100	( 27)
other diseases	31	( 14)	68	( 30)	100	( 44)

A further subdivision of the malignancies by localization of the tumour and the age of the patient displays an unexpected picture (Table 56).

Table 56: 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)

	≤ 64		≥ 65		total	
	%	(n)	%	(n)	%	(n)
all malignancies	43	(130)	57	(175)	100	(304)
stomach	39	( 12)	61	( 19)	100	( 31)
colon/rectum	39	( 18)	61	( 28)	100	( 46)
trachea/lung	36	( 34)	64	( 47)	100	( 81)
breast	62	( 18)	38	( 11)	100	( 29)
other	42	( 49)	58	( 69)	100	(117)

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 64% in 1990.

Extrapolation of these data to the Dutch population is possible, but it should be borne closely in mind that one is relating that number to the total population, whereas this should really be done to the number of persons who are in circumstances in which the possibility of asking the question is envisaged. However, the latter data (morbidity) are not available.

#### Request by the patient for active euthanasia, 1990

age	sex	disease	motive for the request
87	F	chronic non-specific lung disease and severe herpes zoster	pain, dyspnoea
86	M	chronic non-specific lung disease and emphysema	hopelessness, limited possibilities
86	M	carcinoma of the lung	could not take decline in condition
86	F	arthrosis, diverticulosis	does not want to go on, finds condition deteriorating
84	M	carcinoma of the lung	dyspnoea, fear
83	M	carcinoma of the prostate, arterial dementia	lacklustre
83	M	carcinoma of the colon	complete obstruction of the intestinal passage
83	F	not applicable	fear of dementia
82	M	carcinoma of the pancreas	loss of independence, decay
82	M	carcinoma of the colon	uterine abcess
82	F	not applicable	depression

Request by the patient for active euthanasia, 1990 (continuation)

age	sex	disease	motive for the request
82	F	carcinoma of the colon with pulmonary and cerebral metastases	fear of dyspnoea
79	F	inoperable recurrent carcinoma of the hypopharynx	dyspnoea, pain, complete dysphagia, threatening carotid blow-out
78	M	carcinoma of the bronchus	pain
78	F	carcinoma of the gall bladder	long duration
78	F	carcinoma of the ovary with peritonitis carcinomatosa	hopelessness, pain, dyspnoea
77	M	carcinoma of the colon	pain, growth through abdominal wall with abscess formation
77	M	carcinoma of the bladder with metastasis	lacklustre
76	M	carcinoma of the oropharynx	pain, dyspnoea
75	M	carcinoma of the prostate with metastasis	lacklustre
74	M	carcinoma of the stomach	not being able to eat, pain
74	M	carcinoma of the pancreas head	pain, general cachexia
73	F	carcinoma of the endometrium	pain, vomiting
73	F	carcinoma of the colon	unbearable pain, unavoidable
72	F	carcinoma of the lung	pain
70	M	non-Hodgkin's lymphoma	lacklustre, no further treatment possible
70	F	cerebro-vascular accident	decline, depression

## Request by the patient for active euthanasia, 1990 (continuation)

age	sex	disease	motive for the request
69	M	not applicable	precautionary measure
69	M	carcinoma of the colon	pain, decay
68	M	carcinoma of the lung	pain, exhaustion
67	M	hypernephroma	pain
67	M	carcinoma of the kidney	pain
65	F	metastasized carcinoma of the stomach	fear of pain and suffering
62	M	carcinoma of the lung	lacklustre, does not want to experience this
62	M	oat-cell carcinoma	pain, dyspnoea
59	M	carcinoma of the bronchus	pain, cerebral metastases
57	M	cerebral metastases from pulmonary tumour	fear of becoming lacklustre
56	F	hypokinetic rigid syndrome	rapidly progressive dementia
53	F	carcinoma of the lung	fear of pain and dyspnoea
52	M	astrocytoma grade IV	pain, general decay
52	F	adenocarcinoma with metastases in liver and abdomen, primary tumour unknown	vomiting, pain
51	M	carcinoma of the parotid gland; cerebral metastases	pain, vomiting
34	M	carcinoma of the stomach	general cachexia, pain
32	M	Hodgkin's disease	fear of agony
31	F	cerebro-pontile atrophy	progressive neurological decubitus

The investigation has been continued in 1991

## GENERAL REMARKS

1. The weekly return for 1991 has been compiled as follows by the Counselling Committee.
  - a. Influenza(-like illness)
  - b. Referral for logopedics
  - c. Cervical smear
  - d. Myocardial infarction, suspected/confirmed
  - e. Sterilization of the man performed
  - f. Sterilization of the woman performed
  - g. Morning-after pill prescribed
  - h. Diabetes mellitus
  - i. (Attempted) suicide
  - j. Acute unusual headache
  - k. Pregnancy despite contraception
  - l. Out-patient or clinical mammography
  - m. Concern about AIDS
  - n. Mononucleosis infectiosa
2. The incidental investigations for 1991 relate to the subjects euthanasia and Lyme disease.
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**

**Survey as per 1 July 1991.**

- BARTELDS, A.I.M., J. FRACHEBOUD, J. VAN DER ZEE. The Dutch Sentinel Practice Network; relevance for public health policy. Utrecht: Nivel, 1989
- BARTELDS, A.I.M. Continue Morbiditeits Registratie Peilstations, Nederland, 1987. Huisarts en Wetenschap; 1990, 33, 1990, no. 2 p. 74-77
- BARTELDS, A.I.M. Continue Morbiditeits Registratie Peilstations, Nederland, 1985. Huisarts en Wetenschap; 1987, 30, 1987, no. 7, p. 222-226
- BARTELDS, A.I.M. Continue Morbiditeits Registratie Peilstations, Nederland, 1986. Huisarts en Wetenschap; 1989, 32, 1989, no. 10, p. 392-394
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- CASTEREN, V. van, A. Bartelds, e.a. Prescription of H.I.V.-test by Sentinel networks of practitioners in various European countries. Poster presentation for the VIIth International Conference on AIDS. Florence 16-21 Juni, 1991
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- COLLETTE, H.J.A. The Sentinel Practices System in the Netherlands. In: Environmental Epidemiology, P. E. Leaverton (ed) New York: Praeger Special Studies, 1982
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- EGMOND, M. VAN, R.F.W. DIEKSTRA, A.C. DE GRAAF. Suicidepogingen onder patienten in de huisartspraktijk 1979-1984. *Tijdschrift voor Sociale Gezondheidszorg*; 64, 1986, no. 24, p. 777-783
- EGMOND, M. VAN. De beoordeling van suiciderisico door de huisarts. Kan de huisarts suicidepogingen voorkomen? Leiden: Rijksuniversiteit, 1988. Dissertatie (Hoofdstuk 1)
- EPIDEMIOLOGIE van Suicidepogingen: de naald in de hooiberg: *Tijdschrift voor Sociale Geneeskunde*; 60, 1982, no. 19, p. 549-550 Discussie
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## Appendix 1

### Continuous Morbidity Registration, Sentinel Stations Participating General Practitioners in 1990

Name:	Residence:	Province:
A.A.E.E. Brockmöller	'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 Gysel/Mw. J.Kappert (group practice)	Assen	Drenthe
H.E. Maillette de Buy Wenniger*)	Schoonoord	Drenthe
H. Nap*)	Gramsbergen	Overijssel
Th.J. van Dam/P.P.A. Kemps (group practice)	Swifterbant	Flevoland
E.J. van Apeldoorn	Heerde	Gelderland
S. Rijpma*)	Laren	Gelderland
D.G. de Jong	Barneveld	Gelderland
J.H. de Boer/J. van Noort (group practice)	Zelhem	Gelderland
B.G.W.M. Arts	Nijmegen	Gelderland
M.A.J. Janssen	Nijmegen	Gelderland
Ms. I.K.I. de Jongh-Killian/ F.K.A. Fokkema (group practice)	Amersfoort	Utrecht
P.J. Kromeich/J.J. Dijkstra (group practice)	Utrecht	Utrecht
W.J. van Bodegom*)	Linschoten	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
Ms. Y.E.V. van Hazel	Amsterdam	Noord-Holland

## Appendix 1 (continuation)

### Participating General Practitioners in 1990

Name:	Residence:	Province:
Ms. A.J. Arbouw/H.O. Sigling/ E.A. Reijnders (group practice)	Amstelveen	Noord-Holland
J.Th. Koop	Amstelveen	Noord-Holland
J. Hoornweg/E. Hoornweg- Sleeboom/J. Schinkelshoek (from 1-1-'90)(group practice)	Voorhout	Zuid-Holland
A.M. van Meurs	The Hague	Zuid-Holland
R. Kanters	The Hague	Zuid-Holland
J.C.B.M. Rensing	The Hague	Zuid-Holland
B.J.M. Aulbers/(to 30-06-'90)/ J.E.G. Nieuwkamer (group practice)	Delft	Zuid-Holland
D. Pasman/M. Draaisma(to 1-10-'90)		
Mw. M.J. van Walsum(from 1-10-'90) (group practice)	Maassluis	Zuid-Holland
F.L. Reynders	Rotterdam	Zuid-Holland
G. Dorrenboom	Rotterdam	Zuid-Holland
G. van Gangelen	Sliedrecht	Zuid-Holland
A. Lagendijk	Dordrecht	Zuid-Holland
R.R. Lankhorst	Middelburg	Zeeland
P.R.L. Vercauteren/H.J.W.A. Meijerink (group practice)	Terneuzen	Zeeland
A.F.A. van der Reepe/ W.L.M. Rijnders(group practice)	Etten	Noord-Brabant
A.M.H.J.G. Sluyters/J.A.M. Keulers (group practice)	Ravenstein	Noord-Brabant
S.H.H.M. van der Meer	Rosmalen	Noord-Brabant
J.P.C. Moors	Rosmalen	Noord-Brabant
A. Hoevenaars	Uden	Noord-Brabant
A.P.M. Linsen	Oirschot	Noord-Brabant
S.P.F. van Rijn	Eindhoven	Noord-Brabant
R.A.M. de Jong	Maastricht	Limburg

\*) With dispensary



### Appendix 3a

Subjects on the weekly returns in alphabetical order 1970-1991

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subjects

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abortion (spontaneous)	1982-1983
abortion (request)	1970-1975
abortus provocatus	1971-1979
accidents	1971
accidents in the private sector	1981-1983
acute unusual headache	1988-1991
admission of psychiatric patient	1988
AIDS (concern about)	1988-1991
alcoholism	1975
anti-hypertensivum or diuretic (prescription)	1976
battered child syndrome (suspicion of)	1973-1974
bites by pets	1986
burns	1988-1989
cervical smear	1976-1991
cerebrovascular accident	1986-1987
dementia	1987-1988
depression	1983-1985
diabetes mellitus	1980-1983 and 1990-1991
diarrhoea e causa ignota (acute)	1970
discharged psychiatric patient	1986-1988
dog bites	1987
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
hay fever	1978-1982
influenza (-like illness)	1970-1991
malignancies	1984-1986
mammography	1988-1991
measles	1975-1979

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Subjects on the weekly returns in alphabetical order 1970-1991 (continuation)

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subjects

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measles/mumps	1990
mononucleosis infectiosa	1977-1979 and 1991
morning-after pill (prescription)	1972-1991
musculo-skeletal system (trauma of)	1984
myocardial infarction (suspicion of)	1978 and 1983-1985 and 1991
otitis media acuta	1971 and 1986
out-patient or clinical mammography	1988
Parkinson's disease	1980-1985
partus immaturus	1982-1983
partus at gravidity $\leq 28$ weeks	1982-1983
penicillin (prescription and side effects)	1982-1983
pregnancy (despite contraception)	1987-1991
prescription of Rohypnol	1987-1988
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
skull traumas in traffic	1975-1977
smoking (consultation with regard to addiction)	1974
sport traumas	1979-1983
sterilization of the man performed	1972-1991
sterilization of the woman performed	1974-1991
suicide (attempted)	1970-1972 and 1979-1991
tonsillectomy or adenotomy	1971
tranquillizer (prescription)	1972-1974
ulcus ventriculi/duodeni	1975
ulcus pepticum	1985-1986
urinary tract infection (prescription of medicine)	1977

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## Appendix 3b

Incidental investigations and other extra investigations, 1977-1990 (alphabetical)

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subjects

---

alternative forms of treatment (registration feasible?)	1980
anorexia nervosa and boulimia	1985-1989
euthanasia (request for application)	1977-1991
incest	1988
Lyme disease	1991
malignancies	1982-1983
mastitis puerperalis	1982
multiple sclerosis	1977-1982
serum collection	1980 and 1985
regretting sterilization	1980-1984

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## Appendix 4

Age structure of the population of the Netherlands by sex, in thousands, 1 January 1989 (C.B.S.)

age	men	women	total*
0- 4	473	454	927
5- 9	454	434	888
10-14	461	440	901
15-19	565	542	1 107
20-24	645	619	1 264
25-29	660	631	1 291
30-34	617	594	1 211
35-39	585	561	1 146
40-44	603	573	1 176
45-49	462	437	899
50-54	395	384	779
55-59	361	368	729
60-64	318	351	669
65-69	284	345	629
70-74	198	270	468
75-79	145	236	381
80-84	82	168	250
≥ 84	50	128	178
total	7 358	7 535	14 893

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

**TABELLEN 1A-4E**



CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS

CUMULATIEF ALLE PEILSTATIONS GESTANDARDEISEERD

ALLE PEILSTATIONS

JAAR: 1990

WEEK: 01 T/M 52

LEEF TIJDS-  
GROEP

POPULATIE

VERWIJZING LOGOPEDIE

STERILISATIE

M.A.P.I.L

	M	V	T	M	V	T	M	V	T	M	V	T	V
<1 JR	300	312	612	0	0	0	0	0	0	0	0	0	0
1-4 JR	3064	3018	6082	91	60	76	0	0	0	0	0	0	0
5-9 JR	3683	3767	7650	232	127	180	0	0	0	0	0	0	0
10-14 JR	3785	3967	7752	48	40	44	0	0	0	0	0	13	0
15-19 JR	4744	4796	9540	17	8	13	0	0	0	0	0	113	0
20-24 JR	5520	5434	10954	9	18	14	2	2	2	2	2	138	0
25-29 JR	5679	5753	11632	9	10	9	15	19	17	17	17	85	0
30-34 JR	5294	5195	10489	21	10	15	15	98	64	81	39	47	0
35-39 JR	4861	4695	9756	8	10	9	175	92	133	47	24	0	0
40-44 JR	5104	4997	10101	4	6	5	96	54	75	24	13	0	0
45-49 JR	3886	3868	7754	8	10	9	49	18	34	13	0	0	0
50-54 JR	3423	3335	6758	3	3	3	9	0	4	0	0	0	0
55-59 JR	3241	3223	6464	12	0	6	0	0	0	0	0	0	0
60-64 JR	2721	3059	5780	0	10	5	0	0	0	0	0	0	0
65-69 JR	2547	2874	5421	0	17	9	0	0	0	0	0	0	0
70-74 JR	1768	2278	4046	17	22	20	0	0	0	0	0	0	0
75-79 JR	1277	1947	3224	16	21	19	0	0	0	0	0	0	0
80-84 JR	726	1357	2083	0	7	5	0	0	0	0	0	0	0
>85 JR	517	1088	1605	0	9	6	0	0	0	0	0	0	0
TOTAAL	62540	65163	127703	29	21	25	35	19	27	37	0	0	0

	M			V			T			M			V			T			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 JR	300	312	612	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-4 JR	3064	3018	6082	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-9 JR	3893	3767	7660	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
10-14 JR	3785	3967	7752	5	0	3	13	5	9	0	0	0	0	0	0	0	0	0	0	0
15-19 JR	4744	4796	9540	2	4	3	15	8	12	0	0	0	0	0	0	0	0	0	0	0
20-24 JR	5520	5434	10954	5	2	4	13	11	12	2	0	0	0	0	0	0	0	0	0	0
25-29 JR	5879	5753	11632	5	2	3	17	17	17	3	0	0	0	0	0	0	0	0	0	0
30-34 JR	5294	5195	10489	6	0	3	26	14	20	1	0	0	0	0	0	0	0	0	0	0
35-39 JR	4861	4895	9756	6	4	5	27	25	26	3	0	0	0	0	0	0	0	0	0	0
40-44 JR	5104	4997	10101	10	16	13	51	52	52	3	0	0	0	0	0	0	0	0	0	0
45-49 JR	3886	3868	7754	16	34	25	64	85	75	1	0	0	0	0	0	0	0	0	0	0
50-54 JR	3423	3335	6758	47	27	37	120	117	118	10	0	0	0	0	0	0	0	0	0	0
55-59 JR	3241	3223	6464	34	47	40	197	211	204	5	0	0	0	0	0	0	0	0	0	0
60-64 JR	2721	3059	5780	55	56	55	264	265	265	7	0	0	0	0	0	0	0	0	0	0
65-69 JR	2547	2874	5421	55	52	53	232	421	332	6	0	0	0	0	0	0	0	0	0	0
70-74 JR	1768	2278	4046	85	92	89	515	545	532	17	0	0	0	0	0	0	0	0	0	0
75-79 JR	1277	1947	3224	165	82	115	510	637	566	31	0	0	0	0	0	0	0	0	0	0
80-84 JR	726	1357	2083	97	103	101	483	530	514	19	0	0	0	0	0	0	0	0	0	0
>85 JR	517	1088	1605	97	65	75	348	553	486	37	0	0	0	0	0	0	0	0	0	0
TOTAAL	62540	65163	127703	21	22	21	88	121	105	4	0	0	0	0	0	0	0	0	0	0

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS  
KUMULATIEF ALLE PEILSTATIONS GESTANDARDEERD  
JAAR: 1990  
HEEK: 01 T/M 52

ALLE PEILSTATIONS

LEEF TIJDS- GROEP POPULATIE  
SUICIDE ACUTE ONGEMENE HOOPDPIJNZWANGER HAZELEN/  
(POGING) ONDANKSBOF  
SUICIDE ACUTE ONGEMENE HOOPDPIJNZWANGER HAZELEN/  
(POGING) ONDANKS BOF

	M	V	T	M+V	M	V	T	V	M+V
<1 JR	300	312	612	0	0	0	0	0	0
1-4 JR	3064	3018	6082	0	0	0	0	0	16
5-9 JR	3883	3767	7650	0	0	0	0	0	2
10-14 JR	3785	3967	7752	1	0	0	0	0	3
15-19 JR	4744	4796	9540	5	0	0	0	0	1
20-24 JR	5520	5434	10954	4	2	0	1	11	0
25-29 JR	5879	5753	11632	5	0	0	0	12	0
30-34 JR	5294	5195	10489	5	0	2	1	19	1
35-39 JR	4861	4895	9756	6	0	0	0	14	0
40-44 JR	5104	4997	10101	9	2	2	2	4	0
45-49 JR	3866	3868	7734	9	3	3	3	0	0
50-54 JR	3423	3335	6758	9	0	6	3	0	0
55-59 JR	3241	3223	6464	11	6	3	5	0	0
60-64 JR	2721	3059	5780	4	7	0	4	0	0
65-69 JR	2547	2874	5421	2	0	4	2	0	0
70-74 JR	1768	2278	4046	10	6	0	3	0	0
75-79 JR	1277	1947	3224	0	0	0	0	0	0
80-84 JR	726	1387	2083	5	0	7	5	0	0
>85 JR	517	1088	1605	19	0	0	0	0	0
TOTAAL	62540	65153	127703	5	1	1	1	6	1

ALLE PEILSTATIONS

JAAR: 1990 WEEK: 01 T/M 52

LEEF TIJDS- GROEP POPULATIE (POLI)KLINISCHE MAMMOGRAFIE C.AIDS

1.1-89 1.1-89 HERHAL. HERHAL. C.AIDS  
1E MAAL 1E MAAL WEGENS PREVENT. PREVENT.

	M	V	T	V	V	V	V	V	MAY
<1 JR	300	312	612	0	0	0	0	0	0
1-4 JR	3064	3018	6082	0	0	0	0	0	0
5-9 JR	3883	3767	7650	0	0	0	0	1	1
10-14 JR	3785	3967	7752	0	0	0	0	0	0
15-19 JR	4744	4796	9540	13	2	2	0	9	9
20-24 JR	5520	5434	10954	24	4	2	0	37	37
25-29 JR	5879	5753	11632	56	12	12	0	52	52
30-34 JR	5294	5195	10489	94	10	12	2	31	31
35-39 JR	4861	4895	9756	159	27	20	10	28	28
40-44 JR	5104	4997	10101	190	40	18	28	15	15
45-49 JR	3886	3868	7754	160	29	18	18	10	10
50-54 JR	3423	3335	6758	159	45	27	15	6	6
55-59 JR	3241	3223	6464	115	59	12	22	8	8
60-64 JR	2721	3059	5780	82	33	10	29	3	3
65-69 JR	2547	2874	5421	56	10	14	4	7	7
70-74 JR	1768	2278	4046	57	26	0	0	2	2
75-79 JR	1277	1947	3224	26	0	0	0	0	0
80-84 JR	726	1357	2083	29	0	0	0	0	0
>85 JR	517	1088	1605	9	0	0	0	0	0
TOTAAL	62540	65163	127703	75	17	9	8	17	17



CONTINUE MORBIDITEITSREGISTRATIE-PEILSTATIONS  
PROVINCIEGROEP NAAR ZIEKTEBEELD-GESTANDAARDISEERD  
JAAR: 1990 WEEK: 01 T/M 52

PROVINCIE- GROEP	POPULATIE	"INFLU- CERVUITSTRIJKJE ENZA"											
		M	V	T	M+V	V	V	V	V	V	V	V	V
GR+FR+DR	10177	10395	20571	387	66	124	407	46	50	129			
OV+GLD+FLE	10991	11345	22249	284	89	151	342	80	86	100			
UTR+NH+ZH	26158	27872	54029	173	43	154	505	77	49	142			
ZLD+NB+LIM	15237	15501	30736	178	42	136	410	70	99	168			
TOTAAL	62563	65113	127585	227	55	145	439	71	68	139			

"INFLU- 1-1-88 1-1-88 1-1-88 HERHAL. HERHAL. HERHAL.  
ENZA" 1E MAAL 1E MAAL 1E MAAL WEGENS PREVENT PREVENT  
MEGENS PREV.H. PREV.V. H.A. VROUW

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS  
PROVINCIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD  
JAAR: 1990 WEEK: 01 T/M 52

PROVINCIE- GROEP	POPULATIE	VERWIJZING LOGOPEDIE												STERILISATIE		
		M	V	T	M	V	T	M	V	T	M	A.PIL	M	A.PIL		
GR+FR+DR	10177	10395	20571	13	12	12	27	24	25	25						
OV+GLD+FLE	10991	11345	22249	33	29	31	41	16	28	48						
UTR+NH+ZH	26158	27872	54029	27	19	23	36	22	28	41						
ZLD+NB+LIM	15237	15501	30736	44	28	36	37	14	26	32						
TOTAAL	62563	65113	127585	30	22	26	36	19	27	38						

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS  
 PROVINCIEGROEP NAAR ZIEKTEBEELD-GESTANDAARDISEERD  
 JAAR: 1990  
 WEEK: 01 T/M 52

BLAD 3  
 18-11-91

PROVINCIE- GROEP	POPULATIE	DIABETES MELLITUS			INCIDENTIE			PREVALENTIE			ACUTE ONTRESE- LING
		M	V	T	M	V	T	M	V	T	
GR+FR+DR	10177	10395	20571	26	14	20	77	87	82	6	
OV+GLD+FLE	10991	11345	22249	16	18	17	93	115	105	4	
UTR+NH+ZH	26158	27872	54029	20	25	22	98	126	113	4	
ZLD+NB+LIM	15237	15501	30736	24	25	24	80	148	114	6	
TOTAAL	62563	65113	127585	21	22	21	89	124	106	5	

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS  
 PROVINCIEGROEP NAAR ZIEKTEBEELD-GESTANDAARDISEERD  
 JAAR: 1990  
 WEEK: 01 T/M 52

BLAD 4  
 18-11-91

PROVINCIE- GROEP	POPULATIE	SUICIDE ACUTE ONGEMONE HOOFDPUNZWANGER MAZELEN/ (POGING)			SUICIDE ACUTE ONGEMONE HOOFDPUNZWANGER MAZELEN/ (POGING)			M+V	
		M	V	T	M	V	T		
GR+FR+DR	10177	10395	20871	5	0	0	0	5	2
OV+GLD+FLE	10991	11345	22249	6	3	3	3	4	0
UTR+NH+ZH	26158	27872	54029	4	1	1	1	9	1
ZLD+NB+LIM	15237	15501	30736	7	1	1	1	3	0
TOTAAL	62563	65113	127585	5	1	1	1	6	1

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS  
 PROVINCIEGROEP NAAR ZIEKTEBEELD-GESTANDAARDISEERD  
 JAAR: 1990 WEEK: 01 T/M 52

BLAD 5

18-11-91

PROVINCIE- GROEP POPULATIE (POLI)KLINISCHE MAMMOGRAFIE C.AIDS  
 1.1.89 - 1.1.89 HERHAL. HERHAL. HERHAL. HERHAL.  
 1E MAAL 1E MAAL 1E MAAL 1E MAAL  
 WEGENS PREVENT. WEGENS PREVENT. WEGENS PREVENT. WEGENS PREVENT.

	M	V	T	V	V	V	M+V
GR+FR+DR	10177	10396	20571	38	10	8	4 9
OV+GLD+FLE	10991	11346	22249	92	12	18	16 8
UTR+NH+ZH	26158	27872	54029	65	23	7	7 21
ZLD+NB+LIM	19237	19501	30736	111	16	10	6 22
TOTAAL	62563	65113	127585	76	17	10	8 17

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS  
 URBANISATIEGROEP NAAR ZIEKTEBEELD-GESTANDAARDISEERD

BLAD 1

18-11-91

JAAR: 1990 WEEK: 01 T/M 52

URBANISATIE- GROEP POPULATIE "INFLU- CERVIJUITSTRIJKJE ENZA"  
 "INFLU- 1.1.88 1.1.88 1.1.88 HERHAL. HERHAL. HERHAL.  
 1E MAAL 1E MAAL 1E MAAL 1E MAAL 1E MAAL  
 WEGENS PREVENT. WEGENS PREVENT. WEGENS PREVENT. WEGENS PREVENT. WEGENS PREVENT.  
 H.A. H.A. H.A. H.A. H.A.

	M	V	T	M+V	V	V	V	V
A1+A4	10257	10643	20899	246	60	162	352	43 89 103
B1-B3+C1-C4	38519	39718	78143	168	52	107	453	76 62 170
C5	13794	14759	28558	380	56	234	460	79 68 81
TOTAAL	62570	65120	127600	227	55	145	439	71 68 139

CONTINUE MORBIDITEITSREGISTRATIE-PEILSTATIONS  
 URBANISATIEGROEP NAAR ZIEKTEBEELD-BESTAANDARDEISEERD  
 JAAR: 1990 WEEK: 01 T/M 52

BLAD 2  
 18-11-91

URBANISATIE- GROEP	POPULATIE		VERWIJZING LOGOPEDIE		STERILISATIE		M.A.P.I.L			
	M	V	T	V	M	V	T	V		
A1+A4	10257	10643	20899	34	26	30	45	24	34	47
B1-B3+C1-C4	38519	39718	78143	23	19	21	35	16	25	32
C5	13794	14759	28558	46	26	36	30	25	27	45
TOTAAL	62570	65120	127600	30	22	26	36	19	27	38

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS  
 URBANISATIEGROEP NAAR ZIEKTEBEELD BESTAANDARDEISEERD

BLAD 3  
 18-11-91

JAAR: 1990 WEEK: 01 T/M 52

URBANISATIE- GROEP	POPULATIE		DIABETES MELLITUS		INCIDENTIE		PREVALENTIE		ACUTE ONTHREE- LINS	
	M	V	T	V	M	V	M	V	T	M+V
A1+A4	10257	10643	20899	13	14	13	52	72	62	2
B1-B3+C1-C4	38519	39718	78143	19	20	19	82	119	101	5
C5	13794	14759	28558	33	34	33	137	171	154	5
TOTAAL	62570	65120	127600	21	22	21	89	124	106	5

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS  
URBANISATIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD

JAAR: 1990 WEEK: 01 T/M 52

URBANISATIE- GROEP POPULATIE  
SUICIDE ACUTE ONGEWONE HOOFDPIJNZMANGER MAZELEN/  
(FOGING) ONDANKSBOF  
SUICIDE ACUTE ONGEWONE HOOFDPIJNZMANGER MAZELEN/  
(FOGING) ONDANKS BOF

URBANISATIE- GROEP	POPULATIE		SUICIDE ACUTE ONGEWONE HOOFDPIJNZMANGER MAZELEN/ (FOGING) ONDANKSBOF				SUICIDE ACUTE ONGEWONE HOOFDPIJNZMANGER MAZELEN/ (FOGING) ONDANKS BOF				
	M	V	T	M+V	M	V	T	M+V	M	V	M+V
A1+A4	10257	10643	20899	4	2	5	3	3	1		
B1-B3,C1-C4	38519	39718	78143	5	1	1	1	7	1		
C5	13794	14759	28558	7	1	1	1	6	1		
TOTAAL	62570	65120	127600	5	1	1	1	6	1		

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS  
URBANISATIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD

JAAR: 1990 WEEK: 01 T/M 52

URBANISATIE- GROEP POPULATIE  
(POLI)KLINISCHE MAMMOGRAFIE C.AIDS  
1.1.89 1.1.89 HERHAL. C.AIDS  
IE MAAL IE MAAL WEGENS WEGENS PREVENT. PREVENT.

URBANISATIE- GROEP	POPULATIE		(POLI)KLINISCHE MAMMOGRAFIE C.AIDS				1.1.89 1.1.89 HERHAL. C.AIDS IE MAAL IE MAAL WEGENS WEGENS PREVENT. PREVENT.			
	M	V	T	M	V	M+V	M	V	M+V	
A1+A4	10257	10643	20899	90	14	24	19	4		
B1-B3,C1-C4	38519	39718	78143	69	19	7	6	16		
C5	13794	14759	28558	85	16	7	3	30		
TOTAAL	62570	65120	127600	76	17	10	8	17		

## FOOTNOTES

1. Typology of the Dutch municipalities by degree of urbanization, 1-1-1971 (Central Bureau of Statistics).
2. Figures from the registration of professions in primary health care, Jan. 1989, p. 32, Table 10. Published by NIVEL, Utrecht.
3. The tables indicated only by figures are text tables. The tables indicated by a combination of a figure and a letter are included in the appendices together with the figures at the back of the text. In the discussion of the various topics the latter tables are not repeatedly cited.
4. 1-1-1990, Central Bureau of Statistics. Persons who are entered in the central register of vital statistics have been left out of consideration.
5. Practice census 1989.
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).
8. Here and elsewhere in the text incidence or frequency means the frequency per 10 000 inhabitants (either men or women).

9. The calculations made in this chapter have been performed by Dr E. Ketting, now employed by the Netherlands Institute for Socio-Sexological Research
10. Wibaut, p. De onbetrouwbaarheid van de alternatieve morning-after pil, Huisarts en Wetenschap, 1986, p. 306-307.
11. 1. Rademakers J., Ketting E. Hoe betrouwbaar is de 'alternatieve' 22x2 morning-after pil? Medisch Contact 1987; 42: p. 89-92  
2. Santen M.R. van, Haspels A.A. Ingezonden. Medisch Contact 1987; 42: p. 230.  
3. De 2x2-morning-after pil: een verantwoord alternatief? Gen.Bul. 1987 21: p. 47-49.
12. Stuurgroep Toekomstscenario's Gezondheidszorg: Chronische ziekten in het jaar 2005. Deel 1 Scenario's over Diabetes Mellitus 1990-2005. Utrecht, Bohn, Scheltema en Holkema, 1990.
13. Warning Headache in Aneurysmal Subarachnoid Hemorrhage. Robert D. Verweij M.D.: Eelco F.M. Wijdicks M.D.; Jan van Gijn M.D., Arch Neurologica Vol 45, Sept. 1988
14. Onderzoek Gezinsvorming C.B.S. Beets, G.C.N. Geboorteregeling in Nederland, 1982 en 1988, Maandstatistiek van de Bevolking, 37 (1989), 1: 21-27.
15. Vennix, P., De Pil en haar alternatieven. (NISSO-studies nr.6) Ebuton, Delft, 1990.
16. De Koning H.J., Van Ineveld B.M. Van Ootmarsum G.J. De kosten en effecten van bevolkingsonderzoek naar borstkanker. Rotterdam: Instituut Maatschappelijke Gezondheidszorg, 1990.
17. Moons, M.A.W., L. Peters in Huisarts en vragen over AIDS. M.C.; 45, 1990, no 35, p. 1055-1057
18. National Committee for AIDS control, AIDS info line, annual report. 1988-989, Amsterdam 1991.

19. Van Casteren, V., Bartelds, A. e.a. Prescription of H.I.V.-test bij sentinel networks of general practitioners in various European countries. Poster presentation for the VII th International Conference on AIDS, Florence 16-21 Juni 1991.
20. Van Casteren, V., Leurquin, P. Eurosentinel. Concerted Action on Sentinel Health Information Systems with General Practitioners. Instituut voor Hygiëne en Epidemiologie. Brussel, 1991.
21. R.F.W. Diekstra and M. van Egmond. Suicide and attempted suicide in general practice. In the Dutch Sentinel Practice Network; relevance for public health policy, p. 202. Nivel, Utrecht 1989.
22. A euthanasia declaration is a written request for euthanasia on certain conditions.
23. A.I.M. Bartelds. Requests for application of euthanasia. In the Dutch Sentinel Practice Network; relevance for public health policy, p. 259. Nivel, Utrecht 1989.



Explanatory notes pertaining to:

Bijlage 1

Bijlage

Continue morbiditeits registratie,  
peilstations

Deelnemende artsen

Naam

Plaats

Provincie

Comb.-praktijk

Apotheek-houdend

- Appendix
- Continuous morbidity registration,  
- sentinel stations
- Participating general practitioners
- Name
- Residence
- Province
- Group practice
- With dispensary

Bijlage 2

Bijlage

Weekstaat t.b.v. centrale  
registratie

Continue morbiditeits registratie,  
peilstations

Proj. no.

Week no.

Verslagjaar

Code peilstations

Rapport. dagen

- Appendix
- Weekly return for central  
registration
- Continuous morbidity registration,  
- sentinel stations
- Project number
- Number of the week
- Year under review
- Code number sentinel stations
- Number of days over which reporting  
took place
- Line number
- Age group
- Influenza (-like illness)
- Cervical smear
- Taken for the first time after 1-1-1988  
on the ground of
- Complaints/symptoms
- Purely preventive considerations
- General practitioner's initiative
- Woman's request
- Repeat examination
- Sterilization performed
- Referral for logopedocs
- Prescription of morning-after pill

Regel no.

Leeftijdsgroep

Influenza (-achtig ziektebeeld)

Cervixuitstrijkje

Na 1-1-1988 voor de eerste maal  
afgenomen op grond van

Klachten/symptomen

Louter preventieve overwegingen

Initiatief huisarts

Verzoek van de vrouw

Herhalingsonderzoek

Sterilisatie verricht

Verwijzing voor logopedie

Morning-after pil voorgeschreven

Diabetes Mellitus  
Suicide(pogingen)  
Acute ongewone hoofdpijn  
Zwangerschap (ondanks a.c.)

(Poli) klinische mammografie  
na 1-1-1989 voor eerste maal  
Klachten/symptomen  
Louter preventief  
Herhalingsonderzoek  
C.A.I.D.S.

Mazelen/bof

M

V

Weeknummer

Opgemaakt d.d.

Aantal dagen gerapporteerd

(zie voetnoot<sup>1</sup>)

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

- Diabetes Mellitus
- (Attempted) suicide
- Acute unusual headache
- Pregnancy despite adequate contraception
- mammography
- Taken for the first time after 1-1-1989
- Complaints/symptoms
- Purely preventive
- Repeat examination
- Concern about AIDS
- Measles/mumps
- Male
- Female
- Number of the week
- Completed on
- Number of days over which reporting took place
- (See footnote number<sup>1</sup>)
- 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.

- |  |   |
|--|---|
| <p>3. Betreft rapportering van vrouwen bij wie na 1-1-1988 om welke reden dan ook een cervixuitstrijkje heeft plaatsgevonden. Indien bij een vrouw na 1-1-1988 opnieuw een cervixuitstrijkje wordt gemaakt, dient dit altijd onder de subrubriek "herhalingsonderzoek" geboekt te worden (zie ook voetnoot 5).</p> <p>4. Bijvoorbeeld in het kader van pilcontrole</p> <p>5. Bijvoorbeeld wegens verdacht preparaat of wegens technische onvolkomenheden bij onderzoek vorig preparaat.</p> <p>6. S.v.p. apart formulier invullen en bij de weekstaat voegen Code patiënt .....</p> <p>7. Indien het een patient(e) betreft uit een van de leeftijdsgroepen, waarvan het vak gerasterd is, dan tevens exacte leeftijd hierachter vermelden.<br/>Leeftijd:.....</p> <p>8. Uitsluitend indien er een directe indicatie is. Indien een recept voor de morning-after pil wordt afgegeven omdat de betrokkene bijvoorbeeld met vakantie naar het buitenland gaat, dient dit niet te worden gerapporteerd. (Zie ook voetnoot 7).<br/>Naam van de pil:.....</p> | <p>3. Concerns reporting of women on whom a cervical smear was taken after 1-1-1988 for whatsoever reason. If a cervical smear was taken again of a women after 1-1-1988 this should always be entered under the subheading "Repeat examination" (see also footnote 5).</p> <p>4. For example as part of check-up for the pill.</p> <p>5. For example on account of suspect preparation or technical imperfections in the examination of the previous preparation.</p> <p>6. For the supplementary data please complete and attach to the weekly return. Code patient .....</p> <p>7. If a patient is concerned in one of the age groups whose box is filled in, also give the exact here.<br/>Age:.....</p> <p>8. Solely if there is a direct indication. If a prescription for the morning-after pill is issued because the patient is for instance going on holiday abroad, this should not be reported. (See also footnote 7.)<br/>Name of the pill:.....</p> |
|--|---|

- |   |  |
|---|--|
| <p>9. S.v.p. apart formulier invullen en bij de weekstaat voegen.<br/>Code<br/>Geboortedatum.....<br/>Geslacht<br/>Incident<br/>Prevalent<br/>Acute ontregeling</p> | <p>9. Please complete a separate form and attach to the weekly return.<br/>Code<br/>Age: .....<br/>Male/female<br/>Incidence<br/>Prevalence<br/>Acute deregulation</p> |
| <p>10.S.v.p. apart formulier invullen en bij de weekstaat voegen.</p>   | <p>10.Please complete a separate form and attach to the weekly return.</p>   |
| <p>11.S.v.p. apart formulier invullen en bij de weekstaat voegen.</p>   | <p>11.Please complete a separate form and attach to the weekly return.</p>   |
| <p>12.S.v.p. apart formulier invullen en bij de weekstaat voegen.</p>   | <p>12.Please complete a separate form and attach to the weekly return.</p>   |
| <p>13.S.v.p. apart formulier invullen en bij de weekstaat voegen.</p>   | <p>13.Please complete a separate form and attach to the weekly return.</p>   |
| <p>14.S.v.p. apart formulier invullen en bij de weekstaat voegen.</p>   | <p>14.Please complete a separate form and attach to the weekly return.</p>   |

Tables (p. 150 - p. 159)

- |   |  |
|---|--|
| <p>Continue morbiditeits registratie peilstations</p> | <p>- Continuous morbidity registration sentinel stations</p> |
| <p>Kwartaal</p>                                       | <p>- Quarter</p>   |
| <p>Leeftijdsgroep</p>                                 | <p>- Age group</p>   |
| <p>Influenza (-achtig ziektebeeld)</p>                | <p>- Influenza (-like illness)</p>                           |
| <p>Cervixuitstrijkje</p>                              | <p>- Cervical smear</p>                                      |
| <p>Klacht/symptoom</p>                                | <p>- Complaint/symptom</p>                                   |
| <p>Initiatief huisarts</p>                            | <p>- General practitioner's initiative</p>                   |
| <p>Verzoek vrouw</p>                                  | <p>- Woman's request</p>                                     |
| <p>Herhalingsonderzoek</p>                            | <p>- Repeat smear</p>  |
| <p>Verwijzing voor logopedie</p>                      | <p>- Referral voor logopedics</p>                            |
| <p>Sterilisatie verricht</p>                          | <p>- Sterilization performed</p>                             |
| <p>Morning-after pil voorgeschreven</p>               | <p>- Morning-after pill prescribed</p>                       |
| <p>Diabetes Mellitus</p>                              | <p>- Diabetes Mellitus</p>                                   |
| <p>Suicide(pogingen)</p>                              | <p>- (Attempted) suicide</p>                                 |
| <p>Acute ongewone hoofdpijn</p>                       | <p>- Acute unusual headache</p>                              |

Zwangerschap (ondanks a.c.)

(poli) klinische mammografie

Klachten/symptomen

Louter preventief

Herhalingsonderzoek

C.A.I.D.S.

M

V

Provinciegroepen

Gr + Fr = Dr

Ov + Gld + Fl

Utr + NH + ZH

Zld + NB + Lim

Urbanisatiegroepen

A<sub>1</sub> - A<sub>4</sub>

B<sub>1</sub> - B<sub>3</sub> + C<sub>1</sub> - C<sub>4</sub>

C<sub>5</sub>

Voetnoot

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

- Pregnancy despite adequate contraception

- (Clinical) mammography

- Complaints/symptoms

- Purely preventive

- Repeat examination

- Concern about AIDS

- Male

- Female

- Province group

Groningen, Friesland, Drenthe

- Overijssel, Gelderland, Flevoland

- Utrecht, North Holland, South Holland

- Zeeland, North Brabant, Limburg

- Urbanization groups

- Rural municipalities

- Municipalities with urban characteristics and urbanized municipalities

- Municipalities with a population of 100 000 or more

- Footnote

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





