continuous morbidity registration sentinel stations the netherlands

1991

Netherlands institute of primary health care
P.O.Box 1568 3500 BN Utrecht The Netherlands
Phone: ..-31 30 319946
Fax: ..31 30 319290

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FOREWORD

Continuous Morbidity Registration Sentinel Stations the Netherlands contributes to insight into the functioning of the general practitioner.

One of the tasks of the general practitioner is to perform research, or have research performed, into the early detection of threatening disorders. Examples of disorders that, if detected in time, are susceptible to good treatment are cervical and breast cancer.

In the past three years the spotter physicians, as part of the mass screening for cervical cancer, have clearly taken more smears than in the preceding years. The registration also shows that to an increasing extent the smears are taken from those women who, having regard to their age, most qualify for them. The registration from 1988 onwards of the number of mammograms requested by general practitioners also displays an increase.

The number of consultations in which AIDS is discussed with the general practitioner and the distribution thereof across the country has remained practically the same in the last three years. Only in the southern province groups is there an increase in these consultations.

Beneath the surface, not yet visible in the annual report, developments are going on that will help to determine the future of the Continuous Morbidity Registration Sentinel Stations. Discussions have started on the place of the Sentinel Stations in the future provision of information to policy-making bodies with representatives of the Ministry of Welfare, Public Health and Culture, of the Government Public Health Inspectorate and of the National Institute for Public Health and Environment al Protection (RIVM).

We are convinced that in the future too a need will exist for the information collected by the Sentinel Stations.

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

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. 5-8).
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. 119).
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. 14).
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. 120-121) 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 1991 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.
In 1991 joint registration took place of influenza(-like illnesses) and requests for blood tests for H.I.V. antibodies.
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 1991 the committee functioned in the following composition:

	F.K.A. Fokkema, M.D.[5]
	P. van Leeuwen, statistician[7]
	J.J.L. Pieters, M.D.[4] (from 1-1-'91)
	C.A. Postema, M.D.[4] (to 1-6-'91)
	Mr. R.W. Schaafsma,[1] (from 1-1-'91)
	H.O. Sigling, M.D.[5,6]
	W.A. van Veen, M.D.[1]
	J. van Wijngaarden, M.D.[4] (from 1-6-'91)
	J.J. Zandvliet[1] (to 1-1-'91)
	Prof. Dr J. van der Zee[3], chairman
Project leader:	A.I.M. Bartelds, M.D.
Secretaries:	Mrs E. Colet-van Woezik
	Mrs M. Heshusius-van Valen

This committee met twice in 1991. It had one vacancy in that year.

MEETING OF SPOTTER CO-WORKERS 1991

Contact between the registering physicians and their co-workers, the Counselling 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.

At the 1991 annual meeting three presentations were given. Mr K. van der Meer, general practitioner at Roden and scientific researcher in the Medicine of General Practice Department of the University of Groningen, discussed the definitive results of the registration of cerebro-vascular accidents and the follow-up thereof for one year. The results of this investigation are laid down in the publication 'Cerebrovasculaire aandoeningen gepeild' (Nivel, Utrecht, 1990). Mr van der Meer expressed his appreciation of the general practitioners and assistants of the sentinel stations for their painstaking work on this.
The course of affairs with regard to the current registration of diabetes mellitus was discussed by Mr D. Ruwaard, a physician with the Centre for Epidemiology of the National Institute for Public Health and Environment al Protection, Bilthoven. The first stocktaking of the data for 1990 gives the impression that the data are being supplied properly. The expectation that, compared with registration in 1980-1983, there is an increase in the incidence of diabetes mellitus seems confirmed.

The final guest-speaker was Mrs V. van Casteren, a physician with the Institute for Epidemiology and Hygiene in Brussels. She is the project leader of the Belgian Sentinel Practices and also the coordinator of Eurosentinel, the joint venture of sentinel station networks from a number of EC countries and Switzerland. She discussed the results of the joint registrations under Eurosentinel.

During the business part of the meeting the 1991 weekly return was discussed.

DISTRIBUTION OF THE SPOTTER PHYSICIANS OVER THE NETHERLANDS

Figure 1
SENTINEL STATIONS
Continuous Morbidity Registration
1991

The number of sentinel stations at the beginning of 1991 was 43. The number of general practitioners in the sentinel station practices is 63.

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

- A for the Groningen, Friesland and Drenthe province group (northern provinces);
- B for the Overijssel, Gelderland and Flevoland province group (eastern provinces);
- C for the Utrecht, North Holland and South Holland province group (western provinces);
- D for the Zeeland, North Brabant and Limburg province group (southern provinces);
- 1 for the A_1-A_4 urbanization group (rural municipalities)[1];
- 2 for the B_1-B_3, C_1-C_4 urbanization group (urbanized rural municipalities together with municipalities with urban characteristics);
- 3 for the C_5 urbanization group (municipalities with a population of 100 000 or more).

Appendix 1 (p. 117-118) gives a survey of the general practitioners who took part in the sentinel station project during 1991. In 14 sentinel stations there is cooperation between two or more general practitioners, viz 10 times 2, twice between 3 practitioners and twice between 4 practitioners. In January 1991 the percentage of general practitioners cooperating throughout the Netherlands was 46, 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 15% of the total number of spotter physicians. For the Netherlands as a whole this percentage is 11[2].

Tables 1 and 2 give a distribution of the number of spotter physicians and sentinel stations per province and urbanization group in the years 1982-1991. 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 1982-1991[3]

province group	A		B		C		D	
	Groningen, Friesland and Drenthe and		Overijssel, Gelderland 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
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
1991	10	6	10	8	29	19	14	10

Table 2: distribution of the spotter physicians (general practitioners) and sentinel stations per urbanization group in the years 1982-1991

urbanization group	1 rural municipalities		2 urbanized rural municipalities together with municipalities with urban characteristics		3 municipalities with a population of 100 000 or more		Netherlands	
	number of GPs	sentinel stations	number of GPs	sentinel stations	number of GPs	sentinel stations	number of GPs	sentinel stations
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
1991	10	6	39	25	14	12	63	43

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 1991 by 117 871 inhabitants (as per 1-1-1991).

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

			number of inhabitants of the Netherlands[4]	number of patients of sentinel stations[5] (with percentages)	
province group		A	1 598 127	22 774	(1.4%)
		B	3 064 765	24 410	(0.8%)
		C	6 669 376	65 610	(1.0%)
		D	3 676 342	33 823	(0.9%)
urbanization		1	1 652 815	22 727	(1.4%)
group		2	9 782 416	92 080	(0.9%)
		3	3 575 214	31 810	(0.9%)
sex	men		7 419 501	71 645	(1.0%)
	woman		7 590 944	74 972	(1.0%)
total			15 010 445	146 617	(0.9%)

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						Netherlands	
	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	0.7	0.9	0.9	0.7	0.7	1.0	1.1	0.8	0.8	0.8	0.9	0.8	0.8
5- 9	1.4	1.6	0.7	0.8	1.0	1.0	0.9	0.9	1.3	1.5	0.9	0.9	1.0	0.9	1.0	1.0
10-14	1.4	1.6	0.6	0.8	1.0	1.0	0.9	0.9	1.1	1.6	0.9	0.9	0.9	0.9	0.9	1.0
15-19	1.5	1.5	0.7	0.8	1.0	1.0	1.0	1.0	1.4	1.6	1.0	1.0	0.8	0.9	1.0	1.0
20-24	1.3	1.5	0.8	0.9	0.9	1.0	1.0	1.0	1.5	1.6	1.0	1.0	0.7	0.8	1.0	1.0
25-29	1.5	1.7	0.9	0.9	0.9	1.0	0.9	0.9	1.4	1.5	1.0	1.0	0.9	0.9	1.0	1.0
30-34	1.5	1.6	0.8	0.8	1.0	1.0	0.9	0.9	1.3	1.3	0.9	1.0	1.0	1.0	1.0	1.0
35-39	1.4	1.5	0.7	0.7	1.0	1.0	0.9	0.9	1.2	1.4	0.9	0.9	1.0	0.9	0.9	1.0
40-44	1.4	1.5	0.7	0.7	0.9	0.9	0.9	0.9	1.4	1.4	0.9	0.9	0.8	0.9	0.9	1.0
45-49	1.3	1.4	0.8	0.8	0.9	1.0	0.9	0.9	1.3	1.4	0.9	0.9	0.8	0.9	0.9	1.0
50-54	1.4	1.4	0.8	0.8	1.0	0.9	0.9	1.0	1.3	1.4	0.9	0.9	0.8	0.9	1.0	1.0
55-59	1.3	1.2	0.9	0.9	1.0	1.0	1.0	1.0	1.5	1.4	1.0	1.0	0.9	0.9	1.0	1.0
60-64	1.2	1.3	0.8	0.8	1.0	1.0	0.9	1.0	1.4	1.4	0.9	1.0	0.9	0.9	1.0	1.0
65-69	1.4	1.3	0.9	0.8	1.1	1.0	0.9	0.8	1.6	1.4	1.0	0.9	1.0	0.9	1.0	1.2
70-74	1.4	1.3	0.9	0.7	1.0	1.0	1.4	0.9	1.4	1.3	1.0	0.9	0.9	0.8	1.1	1.0
75-79	1.3	1.3	1.0	0.8	0.9	0.9	1.4	0.9	1.4	1.3	1.0	0.9	0.8	0.8	1.0	1.3
80-84	1.3	1.4	1.1	0.7	0.9	0.9	1.4	1.0	1.4	1.3	1.0	0.9	0.8	0.8	1.0	1.2
≥ 85	1.4	1.3	1.3	0.8	1.1	0.9	1.8	1.0	1.8	1.3	1.0	0.9	1.1	0.9	1.2	1.0
total	1.4	1.4	0.8	0.8	1.0	1.0	1.3	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 1991 it was 11 180 (52 weeks x 5 days x 43 sentinel stations). Table 4 shows the absolute numbers and the percentages.

Table 4: maximum and actual number of reporting days per year.

year	maximum number of days which can be reported	actual number of absolute	reported days percentage
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%
1991	11 180	9 903	88 6%

The percentage of reporting days is practically the same in 1991 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, 87.5%, and the northern provinces the highest, 92%.

Per province group	Per urbanization group
A 92. %	1 92.7%
B 90 %	2 88.1%
C 86.6%	3 87.5%
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 25 (maximum 43 x 5= 215).

Figure 2
The number of days registered in 1991 per week.

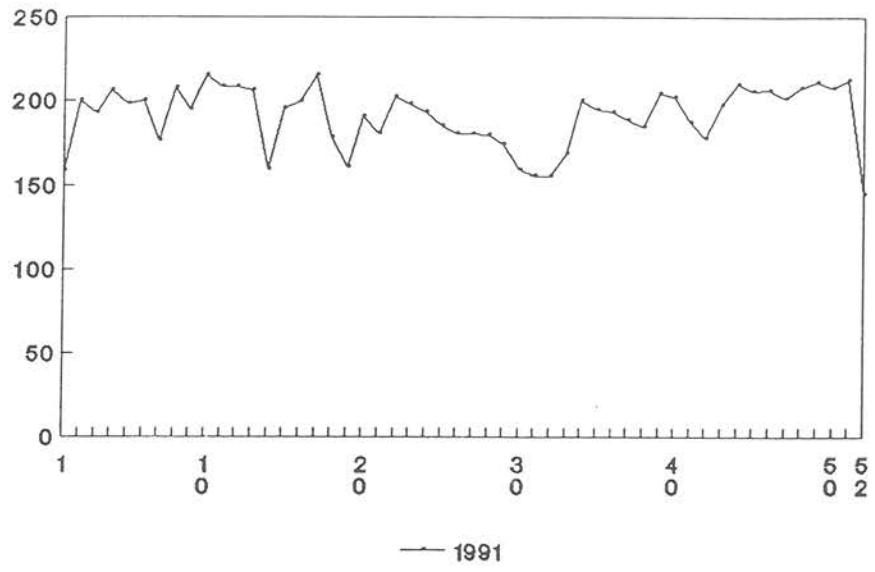


Table 5 presents the frequency distribution of the number of days not reported per sentinel station. The average number of non-reporting days per sentinel station in 1991 is 30, the same as in 1990.
A breakdown into single and group practices shows a clear difference here, viz 38 and 15 days respectively. This is in line with the frequent assertion that forms of cooperation of general practitioners increase the continuity of reporting.

Tabel 5: frequency distribution of the number of days not reported on per sentinel station

number of days not reported on	number of sentinel stations									
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
≤ 0	1	2	2	1	0	0	1	1	2	1
1- 9	9	7	6	8	7	4	7	6	5	7
10-19	2	5	3	1	4	7	2	6	5	3
20-29	6	1	7	8	7	1	5	5	6	11
30-39	15	12	9	10	10	5	15	15	11	10
40-49	10	14	17	15	13	16	13	9	10	9
50-59	3	4	1	2	2	10	2	2	2	1
60-69	0	1	1	0	1	1	0	1	1	0
70-79	0	0	0	0	0	0	0	0	1	0
80-89	0	0	0	0	0	0	0	0	1	0
90-99	0	0	0	0	0	0	0	0	0	0
≥ 100	0	0	0	0	1	0	0	0	0	1
total number of sentinel stations	46	46	46	45	45	44	45	45	44	43
average	29	31	31	30	31	37	27	29	32	29.7
median	34.5	37	35	34	34.5	43	34	32	33	29.5

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 5% of the sentinel stations in 1991. This is a lower percentage than in 1990.
In the major failure to report by one of the sentinel stations of more than 100 days illness of the spotter physician was involved.

THE WEEKLY RETURN (Appendix 2, p. 119)

The questions on the weekly return for 1991 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. Cervical smear (1976);
3. Myocardial infarction (1991);
4. Sterilization of the man performed (1972);
5. Sterilization of the woman performed (1974);
6. Prescription of morning-after pill (1972);
7. Pregnancy (despite adequate contraception) (1987);
8. Diabetes mellitus (1990);
9. (Attempted) suicide (1979);
10. Acute unusual headache (1988);
11. Out-patient and clinical mammography (1988);
12. Concern about AIDS (1988);
13. Mononucleosis infectiosa (1991).

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. 120-121) together with the years of registration.

PROCESSING OF THE DATA ON THE WEEKLY RETURN

This report contains the results of the weekly return for 1991. 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 123) the age structure as on 1 January 1991 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. 124-129):
Tables 1a, 1b, 1c and 1d: give the number of patients per 10 000 of the age group[6] .
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[7] 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 1990-1991 and 1991-1992

Figs. 3.1-3.3 give the number of new cases of influenza per 10 000 inhabitants per week for the Netherlands and by province and urbanization group for the 1990-1991 season[8]. Figs. 4.1-4.3 give the number of new cases of influenza for the 1991-1992 season. The progress of influenza in the first weeks of 1991 was already discussed in the 1990 report.

Figure 3.1
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, for the Netherlands, 1990-1991

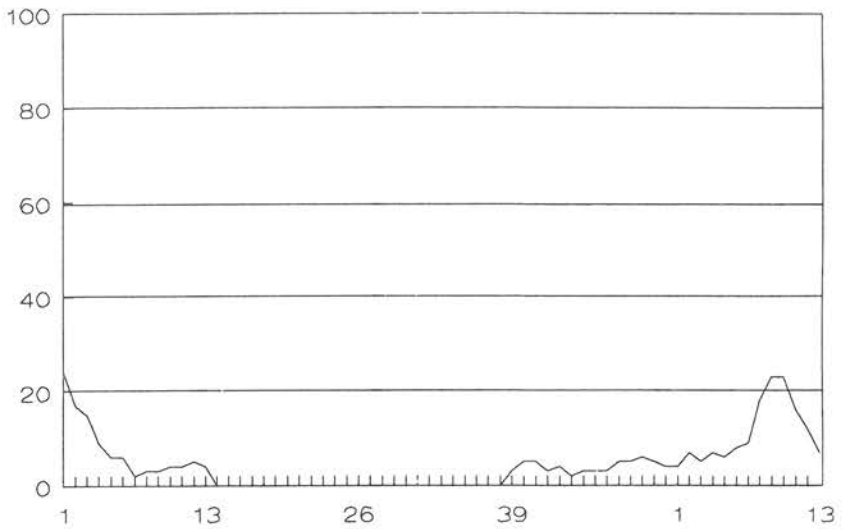


Figure 3.2
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per urbanization group,1990-1991

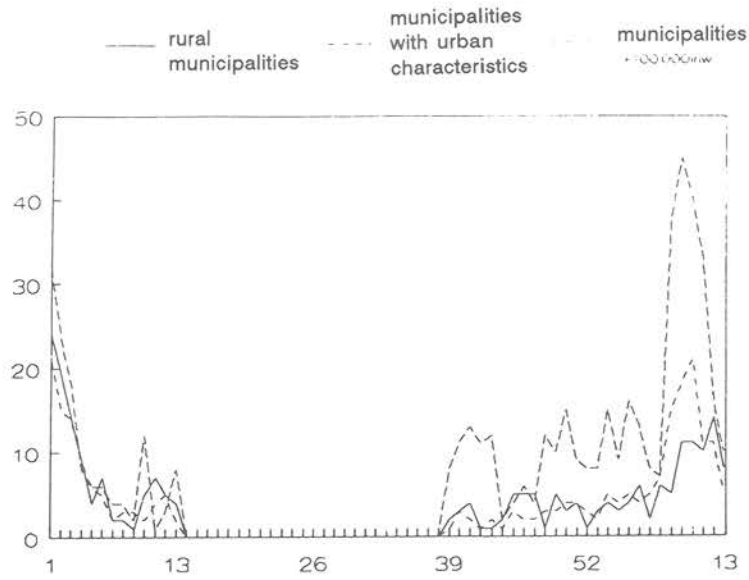


Figure 3.3
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per province group, 1990-1991

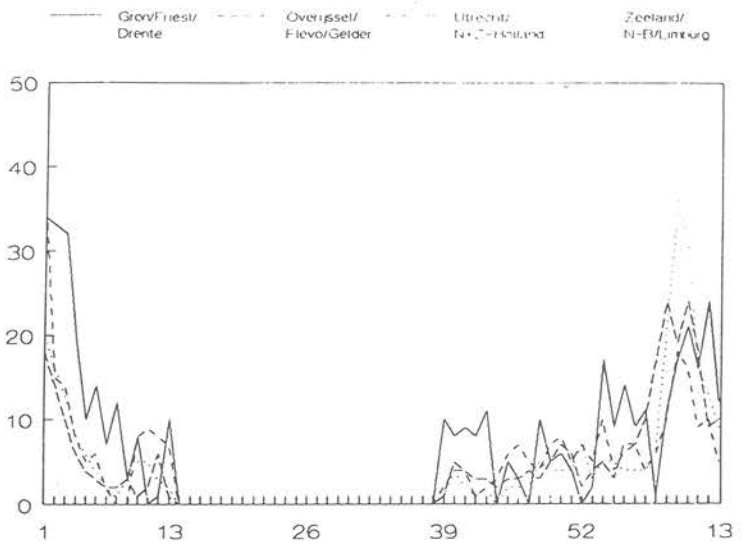


Figure 4.1
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, for the Netherlands, 1991-1992 (up to and including week 13)

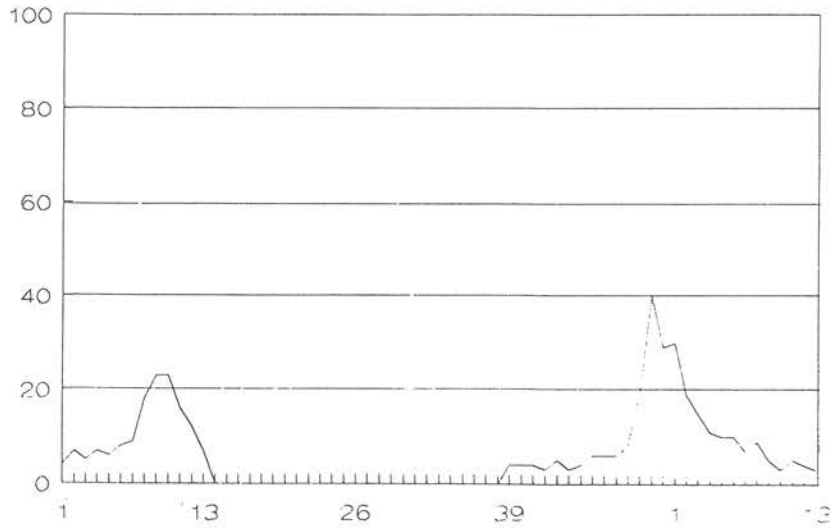


Figure 4.2
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per urbanization group, 1991-1992 (up to and including week 13)

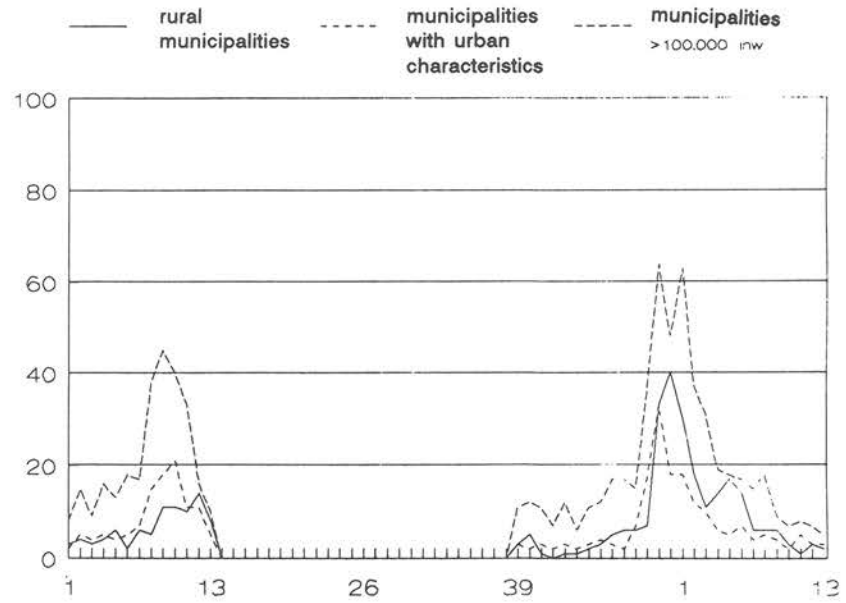
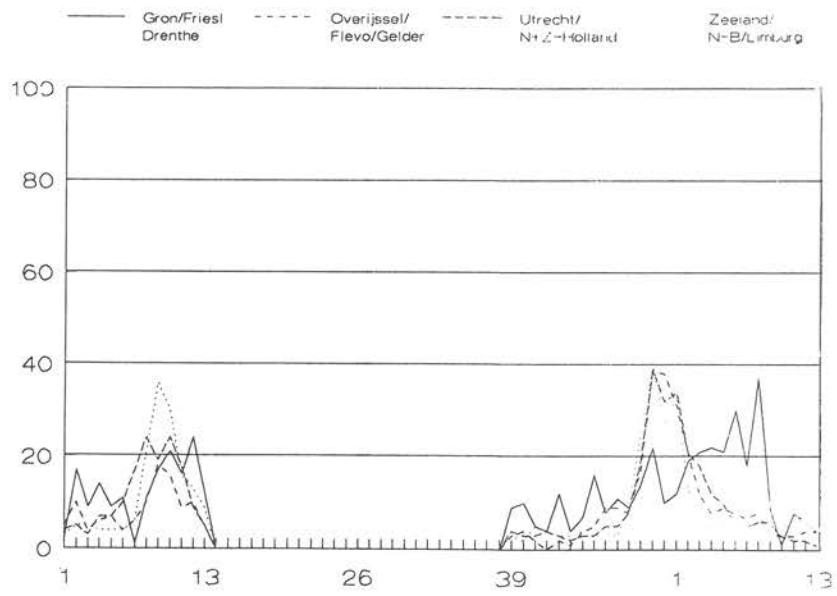


Figure 4.3
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per province group, 1991-1992 (up to and including week 13)



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_1N_1) was isolated. Influenza B viruses were also isolated.

1991-1992 season

In the 1991-1992 season influenza activity was observed for the first time in mid December. There was then a rapid increase in the number of reports in above all the cities and the western and southern provinces. The highest number was reached in week 52: 40 per 10 000 inhabitants. In week 5 of 1992 the number of reports fell to below 10 per 10 000 inhabitants.

In the cities considerably more patients with an influenza-like illness were

seen than in rural municipalities and in the smaller towns: approx. 80 per 10 000 as against approx. 20 per 10 000.
Influenza began this season in the cities in the west in mid December; in the rural municipalities in the northern provinces the much lower peak lay in mid January.

In December 1991 and at the beginning of January 1992 above all influenza A (H_3N_2) was isolated. In the second half of January the proportion of isolations of influenza A (H_1N_1) became larger.
From week 2 of 1992 a limited number of spotter physicians sent in nose/throat cultures for further examination by the RIVM (Virology Division, Dr J.C. de Jong).

Table 6: number of patients with influenza (-like illness), per 10 000 inhabitants, 1982-1991

year	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
total per calendar year	497	396	502	464	630	365	399	410	225	348	
highest weekly incidence per "season"	42	53	57	71	26	9	44	54	24		40

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.
At the end of 1991 there was again influenza activity around Christmas and New Year.

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.

NIVEL/RIVM pilot study for the virological surveillance of influenza-like illnesses

To supplement the clinical influenza surveillance by NIVEL expansion of the system with virological diagnostics is under consideration. In this connection a limited study was performed in the 1991/92 season into the functioning and the efficiency of such an expansion.

During a ten-week period, coinciding with the 'tail-end' of the 1991/92 influenza epidemic, 12 general practitioners of the NIVEL network took nose/throat smears from 43 patients with influenza-like illnesses. From 17 (40%) of these samples a virus was isolated, of which three influenza A (H_3N_2), seven influenza A (H_1N_1) and four RS viruses. On average the full result was known 10 days after the sample had been taken.

The surveillance system used is simple in nature, fits into existing structures and is highly efficient. It seems very sensitive for the detection and etiological characterization of influenza activities among the population. If the number of samples submitted is considerably expanded, a virological surveillance of other respiratory viral infections comes into sight.

In addition to the topical significance during an influenza epidemic, the tested system can by means of the submission forms used possibly also make a contribution to the symptomatology and the clinical diagnostics of respiratory viral infections.

This topic is to be maintained on the weekly return.

1991-1992 Influenza season in Western Europe

From the end of September 1991 data on influenza(-like illnesses) have been passed on weekly by 12 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

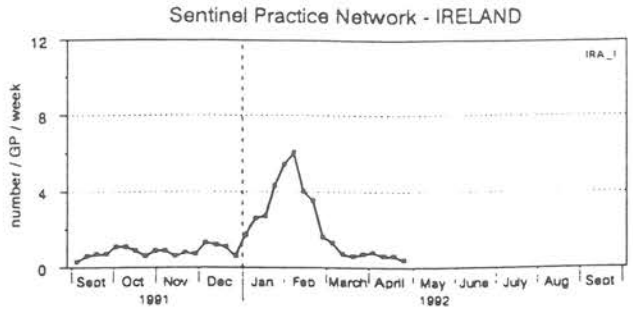
Name of network	Country
Médicins vigies/Peilpraktijken	Belgium
GROGs (Group Régionaux d'Observation de la Grippe)	253 GPs 51 pediatricians France
RNTMT (Réseau National Télématique de Surveillance et d'Information sur les Maladies Transmissibles)	France
Sentinel Practice Network	Ireland
Peilstations	Netherlands
Sistema de Vigilancia por Medicos Sentinela	Portugal
Medicos Centinela	Spain-Basque Country
Red de Medicos Centinelas	Spain-Madrid Region
Sentinella	Switzerland
Weekly Returns Service	United Kingdom
GP Surveillance of Infections in Wales	United Kingdom
ARD Morbidity	Czechoslovakia

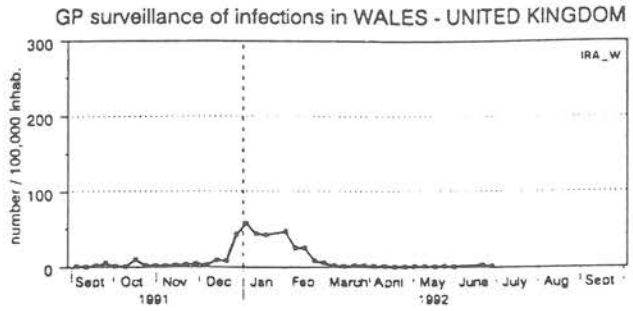
Most of these networks collect the data with the aid of a weekly return. The French RNTMT network uses electronic data communication; in the French GROGs network the physicians are approached by telephone every week for passing on the data.
The latter approach, asking the spotter physicians by telephone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

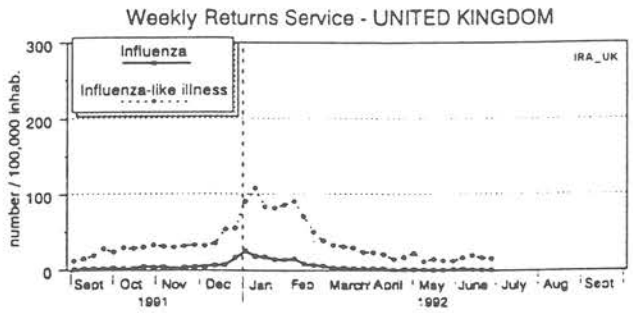
In general an influenza(-like illness) is reported when there is: a sudden start of the complaints, fever, myalgia, coughing and other symptoms of an infection of the upper respiratory tract.

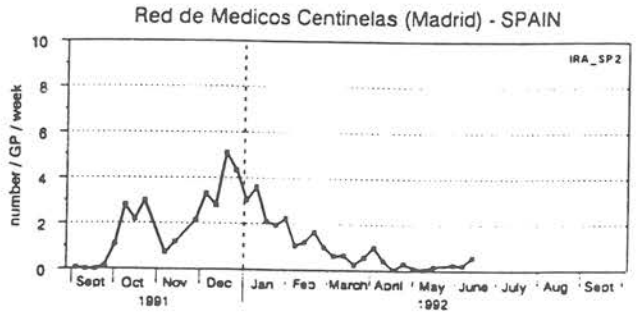
The coordinators of the network report weekly by telephone, fax or post to the Central Facility. The staff of Eurosentinel in Brussels process these data into graphs and a survey of all updated graphs is sent every week to the coordinators. In the case of a sudden or sharp increase in the number of reports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

The survey over the period September 1991 - Maart 1992 of the joint registration within Eurosentinel appears in Figure 5.

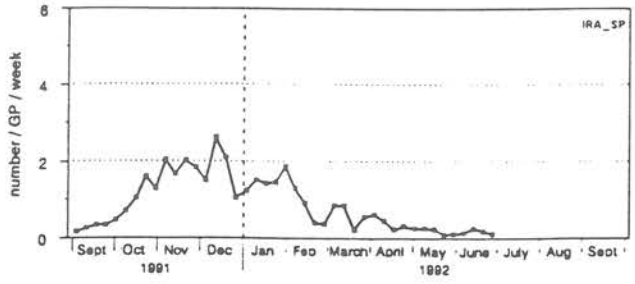




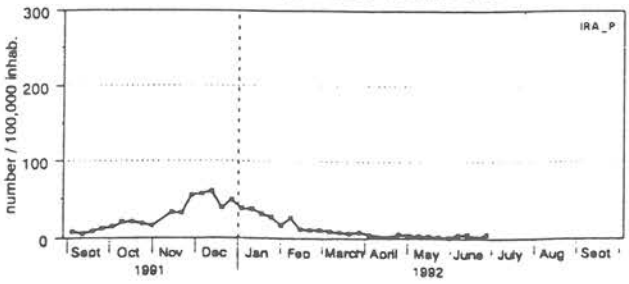




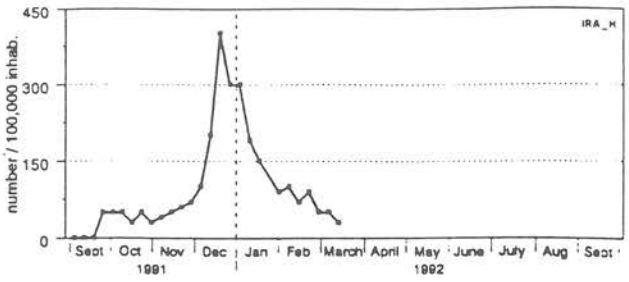
Sistema de Vigilancia por Medicos Centinela - BASQUE REGION



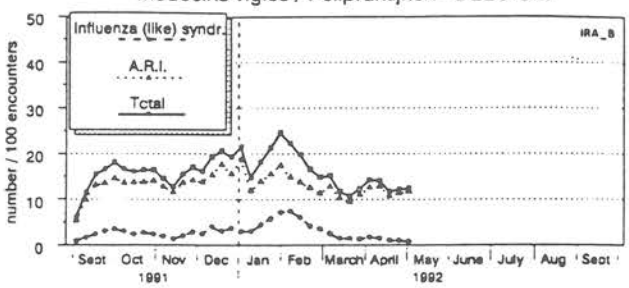
Medicos Sentinela - PORTUGAL

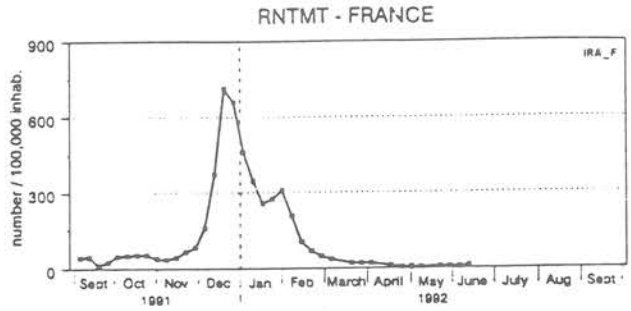


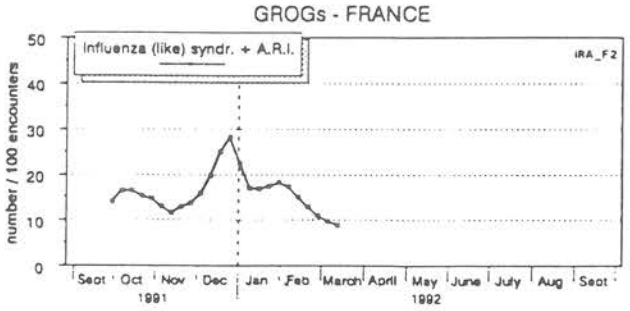
Sentinel Stations - THE NETHERLANDS

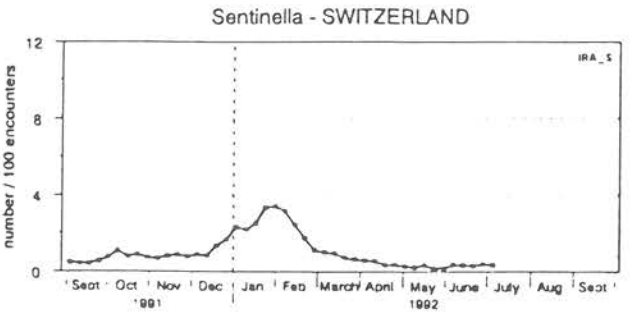


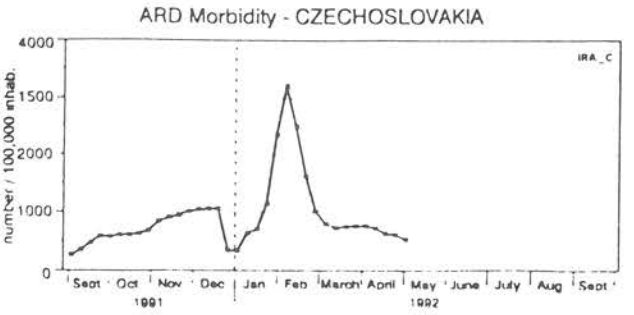
Médecins vigies / Peilpraktijken - BELGIUM











This registration will be continued in the 1992-1993 season.

CERVICAL SMEAR

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

The question is subdivided into the indication for taking a cervical smear, i.e. following complaints and/or symptoms, on 'preventive' grounds at the initiative of the spotter physician or the woman, and a separate column in the case of a repeat smear, irrespective of the indication for taking the previous smear. Three years has been adhered to as the period within which a second or following smear has to be reported as a repeat smear. For 1991 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 1989. 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 1991 in 38 of the 43 sentinel stations. In 1988 mass screening was a fact in only 22 of the 45 sentinel stations.

In Table 8 the total number of smears taken has been subdivided by indication for taking the smear, including the repeat smears.

Table 8: number of smears taken by spotter physicians by indication for taking a smear, per 10 000 women, 1982-1991

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
complaints and/or symptoms	57	65	57	62	65	59	76	72	55	73
"preventive"	297	294	336	324	398	345	369	521	577	537
repeat smear	170	168	182	184	170	211	246	237	273	239
total	524	527	575	570	633	615	691	830	905	849

The total number of smears (849 per 10 000 women) was lower in 1991 than in the 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 00 women. 1988, 1989 and 1991 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 to 273 per 10 000 women in 1990. In 1991 it was lower again: 239 per 10 000.

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 and 1991 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, rose in the years 1987-1990 from 345 to 577 per 10 000 women. In 1991 it was somewhat lower: 537 per 10 000.

In Table 9 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 Figs. 6 and 7).

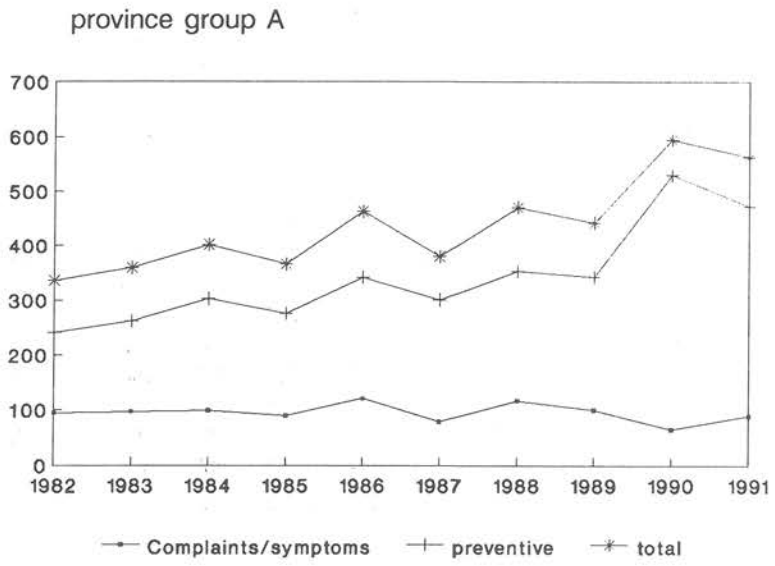
Table 9: number of **"first"** cervical smears taken per province group and urbanization group, by indication for taking a smear and for the Netherlands, per 10 000 women, 1982-1991

		province group				urbanization group			Netherlands
		A	B	C	D	1	2	3	
complaints	1982	95	65	44	58	78	37	98	57
and/or	1983	97	99	49	53	90	44	105	65
symptoms	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
	1991	90	91	57	79	72	64	102	73
"preventive"	1982	241	275	332	272	318	265	369	297
	1983	262	332	312	244	368	249	362	294
	1984	303	334	362	303	371	285	455	336
	1985	276	337	343	311	356	267	445	324
	1986	342	365	449	363	398	344	539	398
	1987	301	340	383	303	342	294	472	345
	1988	354	166	412	385	265	335	553	374
	1989	343	358	657	472	365	523	611	521
	1990	530	487	656	540	511	554	689	577
	1991	473	369	572	634	391	535	618	537

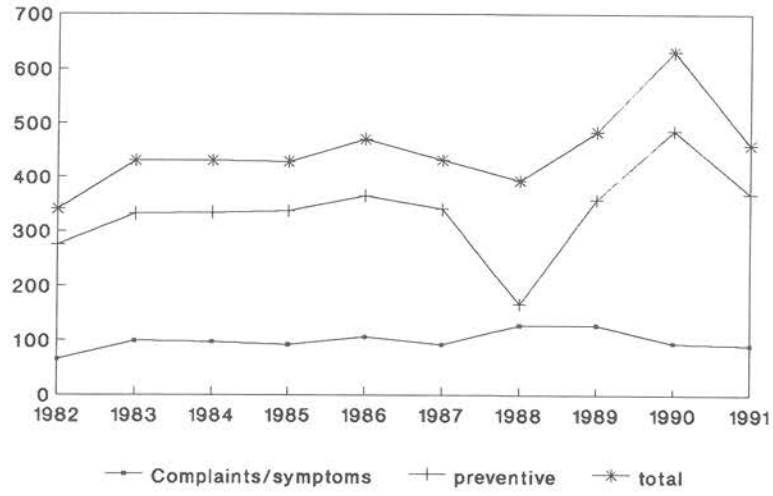
Table 9: number of **"first"** cervical smears taken per province group and urbanization group, by indication for taking a smear and for the Netherlands, per 10 000 women, 1982-1991 (continuation)

		province group				urbanization group			Nether-lands
		A	B	C	D	1	2	3	
total	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
	1991	563	460	629	713	463	599	720	610

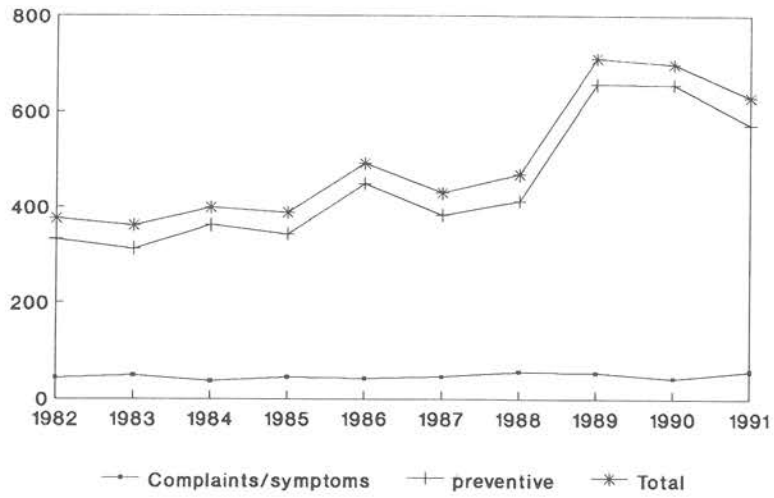
Figure 6
Number of cervical smears taken per province group by indication for taking a smear, per 10 000 women, 1982-1991



province group B



province group C



province group D

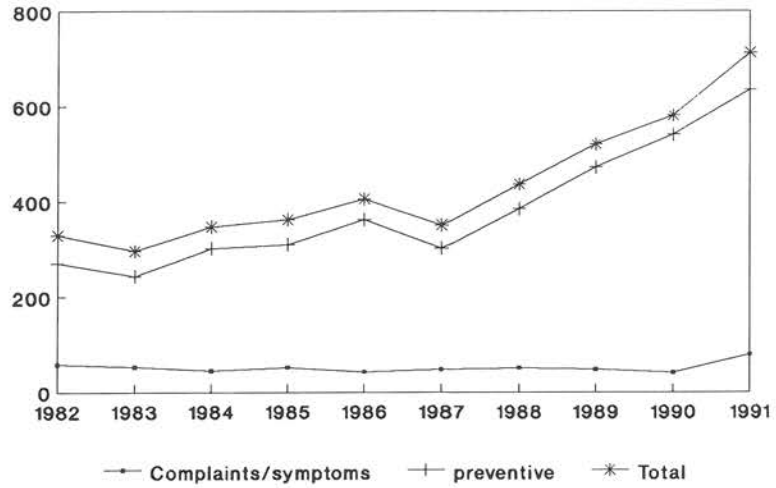
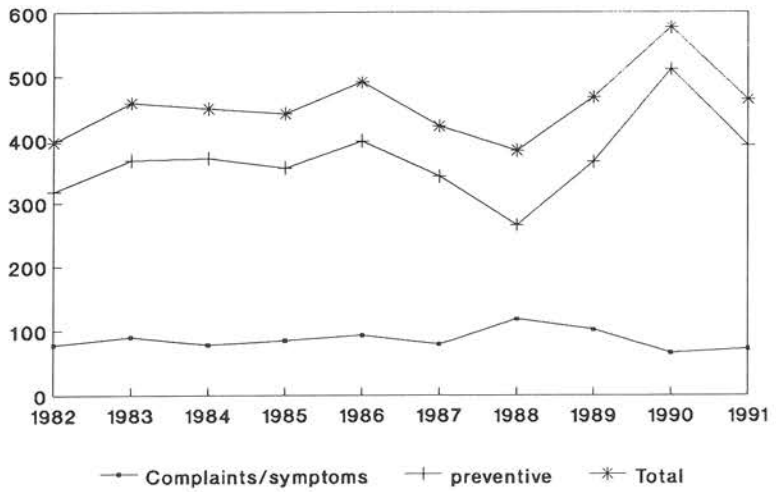
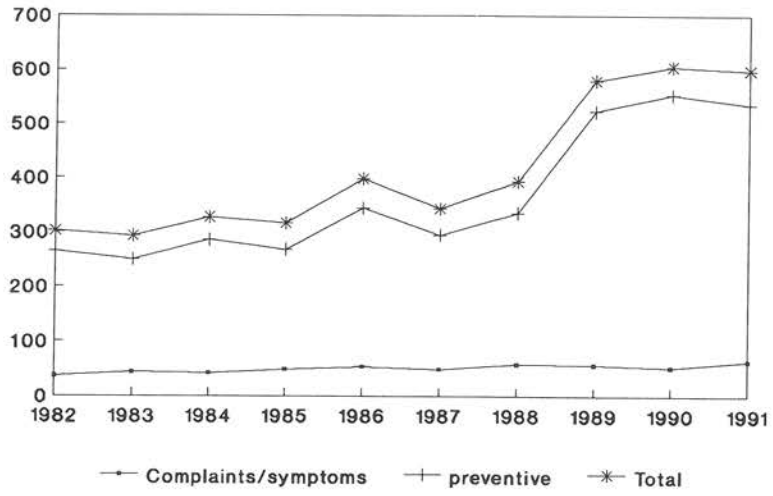


Figure 7
Number of cervical smears taken per urbanization group and for the Netherlands, by indication for taking a smear per 10 000 women, 1982-1991

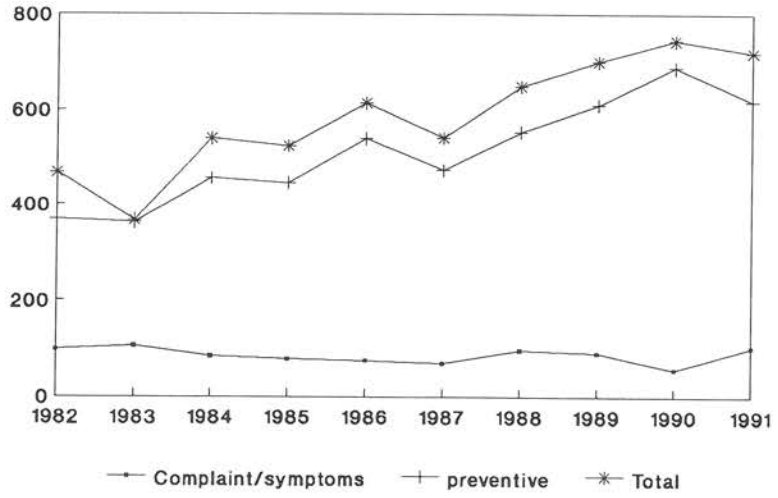
urbanization group 1



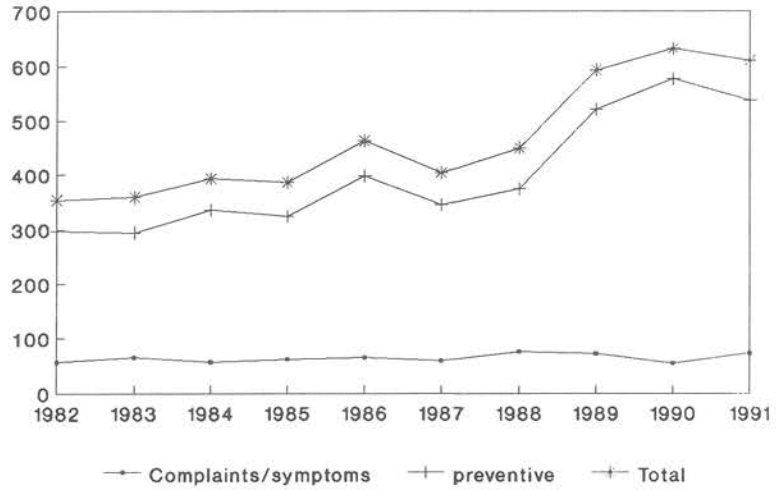
urbanization group 2



urbanization group 3



Netherlands



Age distribution

Table 10 gives a survey of the number of **"first"** smears by age group per 10 000 women (cf. Fig. 8).

Table 10: number of **"first"** smears taken by spotter physicians by age group, per 10 000 women, 1982-1991

	age group							
	10-14	15-19	20-24	24-34	35-44	45-54	55-64	≥65
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
1991	(5)	20	270	760	1782	1459	229	34

This subcategory makes it possible to calculate the number of women who are reached by the general practitioner through this method.The number of women who have been reached in this way at least once every three years

may be seen in the total of Table 10.
The increase in the number of 'first' smears taken from 1987 onwards, which, as expected, is found above all in the 35-54 age group, seems to have come to a halt. In the 25-34 age group lower numbers occur from 1987 onwards in comparison with the years 1984-1986. In the even younger age groups there is also a drop. This table makes it possible to calculate the percentage of women who are reached at least once every three years. For the 35-44 age group that is 52% for the period 1989-1991 and for the 45-54 age group 42%.
For the same age groups these percentages were 21 and 15 respectively around 1983, when the old-style mass screening was still in full swing.

Figure 8
Number of 'first' cervical smears taken by age group, per 10 000 women, 1982-1991

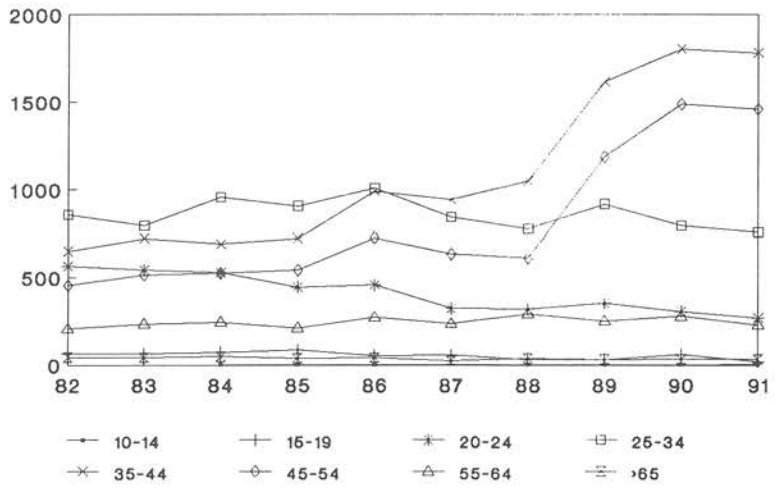


Table 11 gives a breakdown by age and indication for taking a smear, including the repeat smear (see also Figure 9).

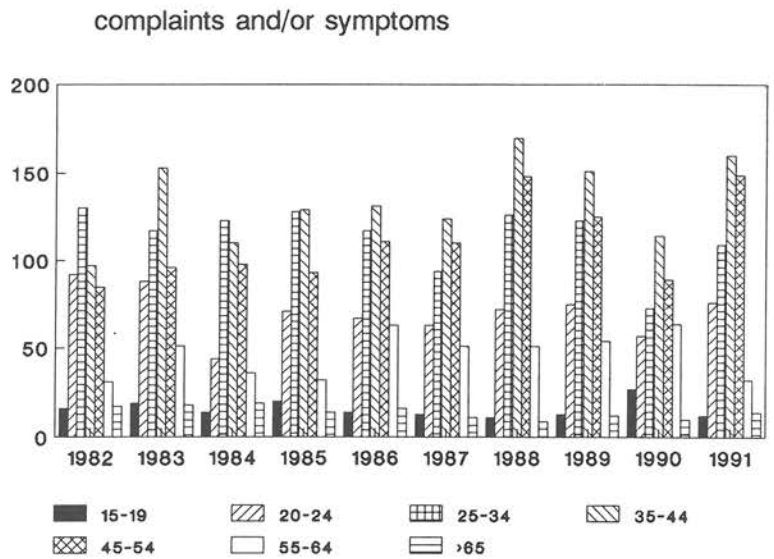
Table 11: number of smears taken by spotter physicians by age group and by indication for taking the smear, per 10 000 women, 1982-1991

		age group						
		15-19	20-24	25-34	35-44	45-54	55-64	≥65
complaints and/	1982	16	92	130	97	85	31	17
or symptoms	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
	1991	12	76	109	160	149	32	14
preventive	1982	48	473	729	554	370	176	26
	1983	44	455	680	571	419	182	24
	1984	58	485	820	583	427	208	29
	1985	66	450	780	595	450	180	24
	1986	40	392	891	860	618	210	28
	1987	44	260	751	776	534	185	13
	1988	23	247	776	877	608	193	29
	1989	19	278	796	1466	1098	200	21
	1990	34	249	715	1690	1398	216	23
	1991	(8)	194	651	1612	1310	181	20
repeat smear	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
	1991	-	63	244	746	614	104	11

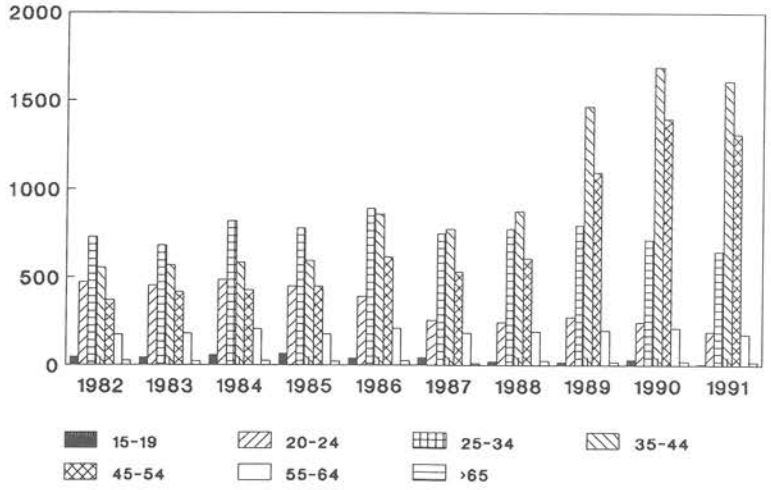
Table 11: number of smears taken by spotter physicians by age group and by indication for taking the smear, per 10 000 women, 1982-1991 (continuation)

		age group						
		15-19	20-24	25-34	35-44	45-54	55-64	≥65
total	1982	70	654	1163	119	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
	1991	20	333	1004	2518	2073	317	45

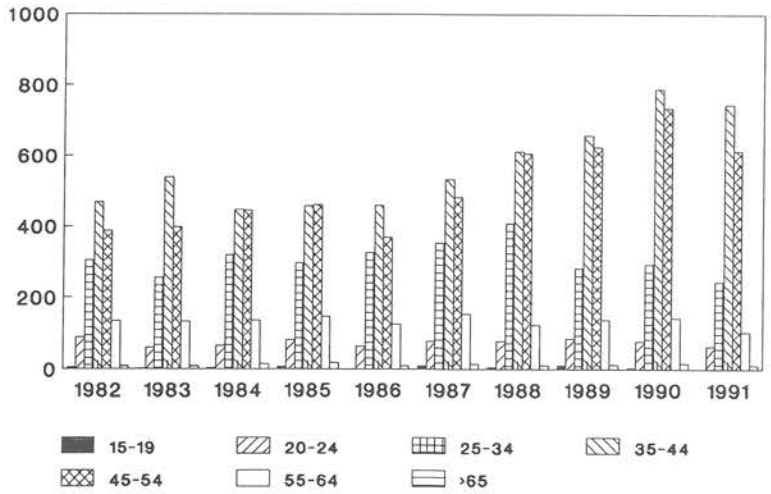
Figure 9
Number of smears taken by spotter physicians by age group and by indication for taking the smear, per 10 000 women, 1982-1991

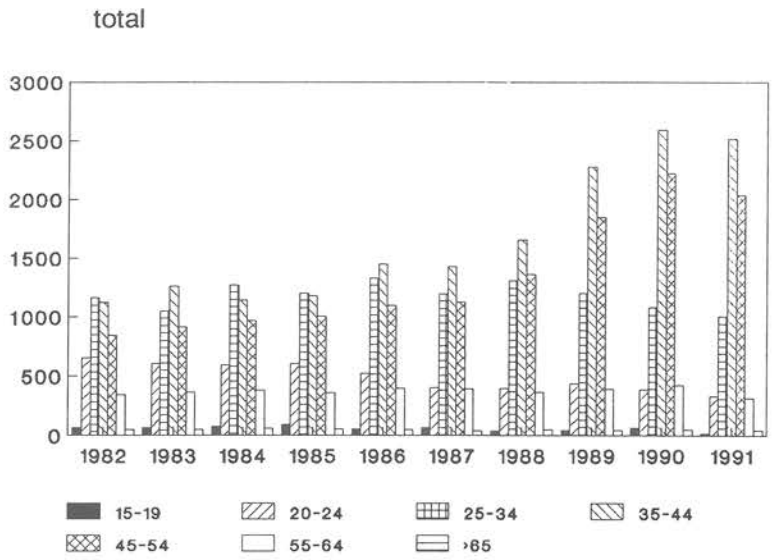


preventive



repeat smear





In 1991 more smears were taken on account of complaints and/or symptoms. For all age groups the numbers are about at the levels of the years before 1990.

In the case of the first smears made on preventive indication the numbers in the 35-54 age group remain the highest. There is a further decrease in the other age groups: of nearly 10% in the 25-34 age group and of over 20% in the 20-24 age group. Below the age of 20 hardly any smears on preventive indication are taken any longer.
Possibly the publication of the NHG standard on oral contraception has affected these figures.

For both the total number of smears and the 'first' smears the percentage for the 35-54 age group is still increasing somewhat (see Table 12). A decrease may be noted among both women younger than 35 and older than 54.
Since the termination of the old-style mass screening (around 1985) and above all with the start of the new-style mass screening (after 1988) the proportion of the 35-54 age group in total had already strongly increased.

Table 12: proportional distribution of smears taken per age group for all sentinel stations (as percentages), 1984-1991

	per age group total number of smears			
year	< 34	35-54	> 55	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
1991	23.4	72.0	4.6	100
	per age group "first smear"			
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
1991	25.0	70.6	4.4	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 1992.

MYOCARDIAL INFARCTION

Knowledge of the number of cases of myocardial infarction is important for adjusting policy both with regard to health care and with regard to scientific research policy.
To obtain full insight into the incidence of myocardial infarction information should be collected at various levels. The Central Statistical Office compiles the cause-of-death statistics and registrations in the hospitals and nursing homes give insight into intramural morbidity. These data are supplemented by the information from registration projects by general practitioners. The Continuous Morbidity Registration Sentinel Stations is one of these GP registration projects.

The topic myocardial infarction already appeared on the weekly return in 1978 and in 1983-1985.
Two questions were formulated:

1. In how many cases did you take measures this week as if a myocardial infarction were concerned? (Both a primary and a recurrent infarction, even if it was a report on one and the same patient.)
2. How often did this lead to admission to hospital? (Within 48 hours.)

Between these two earlier registration periods no major differences have been found in the frequency of the reports (see the 1985 annual report of the Continuous Morbidity Registration Sentinel Stations).

The registration from the years 1983-1985 was studied in depth by J. Fracheboud in the project 'Myocardial infarction - coronary care or home nursing?'[9]. In this project two questions occupied a central place:

1. how often does home nursing of a myocardial infarction occur, what does it entail and what are the results, and
2. is home nursing of a myocardial infarction medically justifiable and, if so, can this treatment be integrated in accordance with policy into the existing ways of treating myocardial infarction?

Fracheboud comes to the conclusion that home nursing of myocardial infarction in the Netherlands is an exceptional occurrence. In the group of patients investigated by him it related to patients of advanced age who did not live alone and most of whom lived in a city or in the west of the

country. These patients had more frequently an unclear infarction picture and at most complications that could be well treated by the general practitioner. Medical policy after the myocardial infarction was more reserved in home nursing and perhaps a partial cause of these patients subjectively feeling somewhat worse. However, the death rate was not strikingly higher in comparison with the clinically treated group of patients if one takes into account the average advanced age and maintains some reservation on account of the small number.

However, despite the fall in mortality of above all the acute forms of ischemic heart disease, myocardial infarction remains one of the principal causes of death in the Netherlands.
In his discussion of the state of affairs regarding the epidemic of acute myocardial infarction Hoogendoorn, after analysis of data collected in the hospitals, finds that the elderly display an increasing admission frequency on account of acute ischemic heart disease. In contrast, the numbers of admissions of young people in the years 1969-1987 declined[10].

In addition to the information from the cause-of-death statistics and from the registrations in the hospitals and nursing homes, there proves to be a need for data from general practice.
At the request of the Centre for Epidemiology (Prof. Dr ir D. Kromhout and Dr H. Verkleij) of the National Institute for Public Health and Environment al Protection, registration of myocardial infarction was again set up in 1991.

Respondents were asked to report both suspected and confirmed myocardial infarctions.
In the case of a suspected myocardial infarction the background of the suspicion was sought: medical history and examination by the physician and any previous cardiological history.
In the case of an acutely deceased patient an infarction may be suspected as cause of death without an autopsy. In the case of a confirmed myocardial infarction the possible previous cardiological history is also requested. The diagnosis can be confirmed on the basis of a positive ECG and/or enzyme increase, or when a fatal infarction is concerned, by autopsy.

For each report a practically person-unique set of data is requested on the patient, which makes it possible to investigate whether duplicate reports have occurred or reports of a suspected infarction that is then confirmed or not, and the occurrence of infarction more than once in a year with the

same patient. The data in the tables are of a provisional nature. The reports will be subjected to a double check.
The comprehensive reporting on the registration takes place elsewhere.
In Table 13 the frequency data of the suspected and confirmed myocardial infarction per province and urbanization group and for the Netherlands are given.

Table 13: number of patients with a suspected and confirmed myocardial infarction given per province and urbanization group and for the Netherlands per 10 000 men and per 10 000 women, 1991

	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
men								
suspected	20	38	19	29	33	24	23	25
confirmed	13	17	15	26	16	18	18	18
women								
suspected	8	18	10	21	8	14	14	13
confirmed	7	11	7	10	2	9	12	9
total								
suspected	14	28	14	25	20	19	18	19
confirmed	10	14	11	18	9	13	15	13

A suspected infarction that is later also reported as a confirmed infarction is included in this table under both the suspected and the confirmed category. For men an infarction is more often suspected and also found than for women. The ratio of suspected to confirmed infarction is 3:2 for both sexes. The western provinces display relatively few reports. This finding agrees with the distribution pattern of ischemic cardiac mortality, as described by Mackenbach, Kunst and Looman[11].

Age distribution
Table 14 gives the frequencies per age group.

Table 14: number of patients by age group with a suspected and confirmed myocardial infarction per 10 000 men and per 10 000 women.

age group	men			women			total	
	suspected	confirmed	total	suspected	confirmed	total	suspected	confirmed
≤ 24	-	-	-	-	-	-	-	-
25-29	(3)	(3)	(6)	-	-	-	(2)	(2)
30-34	(2)	-	(2)	-	-	-	(1)	-
35-39	(8)	(2)	(10)	(-)	-	(-)	(4)	(1)
40-44	21	13	34	-	(4)	(4)	11	9
45-49	18	15	33	(3)	(3)	(6)	10	9
50-54	34	23	57	12	(6)	18	23	14
55-59	60	54	114	12	-	12	36	27
60-64	70	84	154	35	22	57	51	51
65-69	116	68	184	40	37	77	76	51
70-74	143	74	217	66	58	124	100	65
75-79	122	23	145	114	40	154	117	33
80-84	93	134	217	63	63	126	74	87
≥ 85	75	75	150	88	35	123	84	48

The data of one year's registration allow as yet of few pronouncements on the age distributions found.

The topic has been maintained for 1992.

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.

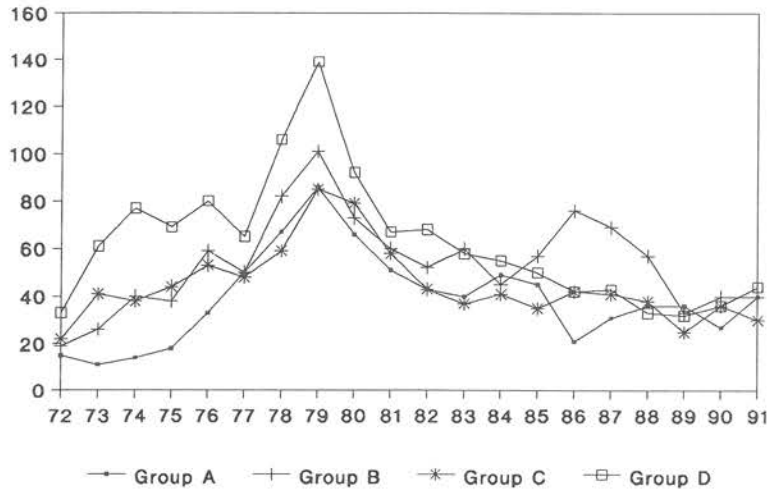
The number of sterilizations of men performed per 10 000 of all men and per province group and urbanization group is given in Table 15 (cf. Fig. 10).

Table 15: number of sterilizations of men performed, per province group and urbanization group per 10 000 men, 1982-1991

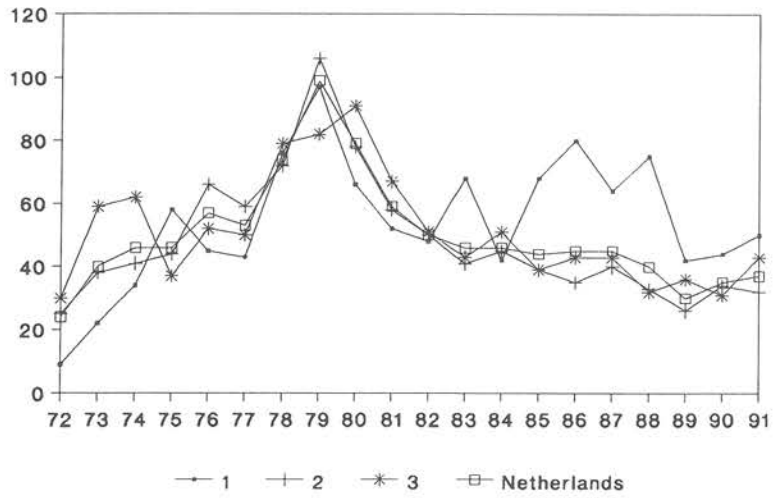
	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
1982	43	52	43	68	48	50	51	50
1983	40	60	37	58	68	41	43	46
1984	49	45	41	55	42	45	51	46
1985	45	57	35	50	68	39	39	44
1986	21	76	42	42	80	35	43	45
1987	31	69	41	43	64	40	43	45
1988	36	57	38	33	75	33	32	40
1989	36	33	25	32	42	26	36	30
1990	27	40	36	36	44	34	31	35
1991	40	40	30	44	50	32	43	37

Figure 10
Number of sterilizations of men performed, per province and urbanization group and for the Netherlands, per 10 000 men, 1972-1991

province group



urbanization group and the Netherlands



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 and 1991 the number is higher again: 35 per 10 000 men.

After extrapolation one arrives at 27 500 sterilizations for the whole Netherlands in 1991. 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 1991 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 1990. As in reality 27 500 operations were performed, there was a very 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 1991[12].

In Figure 13 (see page 52) 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. 14, see p. 53).

Table 16: number of sterilizations of men performed, by age group, per 10 000 men, 1982-1991

	age group					
	15-19	20-24	25-34	35-44	45-54	55-64
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)
1991	-	(4)	67	128	29	(1)

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 2.0% in 1991.

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

Table 16A: number of sterilizations performed on men by age group, per 10 000 men, 1986-1991

	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)
1991	(4)	28	110	153	108	53	(3)

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.
An end seems to have come in 1990 to the declining trend in the number of sterilizations performed on men. In the 30-44 age group there is again an

increase, for the first time in years. This devolopment continues in 1991.
A cumulative calculation shows that in the Netherlands since 1971 at least 701 500 sterilizations of men have been performed, that is on 9.4% 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 1992 weekly return.

STERILIZATION OF THE WOMAN

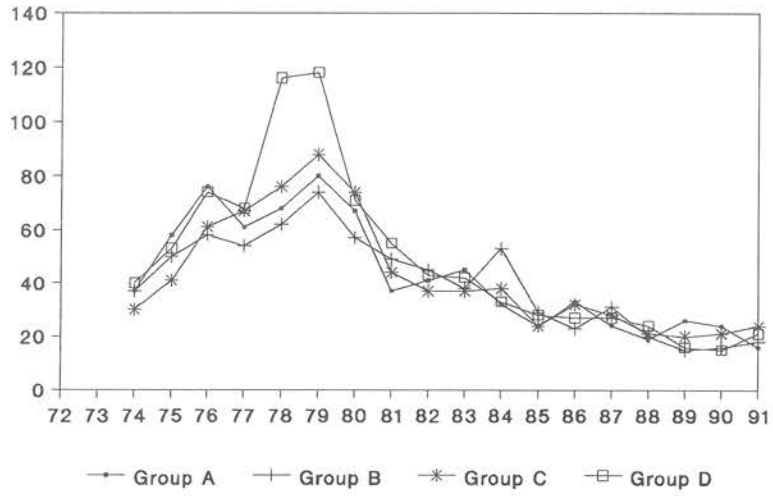
Sterilization of the woman performed was placed on the weekly return in 1974 (of the man performed in 1972). In 1991 21 sterilizations per 10 000 women were performed; in 1990 this was 19. Extrapolation of these figures to the whole of the Netherlands yields a number of 16 000 sterilizations in 1991.
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. 12).

Table 17: number of sterilizations of women performed, per province and urbanization group, and for the Netherlands per 10 000 women, 1982-1991

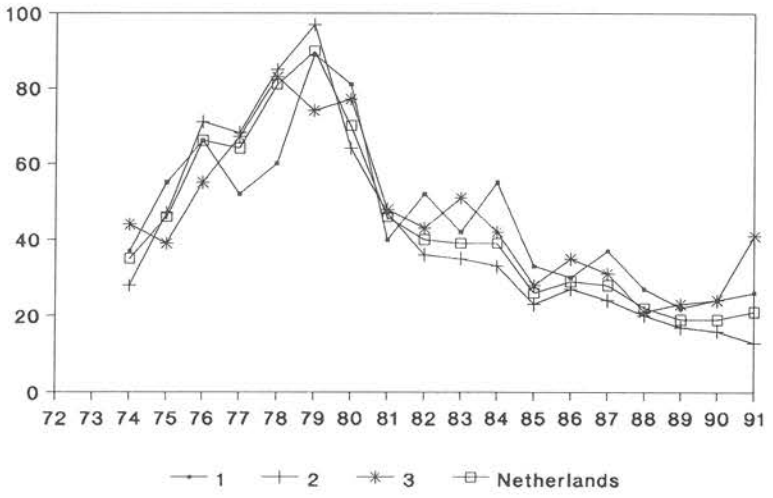
	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
1982	41	45	37	43	52	36	43	40
1983	45	38	37	42	42	35	51	39
1984	32	53	38	33	55	33	42	39
1985	24	29	24	28	33	23	28	26
1986	33	23	32	27	30	27	35	29
1987	24	31	28	27	37	24	31	28
1988	19	20	21	24	27	20	21	22
1989	26	15	20	16	22	17	23	19
1990	24	16	21	15	24	16	24	19
1991	16	18	24	21	26	13	41	21

Figure 12
Number of sterilizations of women performed, per province and urbanization group and for the Netherlands, per 10 000 women, 1972-1991

province group



urbanization group and the Netherlands



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

Age distribution

The age-specific distribution of the number of sterilizations performed per 10 000 women is given in Table 18 (cf. Fig. 14).

Figure 13
Number of sterilizations performed per 10 000 men and 10 000 women, for the Netherlands, 1972-1991

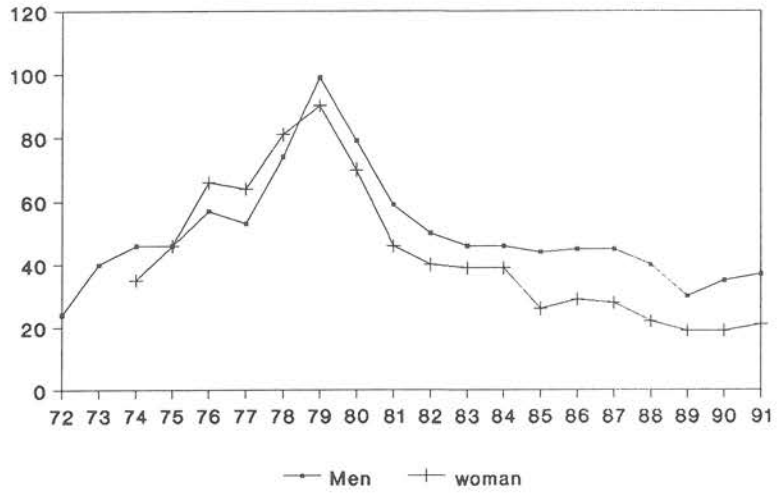


Figure 14
Number of sterilization performed by age group, per 10 000 men and women, 1972-1991

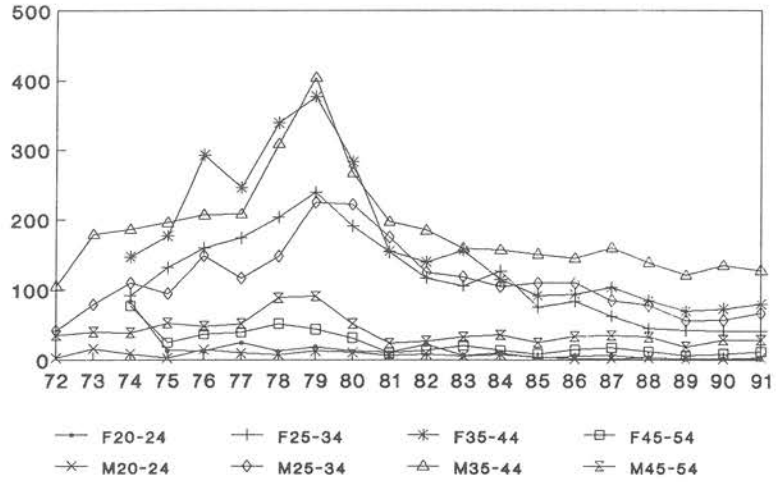


Table 18: number of sterilizations of women performed, by age group per 10 000 women, 1982-1991

	age group					
	10-14	15-19	20-24	25-34	35-44	45-54
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
1991	-	(2)	(2)	42	80	12

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

Table 18A: number of sterilizations performed on women by age group, per 10 000 women, 1986-1991

	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	-
1991	(2)	22	64	88	72	20	(3)

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 554 500 women, i.e. 7.3% 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, and 22.4 in 1984 to 23.0 in 1986. In 1987 it fell slightly for the first time. This fall continued. In 1990 this percentage was 22.1 and in 1991 21.8. The number of sterilizations (of men **and** women) that ought to have been performed in 1991 on the basis of this calculation to keep the total percentage equal to that of 1990 was 52 900. In reality this number was only 43 500 (27 500 men and 16 000 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 9.6 in 1991. 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. According to Dr E. Ketting, who made these calculations, the above is probably bound up with two factors. In the first place women want to have (further) children at a steadily later age, as a result of which a decision concerning sterilization is increasingly postponed and often also put off indefinitely. And in the second place objections to still using oral 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. Incidentelly it is interesting that the Netherlands, as for as is known, is the only country where clearly more men than women are sterilized. This ratio is at present 56% men to 44% women.
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 1.6% in 1991. Since 1985 there has now also been a considerable decline among the 30-34 age group of women (from 13.8% in 1985 to 5.8% in 1991). In the 35-44 age group the decline is much less (from 21.2% in 1985 to 18.3% in 1991).

The topic sterilizations has been maintained on the weekly return for 1992.

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. A survey is given here from 1982.

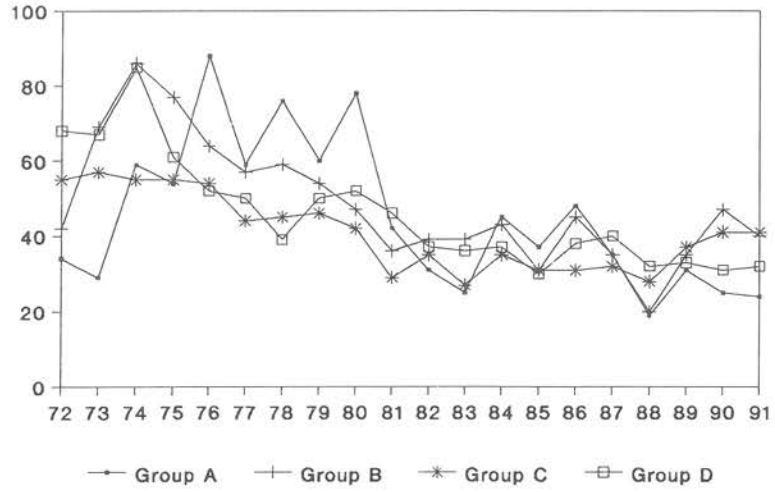
Table 19 gives the frequency with regard to the prescription of the morning-after pill, per province and urbanization group and for the Netherlands (cf. Fig. 15).

Table 19: number of prescriptions of the morning-after pill, per province and urbanization group per 10 000 women, 1982-1991

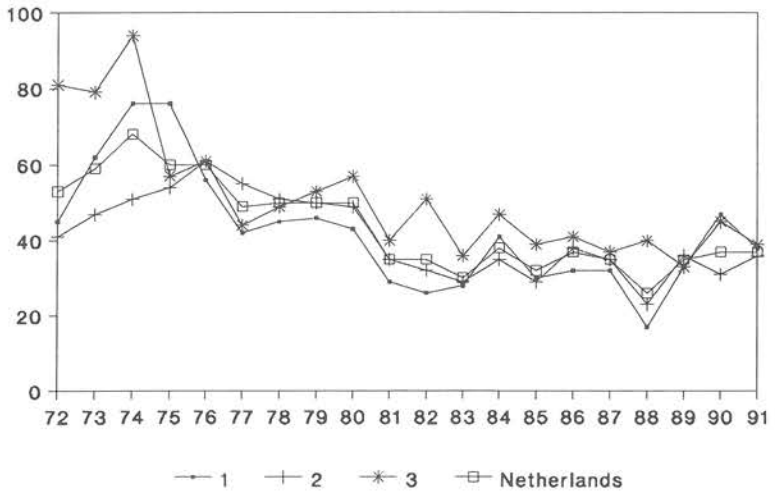
	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
1982	31	39	35	37	26	32	51	35
1983	25	39	27	36	28	29	36	30
1984	45	43	35	37	41	35	47	38
1985	37	31	31	30	30	29	39	32
1986	48	45	31	38	32	38	41	37
1987	35	35	32	40	32	35	37	35
1988	19	20	28	32	17	23	40	26
1989	31	35	37	33	33	36	33	35
1990	25	47	41	31	47	31	45	37
1991	24	40	41	32	38	36	39	37

Figure 15
Number of prescriptions of the morning-after pill, per province and urbanization group, per 10 000 women, 1972-1991

province group



urbanization group and the Netherlands



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 reports, 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.

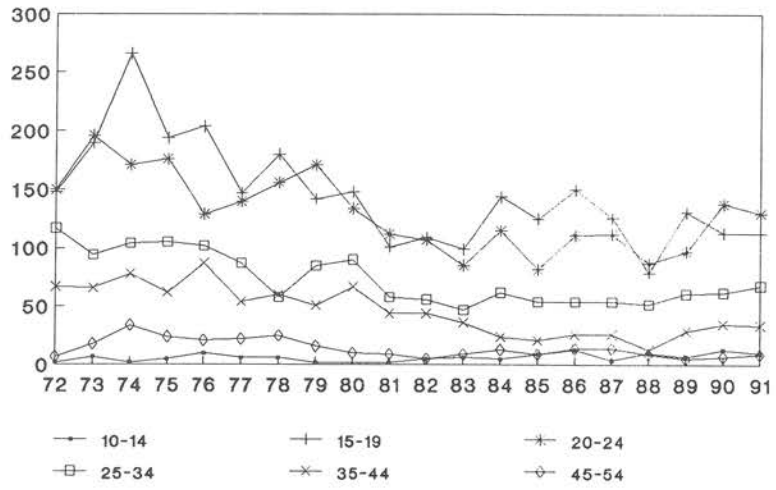
After 1988 the number of prescriptions is again in the neighbourhood of 35 per 10 000 women.

Age distribution
Table 20 gives the age distribution of prescription of the morning-after pill (cf. Fig. 16).

Table 20: number of prescriptions of the morning-after pill, by age group, per 10 000 women, 1982-1991

	age group					
	10-14	15-19	20-24	25-34	35-44	45-54
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	13	113	138	62	35	(7)
1991	(10)	113	130	68	34	9

Figure 16
Number of prescription of the morning-after pill by age group, per 10 000 women, 1972-1991



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 1991.
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, 1982-1991

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991*
11 years	-	1	-	-	-	-	-	-	-	-
12 years	-	-	-	-	-	-	-	-	-	-
13 years	1	1	1	1	-	-	-	1	-	1
14 years	1	2	2	4	5	2	1	-	4	2
15 years	12	5	7	3	7	6	1	2	5	-
16 years	14	16	21	18	16	15	9	12	6	6
17 years	17	23	21	32	30	11	10	7	13	6
18 years	16	15	28	15	15	11	3	4	10	6
19 years	16	7	12	6	8	16	22	49	10	3
total	78	70	92	79	81	61	46	75	48	24

* In 1991 the exact age was stated in only 24 of the 59 reports.

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 20 shows that in 1990 and 1991, 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. 102.
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 levonorgestril 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"[13]. Others too published on the greater risk of failure of the "alternative 2x2" methods[14]. 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. In 1991 this percentage was 25.
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.

Registration of this topic is not continued in 1992. In recent years - the year 1988 forms an exception - few changes have occurred in the pattern of prescription of the morning-after pill. Registration can be resumed when developments, for instance the availability of the "abortion pill", occasion this.

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 Statistical office 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[15]. 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[16].

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 rhythim method or coitus interruptus.

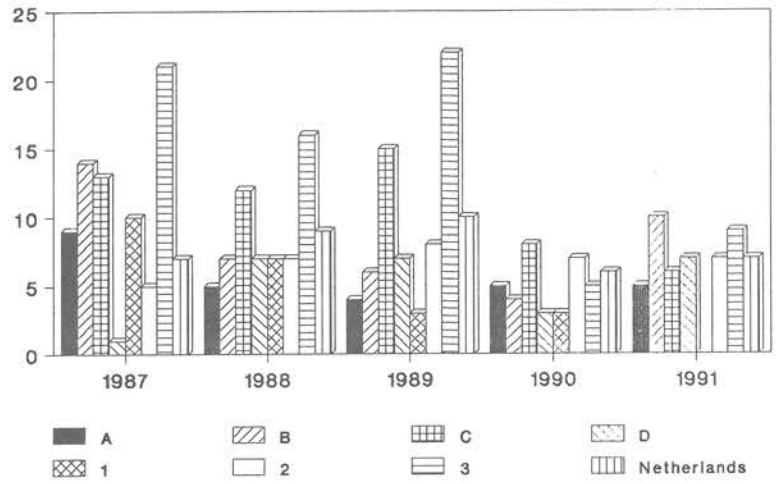
By means of a supplementary questionnaire the spotter physician registers the length of pregnancy, the woman's situation, the method of contraception used, the possible cause of failure and, as far as known, the course of the pregnancy (spontaneous abortion, abortus provocatus, intention to allow the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

In Table 22 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 22: 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 1987-1991

	province group				urbanization group			Nether-lands
	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
1991	5	10	6	7	-	7	9	7

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, 1987-1991



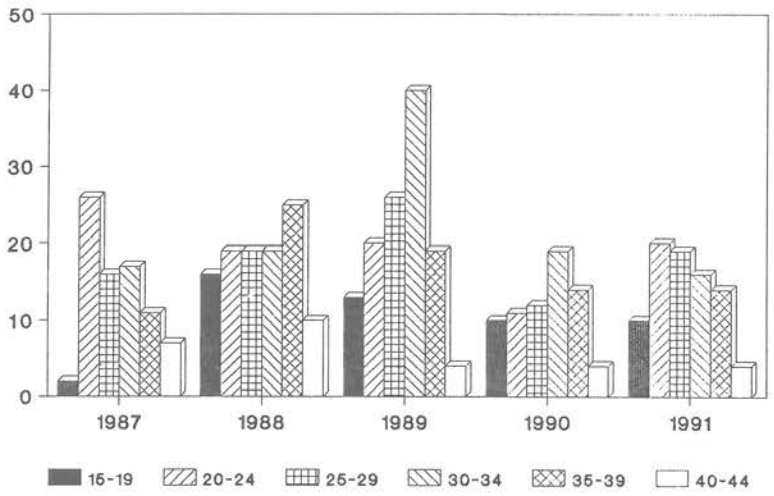
Caution should be observed in the use of these data. In the absolute sense the event occurs infrequently and not regularly.
The figures for 1987-1991 create the impression that the failure of contraception considered adequate occurs more in the east, centre and west of the country and in the cities. In 1990 and 1991 this pattern is not comfirmed for the cities.
The decline in rural municipalities is noteworthy.

Age distribution
Table 23 gives the occurrence of pregnancy despite adequate contraception per age group per 10 000 women in 1987-1991 (cf. Fig. 18).

Table 23: number of pregnancies despite contraception considered adequate per age group per 10 000 women in 1987-1991

	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)
1991	10	20	19	16	14	(4)

Figure 18
Number of women with a pregnancy despite contraception considered adequate per age group, per 10 000 women, 1987-1991



In this registration in 1987-1991 no pregnancies despite contraception considered adequate occurred below the age of 15 years and above the age of 44 years.
In 1991 there was one report below the age of 15 years; above the age of 44 years there was no report.
In the 20-29 age group the number of reports is the highest.

1991

Of the in total 49 pregnancies reported, 23 went to term. A further 23 were terminated. One of the reported pregnancies ended in a spontaneous abortion. It is not known whether two of the pregnancies went to term or were terminated.

Of the married women, 50% opted for maintenance of the pregnancy; for the unmarried women the figure is 45%.

The results for the period 1987-1991 show that 6 out of 10 women with a pregnancy that came about after contraception considered adequate opt for termination.

Unmarried women opt more often for termination of pregnancy than married ones.

In 1992 registration of this topic has been stopped.

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 1988 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 the National Institute for Public Health and Environment al protection (Prof. Dr ir. D. Kromhout, Dr H. Verkleij and drs D. Ruwaard), the subject has been placed on the 1990 weekly return[17].

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 destabilization. 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 what the share of the general practitioner in the treatment of patients with diabetes mellitus is.

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 ≥ 6.7 mmol/litre and/or a capillary blood sugar ≥ 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 1990-1991 and the occurrence of acute destabilization are reported on.

In Table 24 the incidence of diabetes mellitus and the occurrence of acute destabilization 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 24: incidence of diabetes mellitus and the occurrence of acute destabilization by province and urbanization group and for the Netherlands, per 10 000 men and per 10 000 women, 1990-1991

			provincegroup				urbanization group			Nether-lands
			A	B	C	D	1	2	3	
incidence	1990	M	26	16	20	24	13	19	33	21
	1991	M	7	13	17	16	8	13	23	15
	1990	F	14	18	24	25	14	20	33	22
	1991	F	15	16	19	13	13	13	28	16
	1990	M+F	20	17	22	24	13	19	33	21
	1991	M+F	11	14	18	14	10	13	26	15
acute desta-bilization	1990	M+F	6	4	4	5	2	5	5	4
	1991	M+F	3	5	4	7	6	3	8	5

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 25 gives the age-specific distribution of the incidence of diabetes mellitus and the occurrence of acute destabilization.

Table 25: Incidence of diabetes mellitus and the occurrence of acute destabilization by age group per 10 000 men and per 10 000 women, 1990-1991

			≤9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	≥80
incidence	1990	M	(1)	(4)	5	6	13	41	55	120	97
	1991	M	(3)	(1)	(2)	8	23	28	43	59	-
	1990	F	(1)	(2)	(2)	(2)	23	37	55	88	85
	1991	F	(1)	(1)	(1)	(4)	9	29	58	69	33
acute desta-bilization	1990	M+F	-	-	2	2	2	8	6	23	27
	1991	M+F	-	(1)	5	3	(2)	7	7	19	19

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 destabilization of diabetes mellitus is low at a young age; at greater ages the number is considerably higher.

Compared with the period 1980-1983 the incidence in 1990-1991 has risen. The increase occurs above all in the higher age groups. Further reporting on the rise in the incidence follows.

For 1992 this topic has been amended: only the incidence will be registered.

(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 (hospitals), research into suicide is being performed at present. In this way it is being attempted to get an insight into the extent, the trend and other aspects of the problem. The name of the topic is also the definition.
The Chief Office of the some time requested that supplementary data be collected on the cases reported. For this purpose a questionnaire has been compiled in cooperation with Professor R.F.W. Diekstra, clinical psychologist, Leiden. On this form the question whether the attempt was successful or not and how the attempt was made appears. At the same time questions are asked about contacts with the medical sector prior to the (attempted) suicide. However, the essential aspect here is not whether the attempt was successful; the primary concern is the patient's intention, with the possibility that suicide is a consequence of the action.

The absolute number of reports (which is not equal to the number of patients, since recidivists are not uncommon) was 90, 96, 83, 89, 67 and 60 in 1986-1991.
The number of attempts per province and urbanization group per 10 000 inhabitants may be found in Table 28. This breakdown into subgroups is of limited value, because of the relatively small frequencies.
When the degree of urbanization is considered, most suicide attempts are consistently reported in the cities.
The distribution by province group displays a less consistent picture, possibly on account of the small numbers.

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

Table 26: number of reports of (attempted) suicide per province and urbanization group, per 10 000 inhabitants, 1982-1991

	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
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
1991	5	6	5	4	4	3	10	5

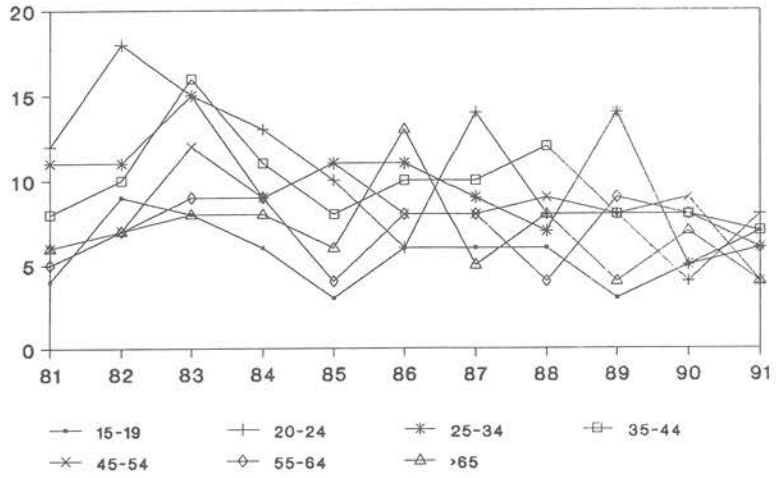
Age distribution

Table 27 gives the frequency of (attempted) suicide per 10 000 inhabitants by age group (see also Fig. 19).

Table 27: number of reports of (attempted) suicide by age group, per 10 000 inhabitants, 1982-1991

	age group							
	10-14	15-19	20-24	25-34	35-44	45-54	55-64	>64
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
1991	(1)	7	8	6	7	4	6	4

Figure 19
Number of reports of (attempted) suicide by age group, per 10 000 inhabitants, 1982-1991



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 1992.

ACUTE UNUSUAL HEADACHE

There are indications that a subarachnoidal haemorrhage is preceded by a "warning leak"[18]. 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, 1988-1991

		province group				urbanization group			Nether-lands
		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
1991		(1)	(4)	(1)	(1)	(1)	2	(1)	2
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
1991		(2)	(2)	2	(2)	(1)	1	5	2
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
1991		(2)	2	2	2	(1)	1	3	2

With this limited incidence it is not responsible to pronounce on the differences between the subgroups.

Age distribution

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 1992. From the beginning of 1990 the number of general practitioners involved in this registration has been considerably expanded. This expanded registration is reported on elsewhere. The latter has been rendered possible partly by a subsidy from the Netherlands Heart Foundation.

MAMMOGRAPHY

The results of the H.I.P. (Health Insurance Plan) study that started in New York in 1963, which became available from 1971, displayed a clear decline in mortality from breast cancer in the group of women older than 50 years. These results were a reason to set up trial projects in Utrecht and Nijmegen and elsewhere outside the Netherlands. Data resulting from the two projects confirm that a well-organized mass screening for breast cancer for women 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 acceptabiiity 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 too 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 1990. If at any time after 1 January 1990 a mammogram has been made for a woman and such an examination is performed **again**, this should be registered under the subgroup "repeat examination".

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

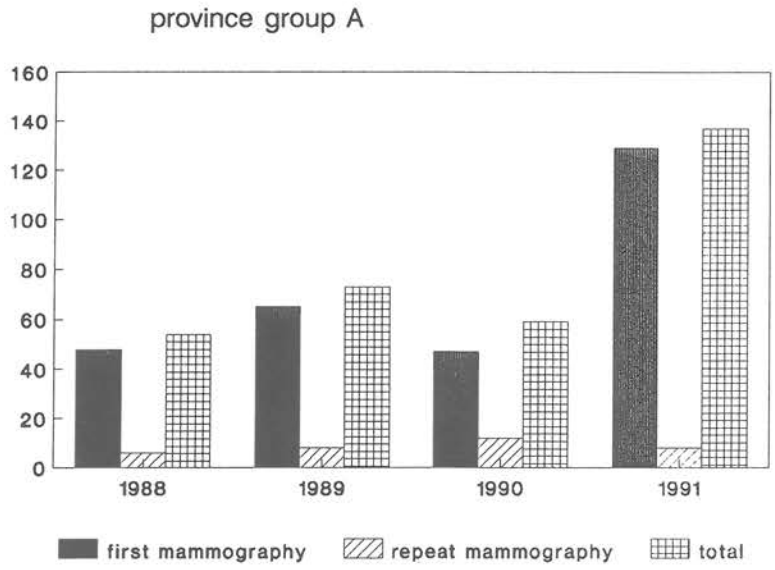
The data of this registration are made available to the group that is performing the investigation into the costs and effects of mass screening for breast cancer for the Ministry of Welfare, Public Health and Culture (Project leader Prof. Dr P.J. van der Maas, Social Health Care Institute, Erasmus University, Rotterdam[19].

Table 29 gives the numbers of mammograms per province and urbanization group and for the Netherlands (cf. Figs 20 and 21).

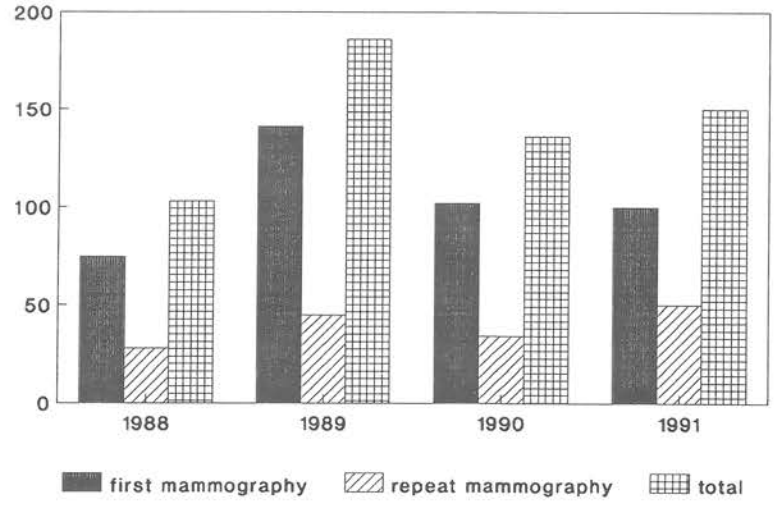
Table 29: number of mammograms per province and urbanization group and the Netherlands per 10 000 women in 1988-1991

		province group				urbanization group			Nether-lands
		A	B	C	D	1	2	3	
first mammography	1988	48	75	92	81	80	79	81	80
	1989	65	141	77	84	154	71	87	87
	1990	47	102	88	125	102	87	101	92
	1991	129	100	93	112	103	92	142	105
repeat mammography	1988	6	28	9	17	26	11	8	12
	1989	8	45	6	15	41	10	11	15
	1990	12	34	14	16	43	13	10	17
	1991	8	50	25	20	54	22	20	26
total	1898	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
	1991	137	150	118	132	157	114	162	131

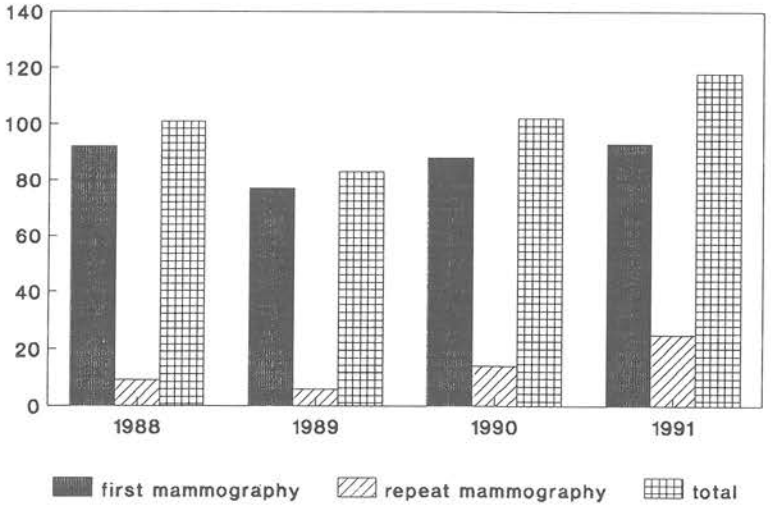
Figure 20
Number of mammograms per province group, per 10 000 women, 1988-1991



province group B



province group C



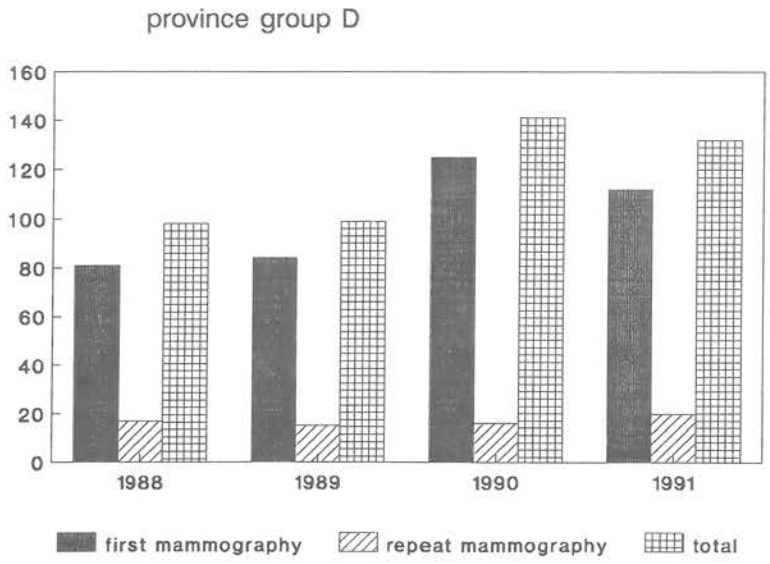
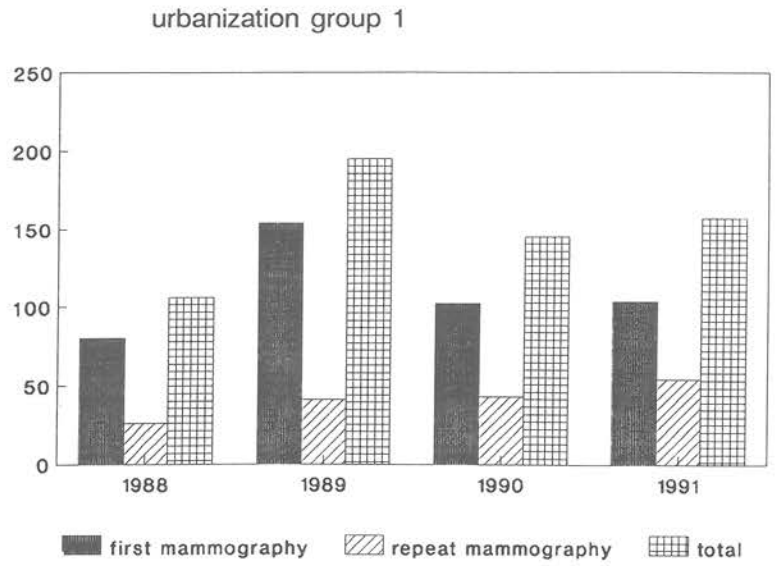
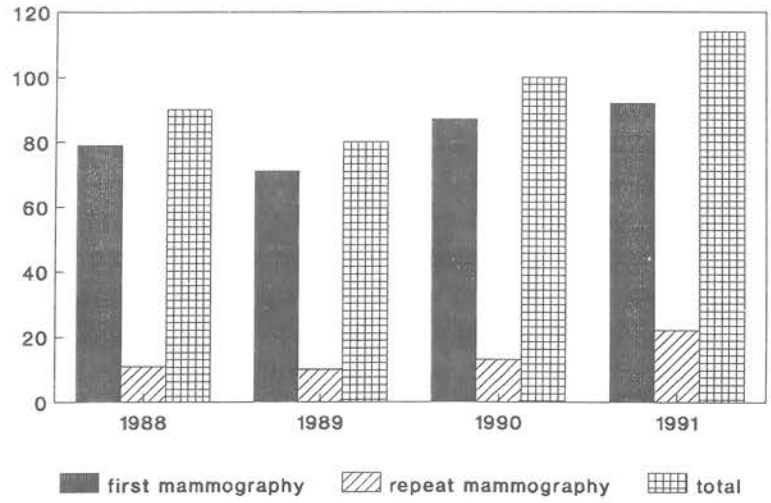


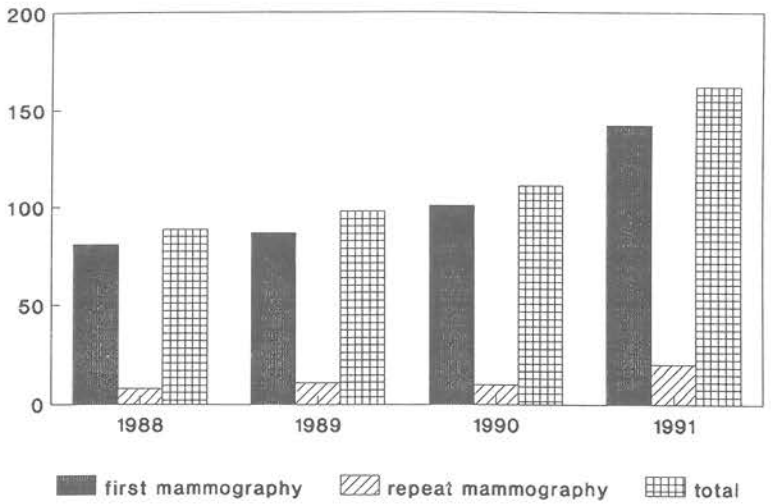
Figure 21
Number of mammograms per urbanization group and for the Netherlands per 10 000 women, 1988-1991

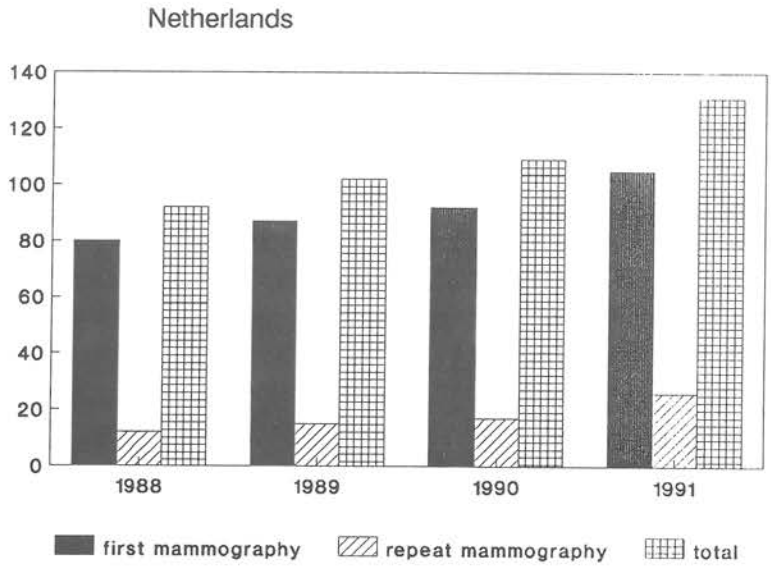


urbanization group 2



urbanization group 3





The total number of mammograms considerably increased in 1991 from 109 to 131 per 10 000 women.
In three of the four province groups there is an increase; in the northern provinces even a remarkable one: from 59 to 141 per 10 000 women.
This remarkable increase occurs with the first mammograms and in particular above the age of 49 years.

Table 30 lists the numbers of mammograms by age group per 10 000 women.

Table 30: number of mammograms by age group per 10 000 women for 1988-1991

	Age group									
	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79
first mammography										
1988	144	170	195	179	124	95	96	71	37	15
1989	124	189	223	213	159	127	102	46	34	31
1990	104	186	230	189	204	174	115	66	83	26
1991	140	170	253	226	229	166	147	117	75	54
repeat mammography										
1988	16	25	30	34	23	21	12	(4)	(8)	(10)
1989	17	34	42	37	28	31	18	8	(8)	(10)
1990	14	30	46	36	42	33	39	18	-	-
1991	15	35	89	70	67	50	41	20	25	10
total										
1988	160	195	225	213	147	116	108	75	45	25
1989	141	223	275	250	187	158	120	54	42	41
1990	118	216	276	225	246	207	154	84	83	26
1991	155	205	342	296	296	216	186	137	100	64

The registration shows that mammograms are requested above all in the age groups between 40 and 55 years. This "worried-well" pattern is the same for the four years in which registration has been performed so far.
In recent years the greatest increase in the number of mammograms has occurred in the 50-70 age group.

The majority (64%) of the mammograms requested by the spotter physicians lie outside those age groups that are covered by the proposed mass screening (see also Table 31). The proportion of the 50-69 age group is on the increase: from 24% in 1988 to 31% in 1991.

Table 31: proportional distribution of mammograms by three age groups. Percentages

year	≤49	50-69	≥70	total
	age distribution, total number of mammograms			
1988	73	24	3	100
1989	72	25	3	100
1990	65	31	4	100
1991	64	31	5	100
	age distribution, "first" mammograms			
1988	74	24	2	100
1989	73	25	2	100
1990	65	30	5	100
1991	64	31	5	100

In 1992 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[20] (M. Moons and L. Peters, Netherlands Institute for Research into Primary Health Care).

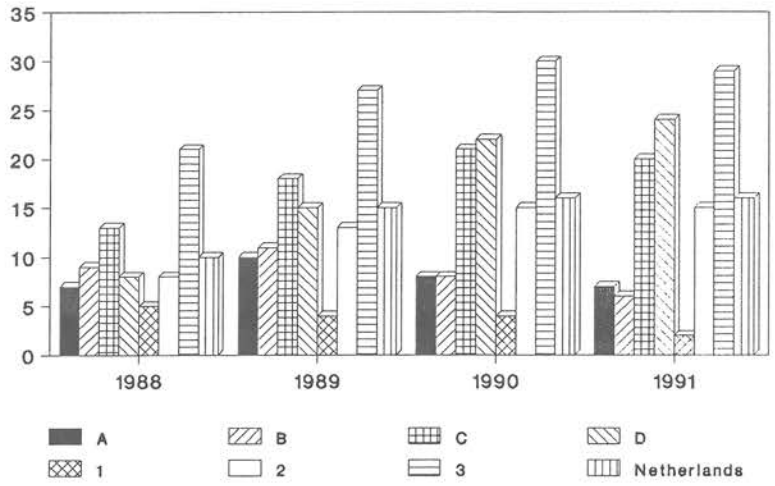
Table 32 lists the number of consultations in which AIDS comes up for discussion, by province and urbanization group and for the Netherlands, per 10 000 inhabitants, 1988-1991.

Table 32: numbers of consultations in which AIDS comes up for discussion, by province and urbanization group and for the Netherlands, per 10 000 inhabitants, 1988-1991

	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
1991	7	6	20	24	2	15	29	16

The increase in consultations on AIDS did not continue in 1991. In 1991 the general practitioners in the southern provinces were more confronted with questions about AIDS than elsewhere in the Netherlands. In the years prior to 1991 that was less pronounced. The general practitioners in the cities also have more consultations in which AIDS comes up for discussion (see Figure 22).
The first supplementary data show that the number of consultations by women is increasing. Whereas in the first year of registration this proportion was still only 37%, in the last year this had risen to 51%. The women who visit the general practitioner are on average somewhat younger than the men.
The latter pattern can also be determined among those who ring the AIDS info line.
However, the proportion of telephone consultations by men remains higher: 67%.

Figure 22
Number of consultations in which AIDS comes up for discussion, per province and urbanization group and for the Netherlands, per 10 000 inhabitants, 1988-1991

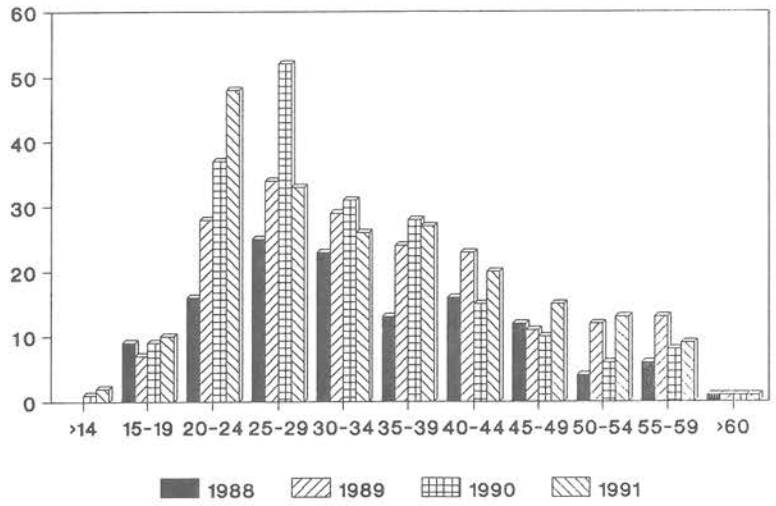


Age distribution
Table 33 gives the number of consultations in which AIDS comes up for discussion per 10 000 inhabitants per age group, for both sexes together (cf. Fig. 23).

Table 33: number of consultations in which AIDS comes up for discussion per age group, per 10 000 inhabitants, 1988-1991

	Age group										
	≤14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	≥60
1988	-	9	16	25	23	13	16	12	(4)	6	(1)
1989	-	7	28	34	29	24	23	11	12	13	(1)
1990	(1)	9	37	52	31	28	15	10	(6)	8	(1)
1991	(2)	10	48	33	26	27	20	15	13	9	(1)

Figure 23
Number of consultations in which AIDS comes up for discussion per age group, per 10 000 inhabitants, 1988-1991



The majority of the questions about AIDS put to general practitioners are asked in the 20-44 age group: the percentage fluctuates around 80% in the period 1988-1991. 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[21].

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

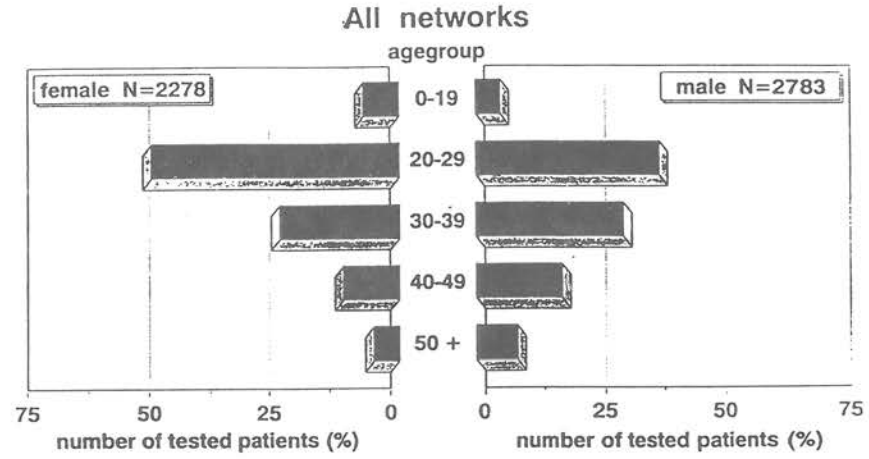
Eurosentinel[22] (1990)
Eurosentinel is a project in which networks of spotter physicians in various European countries cooperate.
In 1990 the number of requests for a test on H.I.V. antibodies was registered by six networks in five countries.

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 24.

Figure 24
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 34).

Table 34: Principal reasons for requesting an H.I.V. test by country and by person taking the initiative for the test

test ordered by GP	%	N	Country	N	%	test asked by patient
prenatal screening	27	411	Belgium	464	35	heterosex. contact "at risk"
heterosex. contact "at risk"	24				29	anxlety
screening beforo 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	anxlety
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	anxlety
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.

MONONUCLEOSIS INFECTIOSA

In 1977-1979 and in 1991 mononucleosis infectiosa (Pfeiffer's disease) appeared on the weekly return. In other registration networks, including the Weekly Returns Service of the Royal College of General Practitioners in the United Kingdom, the disease is registered continuously[23].

The disease is caused by infection with the Epstein-Barr virus, a virus from the herpes virus group that occurs worldwide. It is conveyed by saliva contact or a drop infection.
In the developed countries the disorder occurs above all among older teenagers and young adults, in the developing countries more among young children.

With some regularity the disorder 'kissing disease' appears in the news. The nickname for mononucleosis infectiosa will have something to do with this. The drift of the reports is usually that its occurrence is increasing.

With an interval of over 10 years the incidence of mononucleosis infectiosa was again registered in 1991. The spotter physicians were asked to report the disorder when the diagnosis was confirmed with a new patient by a characteristic blood picture, a positive Paul Bunell reaction, a positive monosticon reaction or a combination of these possibilities.
In 1977-1979 inquiry revealed that the physicians, with the occasional exception, combine the monosticon reaction, which is not considered sufficiently specific, with one or both of the other determinations.

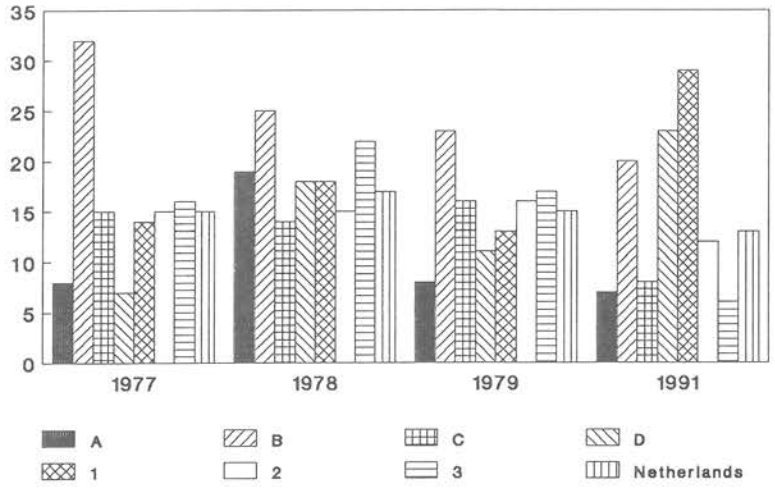
In Table 35 the incidences per 10 000 men and women per province and urbanization group are given (see also Figure 25). A comparison is made with the registration from 1977-1979.

Table 35: Number of cases of mononucleosis infectiosa per province and urbanization group, per 10 000 men and women, 1977-1979 and 1991

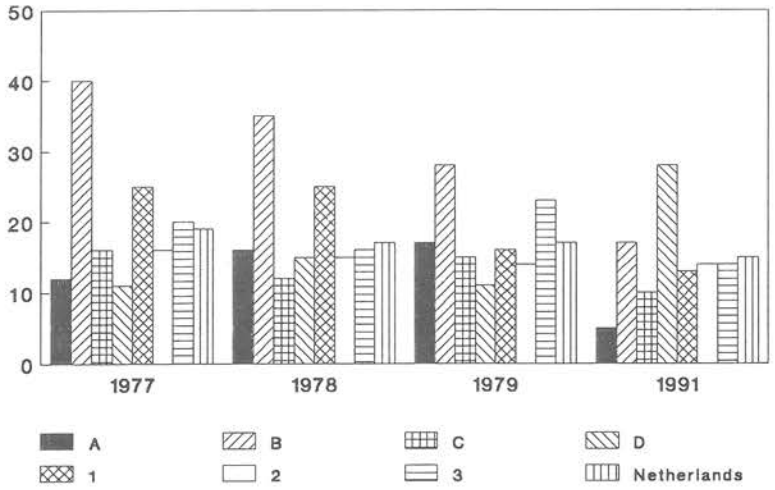
		province group				urbanization group			Nether-lands
		A	B	C	D	1	2	3	
1977	M	8	32	15	7	14	15	16	15
1978		19	25	14	18	18	15	22	17
1979		8	23	16	11	13	16	17	15
1991		7	20	8	23	29	12	6	13
1977	F	12	40	16	11	25	16	20	19
1978		16	35	12	15	25	15	16	17
1979		17	28	15	11	16	14	23	17
1991		5	17	10	28	13	14	14	15
1977	T	10	40	16	9	20	15	18	17
1978		17	30	13	16	21	15	19	17
1979		13	25	15	11	14	15	20	16
1991		6	18	9	26	21	13	10	1

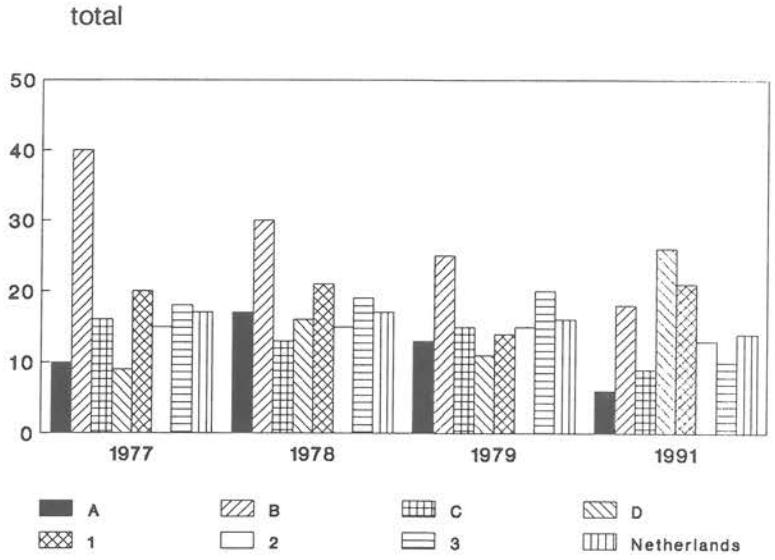
Figure 25
Number of cases of mononucleosis infectiosa per province and urbanization group and for the Netherlands, per 10 000 men and women, 1977-1979 and 1991

men



women





The number of reports in 1991 is somewhat lower than in 1977-1979: 14 per 10 000 as against 17 per 10 000. Between the province and urbanization groups there are major differences: in the south over four times as many cases are reported as in the northern provinces.
In the rural municipalities twice as many cases are reported as in the cities.

In the period 1977-1979 more cases were reported in the eastern provinces; between the urbanization groups less great differences existed in that period than was the case in 1991.
There are no noteworthy differences between men and women.

Age distribution

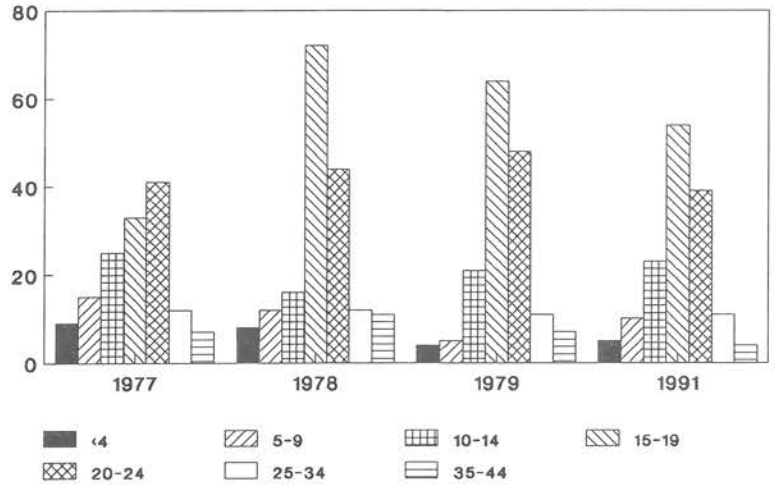
The age-specific figures display the expected picture for 1991 too: the greater part of the reports are in the 10-29 age group (Table 36) (see also Figure 26).

Table 36: Number of cases of mononucleosis infectiosa by age group, 1977-1979 and 1991

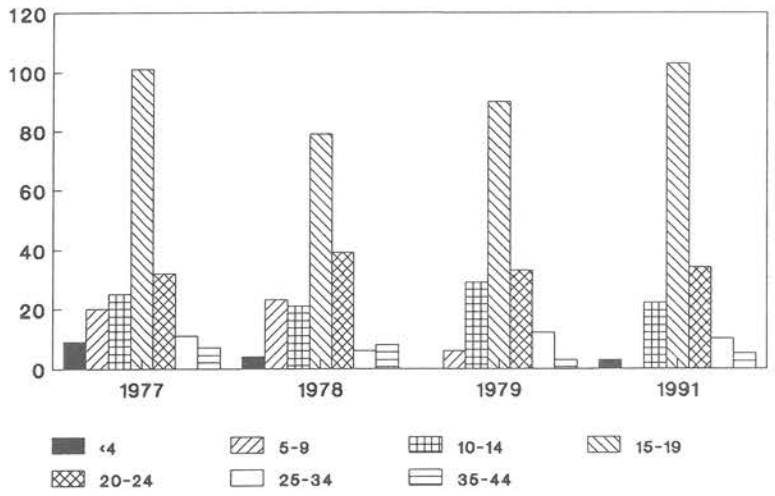
		age group						
		>4	5-9	10-14	15-19	20-24	25-34	35-44
1977	M	9	15	25	33	41	12	7
1978		(8)	12	16	72	44	12	11
1979		(4)	(5)	21	64	48	11	7
1991		(5)	10	23	54	39	11	(4)
1977	F	9	20	25	101	32	11	7
1978		(4)	23	21	79	39	6	8
1979		-	(6)	29	90	33	12	(3)
1991		(3)	0	22	103	34	10	(5)
1977	T	9	18	19	69	36	11	7
1978		6	18	19	75	41	9	9
1979		(2)	5	25	77	40	12	5
1991		(4)	5	22	78	37	11	(4)

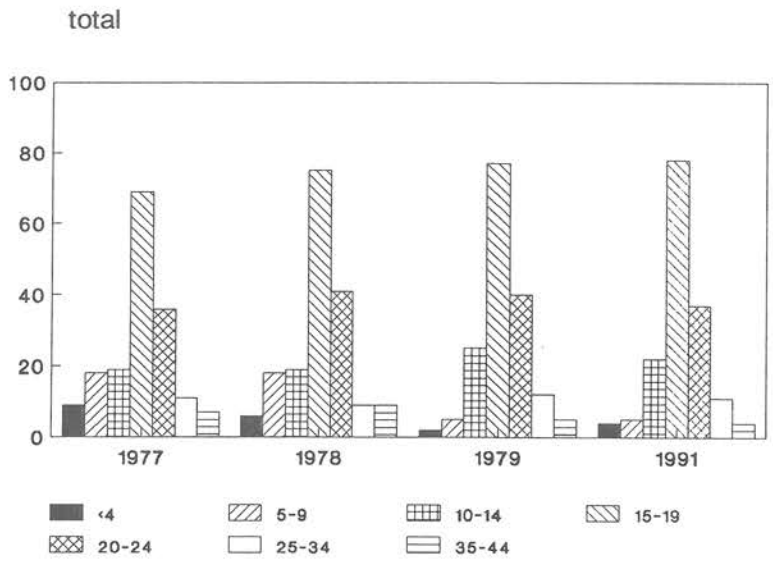
Figure 26
Number of cases of mononucleosis infectiosa by age group, 1977-1979 and 1991

men



women





The peak of the reports lies in the 15-19 age group; for the women twice as much as for the men. Just as is the case in the years 1977-1979, in the 20-24 age group the number of reports for men is higher than for women. After the 25th year the number of reports falls quickly, as before.

However, mononucleosis infectiosa occurs up to a later age. That was also the case in the years 1977-1979.

Since the registration of the incidence of mononucleosis infectiosa has yielded no essentially new insights, the topic has been removed from the weekly return in 1992.

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. 9 - 10) 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 topic 'mammography' 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[24].

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, 1982-1991 (Central Statistical Office)*

year	men	women	total
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
1991	7 419	7 591	15 010

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

Extrapolation of frequencies found to the Dutch population

	frequency* incidence (per 10 000)				Netherlands** (absolute number)		
category	year	M	F	total	M	F	total***
'influenza'	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
	1991			348			522 000
cervical smear	1982		57			41 000	
-with complaints	1983		65			47 000	
and/or symptoms	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	
	1991		73			55 500	
-preventive	1982		297			214 000	
	1983		294			213 000	
	1984		336			244 000	
	1985		324			237 000	
	1986		398			293 000	
	1987		345			255 000	
	1988		369			274 000	
	1989		521			389 500	
	1990		577			434 500	
	1991		537			407 000	

* see page 103

Extrapolation of frequencies found to the Dutch population (continuation)

	frequency* incidence (per 10 000)				Netherlands** (absolute numbers)		
category	year	M	F	total	M	F	total***
-repeat examination (within 3 years)	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	
	1991		239			181 500	
cervical smear total	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	
	1991		857			645 000	
myocardial infarction							
- suspected	1991	24	14	19	18 000	10 500	28 500
- confirmed	1991	17	9	13	12 500	7 000	19 500
sterilization	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
	1991	37	21		27 500	16 000	43 500
cumulative					701 500[1]	554 500[2]	

* see page 103

1) from 1972

2) from 1974

Extrapolation of frequencies found to the Dutch population (continuation)

		frequency* incidence (per 10 000)			Netherlands** (absolute numbers)		
category	year	M	F	total	M	F	total***
morning-after pill prescribed	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	
	1991		37			28 000	
diabetes mellitus incidence	1980			13			18 000
	1981			12			17 000
	1982			12			17 000
	1983			11			16 000
	1990	21	22	21	15 000	16 000	31 000
	1991	15	16	16	11 000	12 000	23 000
prevalence	1980			125			176 000
	1990-1991	107	140	124	79 000	105 500	184 500
acute destabilization	1990			4			6 000
	1991			5			7 500
(attempted) 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
	1991			5			7 500

* see page 103

Extrapolation of frequencies found to the Dutch population (continuation)

	frequency* incidence (per 10 000)				Netherlands** (absolute numbers)		
category	year	M	F	total	M	F	total***
pregnancy	1987		7			5 000	
despite ade-	1988		9			6 500	
quate contra-	1989		10			7 500	
ception	1990		6			4 500	
	1991		7			5 500	
first mammograms	1988		80			59 500	
	1989		87			65 000	
	1990		92			69 000	
	1991		105			80 000	
repeat mammo-	1988		12			9 000	
grams	1989		15			11 000	
	1990		17			13 000	
	1991		26			19 500	
mammograms	1988		92			68 500	
total	1989		102			76 000	
	1990		109			82 000	
	1991		131			99 500	
concern about	1988			10			15 000
aids	1989			15			22 000
	1990			16			24 000
	1991			16			24 000
mononucleosis	1977	15	19	17	10 000	13 000	23 000
infectiosa	1978	17	17	17	12 000	12 000	24 000
	1979	15	17	16	10 000	12 000	22 000
	1991	13	15	14	10 000	11 500	21 500

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

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

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

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 1991 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 investigation. A form is sent to all spotter physicians at the end of the year with the request that they report whether the question was asked of them in the past year by a patient himself or herself for the application of active euthanasia directly or indirectly and, if so, what the motive was for this. In addition, information is sought on the age, sex, disease, place of care or nursing and the use or otherwise of a 'euthanasia declaration'[25].
The results per patient can be found at the end of this section.
This table does not require much explanation.

In 1991 the number of requests was 40. Of the patients making a request for application of euthanasia, 80% have a malignity.
The number of patients nursed at home is 31; six patients live in a nursing home. One patient stays in the hospital; for two patients this information is not stated.

In 25 cases the request was supported by a written 'euthanasia declaration'. Requests for euthanasia were made by 34 patients; six patients asked for assistance with suicide. In 32 of the 40 requests the general practitioner consulted another physician. Of the 40 patients, 30 signed a written 'euthanasia declaration'

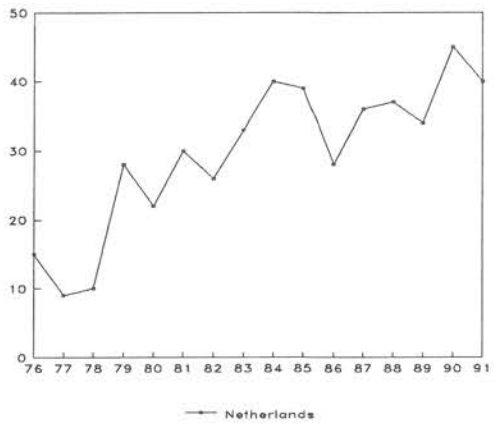
Requests for application of euthanasia 1976-1990

The distribution of the number of requests per province and urbanization group and per sex may be found in Table 37 (cf. Fig. 27).

Table 37: absolute number of patients who requested the general practitioner to apply active euthanasia by sex, per province and urbanization and for the Netherlands 1976-1991

absolute	M	F	province group				urbanization group			Netherlands
			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
1991	21	19	7	5	23	5	2	21	17	40

Figure 27
Absolute number of patients who requested the general practitioner for the application of active euthanasia, for the Netherlands, 1976-1991



The average number of requests for euthanasia and the scatter per province and urbanization group are given in Table 38 and Table 39.

Table 38: average number of requests per sentinel station by province group 1976-1991*

	province group			
	A	B	C	D
number of sentinel stations	6	7	17	10
average number of requests	11	7	15	7
scatter	0 - 24	2 - 24	0 - 27	2 - 15

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

Table 39: average number of requests per sentinel station by degree of urbanization 1976-1991*

	degree of urbanization		
	1	2	3
number of sentinel stations	6	21	13
average number of requests	7	10	15
scatter	2 - 19	0 - 21	2 - 23

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

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 40.

Table 40: absolute number of patients who requested the general practitioner for application of active euthanasia by age group, 1976-1991

	≤54	55-64	65-74	75-84	≥85	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
1991	9	5	11	10	5	40

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[26]. Meanwhile the data are known on 472 requests for application of euthanasia. Of these requests, 257 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 41.

Table 41: disorders for which euthanasia was requested, 1976-1991

	n	%
malignant neoplasms	337	71
cardio-vascular disease	35	8
chronic obstructive pulmonary disease	23	5
symptoms and incompletely described diseases	30	6
other diseases	47	10
total	472	100

The distribution of the disorders for which euthanasia was requested by age is given in Table 42.

Table 42: percentage of requests per disorder of the total number of reports by age (absolute numbers between parentheses), 1976-1991

	≤54		55-64		65-74		75-84		≥85	
	%	n	%	n	%	n	%	n	%	n
malignant disorders	79	(60)	88	(81)	88	(115)	57	(73)	17	(8)
cardio-vascular disease	0	(0)	1	(1)	2	(3)	16	(20)	24	(11)
chronic obstructive pulmonary disease	1	(1)	4.5	(4)	2	(3)	8	(10)	11	(5)
symptoms and incompletely described diseases	3	(2)	2	(2)	1	(1)	5	(6)	41	(19)
other diseases	17	(13)	4.5	(4)	7	(9)	14	(18)	7	(3)
	100	(76)	100	(92)	100	(131)	100	(127)	100	(46)

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

Table 43: percentage of requests for application of euthanasia by patients younger and older than 65 by disorder, 1976-1991 (n=absolute numbers of requests)

	≤ 64		≥ 65		total	
	%	(n)	%	(n)	%	(n)
all disorders	36	(168)	64	(302)	100	(470)
all malignancies	42	(141)	58	(196)	100	(337)
cardio-vascular disease	3	(1)	97	(34)	100	(35)
chronic obstructive pulmonary disease	22	(5)	78	(18)	100	(23)
symptoms and incompletely described diseases	13	(4)	87	(26)	100	(30)
other diseases	36	(17)	64	(30)	100	(47)

A further subdivision of the malignancies by localization of the tumour and the age of the patient displays the following picture (Table 44).

Table 44: percentage of requests for application of euthanasia by patients younger and older than 65 with a malignancy by localization of the tumor (n=absolute numbers)

	≤ 64		≥ 65		total	
	%	(n)	%	(n)	%	(n)
all malignancies	42	(141)	58	(194)	100	(335)
stomach	33	(12)	67	(24)	100	(36)
colon/rectum	35	(19)	65	(36)	100	(55)
trachea/lung	43	(37)	57	(49)	100	(86)
breast	56	(18)	44	(14)	100	(32)
other	45	(57)	55	(71)	100	(128)

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 63% in 1991.

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, 1991

age	sex	disease	motive for the request
92	F	old age	does not wish to go on
91	F	cerebro-vascular accident	hopelessness
90	M	carcinoma of the stomach	decay
89	V	metastasized carcinoma of the sigmoid	expects suffering, decay, loss of decorum
87	F	unclear	severe depression, pain
84	M	multi-infarct syndrome	
84	F	carcinoma of the colon	quality of life
84	F	carcinoma of the stomach	hopelessness, pain
83	M	metastasized carcinoma	great painof the colon
82	F	total mental and physical decay	unworthy existence, suffering
81	F	metastasized carcinoma of the colon	increasing pain and passage
77	M	carcinoma of the lung	increasing dyspnoea
76	M	Kahler's disease	terminal pain, despair
76	M	carcinoma of the stomach	lacklustre
75	F	carcinoma of the mamma; various bone metastases	pain, hopelessness
74	M	carcinoma of the stomach dependence, pain	decay, in need of help,
72	F	metastasized carcinoma of the ovary	unbearable suffering
71	M	carcinoma of the lung, metastasized	fear of pain
71	F	carcinoma of the mamma	lacklustre, pain
70	F	adenocarcinoma	unbearable suffering
69	M	carcinoma of the colon	liver metastases
69	V	metastasized carcinoma of the mamma	pain, vomiting
68	M	carcinoma of the stomach	fear of pain etc.
68	M	metastasized adenocarcinoma	great pain
67	M	metastasized carcinoma of the colon	obstruction
65	F	carcinoma of the lung, spinal cord lesion	lacklustre
63	M	Hodgkin's disease	

Reguest by the patient for active euthanasia, 1991 (continuation)

age	sex	disease	motive for the request
63	M	carcinoma of the lung	dyspnoea, pain
61	F	carcinoma of the colon	does not want to suffer like brother and sister
60	M	carcinoma of the bronchus	unbearable suffering
56	F	carcinoma of the lung	increasing dyspnoea
52	M	carcinoma of the floor of the mouth, metastases	untreatable
51	M	carcinoma of the pancreas	
48	F	metastasized melanoma	metastasization
47	M	adenocarcinoma	exhaustion
47	F	carcinoma of the pancreas	hopelessness, emergency situation
46	F	carcinoma of the ovary	suffering
42	M	AIDS	
37	M	AIDS	increasing decay, pain,in need of help, no dignity
30	M	AIDS	hopelessness, bad state

The investigation is being continued in 1992

Lyme disease

In 1989 Nohlmans and co-workers collected ticks at 20 places in the Netherlands and examined them on their infection with the spirochaete Borrelia burgdorferi, which causes the disease Lyme borreliosis in man. The infection comes about through a bite from an infected tick.
At all locations investigated by Nohlmans infected ticks were encountered; on trees, on paths and in car parks around the woods, in the dunes and on moorland. In the home too man can come into contact via a domestic animal carrying the tick and be bitten.

In the Netherlands an investigation has been made among blood donors into the percentage that prove to have antibodies against B. burgdorferi[27]. This varies by region from 2 to 17 with an average of 8.7. On the strength of this average about 1 300 000 persons in the Netherlands ought to have antibodies. In only 2-3% of the persons in whom antibodies are demonstrable do clinical symptoms occur. This would mean a prevalence of 30-45 000 patients. At an average life expectancy of 75 years the incidence to be expected is 400-600 patients per year.

The spotter physicians were asked in 1991 to report the new patients with Lyme borreliosis. In addition to age and sex the patient's occupation was asked for, the possible place of infection, the stage at which the disease became manifest and whether serological confirmation of the diagnosis was obtained.

In 1991 8 reports were made. The age varies from 9 to 60 years. Of the 8 reports, 5 were serologically confirmed. The probable place of infection is unknown for 2 patients; three patients were bitten abroad by a tick. Two patients were infected outdoors in the Netherlands, and the youngest patient was probably infected by a domestic animal. No reports came from the eastern and southern provinces. Reports were made from each of the three urbanization groups.

The registration of this syndrome is being repeated in 1992.

GENERAL REMARKS

1. The weekly return for 1992 has been compiled as follows by the Counselling Committee.

   a. Influenza(-like illness)
   b. Cervical smear
   c. Myocardial infarction, suspected/confirmed
   d. Sterilization of the man performed
   e. Sterilization of the woman performed
   f. Side-effect of cosmetics (suspicion of)
   g. Diabetes mellitus
   h. (Attempted) suicide
   i. Acute unusual headache
   j. Out-patient or clinical mammography
   k. Sport-traumas (1st consultation)
   l. Bee of wasp sting
   m. Urethritis of the man
   n. Concern about AIDS
   o. Gastro-enteritis

2. The incidental investigations for 1992 relate to the subjects euthanasia, Lyme disease and vaccination against influenza.

3. Suggestions relating to the questions on the weekly returns will be gladly received by the Counselling Committee.

4. Data from thus 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 January 1992.

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INKLAAR, H. Sportletsels in de huisartspraktijk. Huisarts en Wetenschap; 29, 1986, no. 9, p. 265-268

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Appendix 1

Continuous Morbidity Registration, Sentinel Stations Participating General Practitioners in 1991

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 1991

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/Ms. E. Hoornweg-Sleeboom/J. Schinkelshoek (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
D. Pasman/Mw. M.J. van Walsum (group practice)	Maassluis	Zuid-Holland
G. Dorrenboom	Rotterdam	Zuid-Holland
G.C.J.M. van Rooy/C.J.J. Kloos P. van Dijk/Ms. B. Hart (from 1-1-'91)(group practice	Schiedam	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-Branant
S.P.F. van Rijn/M. Klomp (from 1-5-'91)(group practice)	Eindhoven	Noord-Brabant
R.A.M. de Jong	Maastricht	Limburg

*) With dispensary

Weekstaat t.b.v. centrale registratie

CONTINUE MORBIDITEITSREGISTRATIE, PEILSTATION 1991

Proj. no.			Verslagjaar		Code peilstat.				Week no.	
4	0	0	9	1						

	Leeftijdsgroep	Influenza (-achtig) ziektebeeld[2]	Cervixuitstrijkje[3]				Hartinfarkt				Sterilisatie verricht[7]		Morning-after pil voorgeschreven[8]	Diabetes Mellitus					Suicide(poging)[10]	Acute ongewone hoofdpijn[11]		Zwangerschap (ondanks a.c.)[12]	Mammografie		C.A.I.D.S.[13]	Mono-nucleosis infectiosa[14]		Leeftijdsgroep	
			Klachten/ symptomen	Locaal pathologisch	Klachten/ symptomen[5]	Locaal pathologisch	Vermoed[6]		Bevestigd[6]					Incidentie[9]		Prevalentie[9]		sociale ziekte					Na 1-1-1990 voor 1e maal	Herhalings-onderzoek					
		M+V	V	V	V	V	M	V	M	V	M	V	V	M	V	M	V	M+V	M+V	M	V	V	V	V	M+V	M	V		
1	< 1																											< 1	
2	1-4																											1-4	
3	5-9																											5-9	
4	10-14																											10-14	
5	15-19																											15-19	
6	20-24																											20-24	
7	25-29																											25-29	
8	30-34																											30-34	
9	35-39																											35-39	
10	40-44																											40-44	
11	45-49																											45-49	
12	50-54																											50-54	
13	55-59																											55-59	
14	60-64																											60-64	
15	65-69																											65-69	
16	70-74																											70-74	
17	75-79																											75-79	
18	80-84																											80-84	
19	≥ 85																											≥ 85	

Week nummer : _____

Opgemaakt d.d.: _____

Aantal dagen gerapporteerd (zie voetnoot 1) 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Zie ommezijde voor voetnoten

Appendix 3a

Subjects on the weekly returns in alphabetical order 1970-1992

subjects	
abortion (spontaneous)	1982-1983
abortion (request)	1970-1975
abortus provocatus	1971-1979
accidents	1971
accidents in the private sector	1981-1983
acute unusual headache	1988-1992
admission of psychiatric patient	1988
AIDS (concern about)	1988-1992
alcoholism	1975
anti-hypertensivum or diuretic (prescription)	1976
battered child syndrome (suspicion of)	1973-1974
bee or wasp sting	1992
bites by pets	1986
burns	1988-1989
cervical smear	1976-1992
cerebrovascular accident	1986-1987
dementia	1987-1988
depression	1983-1985
diabetes mellitus	1980-1983 and 1990-1992
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
gastro-enteritis	1992
hay fever	1978-1982
influenza (-like illness)	1970-1992
malignancies	1984-1986
measles	1975-1979
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 and/or confirmed)	1978 and 1983-1985 and 1991-1992

Subjects on the weekly returns in alphabetical order 1970-1992 (continuation)

subjects	
otitis media acuta	1971 and 1986
out-patient or clinical mammography	1988-1992
Parkinson's disease	1980-1985
partus immaturus	1982-1983
partus at gravidity ≥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
side-effect of cosmetics (suspicion of)	1992
skull traumas in traffic	1975-1977
smoking (consultation with regard to addiction)	1974
sport traumas	1979-1983 and 1992
sterilization of the man performed	1972-1992
sterilization of the woman performed	1974-1992
suicide (attempted)	1970-1972 and 1979-1992
tonsillectomy or adenotomy	1971
tranquillizer (prescription)	1972-1974
ulcus ventriculi/duodeni	1975
ulcus pepticum	1985-1986
urinary tract infection (prescription of medicine)	1977
urethritis of the man	1992

Appendix 3b

Incidental investigations and other extra investigations, 1977-1992 (alphabetical)

subjects	
alternative forms of treatment (registration feasible?)	1980
anorexia nervosa and boulimia	1985-1989
euthanasia (request for application)	1977-1992
incest	1988
influenza (vaccination against)	1992
Lyme disease	1991-1992
malignancies	1982-1983
mastitis puerperalis	1982
multiple sclerosis	1977-1982
serum collection	1980 and 1985
regretting sterilization	1980-1984

Appendix 4

Age structure of the population of the Netherlands by sex, in thousands, 1 January 1990 (C.B.S.)

age	men	women	total*
0- 4	484	463	947
5- 9	453	434	887
10-14	463	441	904
15-19	535	513	1 048
20-24	646	620	1 266
25-29	669	637	1 306
30-34	629	603	1 232
35-39	589	566	1 155
40-44	621	592	1 213
45-49	470	446	916
50-54	405	393	798
55-59	360	366	726
60-64	324	354	678
65-69	283	342	625
70-74	207	281	488
75-79	147	237	384
80-84	83	171	254
≥ 85	51	132	183
total	7 419	7 591	15 010

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

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS — BLAD 1

CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD — 16-06-92

ALLE PEILSTATIONS — JAAR: 1991 — WEEK: 01 T/M 52

LEEFTIJDS-GROEP	POPULATIE			"INFLU-ENZA"	CERVIXUITSTRIJKJE				HARTINFARKT					
				"INFLU-ENZA"	1.1.89 IE MAAL WEGENS	1.1.89 IE MAAL PREVENT	HERHAL. WEGENS	HERHAL. PREVENT	VERMOED AMI			BEVESTIGD AMI		
	M	V	T	B	V	V	V	V	M	V	T	M	V	T
<1 JR	330	331	661	1049	0	0	0	0	0	0	0	0	0	0
1-4 JR	3314	3218	6532	638	0	0	0	0	0	0	0	0	0	0
5-9 JR	4092	3940	8032	582	0	0	0	0	0	0	0	0	0	0
10-14 JR	3921	4095	8016	463	5	0	0	0	0	0	0	0	0	0
15-19 JR	4845	4880	9725	355	12	8	0	0	0	0	0	0	0	0
20-24 JR	5648	5557	11205	258	76	194	40	23	0	0	0	0	0	0
25-29 JR	6021	5931	11952	302	105	474	86	98	3	0	2	3	0	2
30-34 JR	5546	5487	11033	335	113	843	124	186	2	0	1	0	0	0
35-39 JR	5098	5102	10200	345	155	1582	129	603	8	0	4	2	0	1
40-44 JR	5299	5144	10443	306	165	1658	189	570	21	0	11	13	4	9
45-49 JR	3995	3988	7983	328	148	1283	176	477	18	3	10	15	3	9
50-54 JR	3531	3456	6987	292	151	1343	203	368	34	12	23	23	8	14
55-59 JR	3358	3377	6735	291	50	237	59	110	60	12	36	54	0	27
60-64 JR	2864	3188	6052	292	44	122	19	16	70	35	51	84	22	51
65-69 JR	2671	3000	5671	251	27	53	10	7	116	40	76	58	37	51
70-74 JR	1885	2406	4291	336	13	4	13	4	143	66	100	74	58	65
75-79 JR	1310	2024	3334	210	10	10	0	0	122	114	117	23	40	33
80-84 JR	751	1423	2174	304	7	7	7	0	93	63	74	134	63	87
>85 JR	536	1129	1665	258	0	0	0	9	75	89	84	75	35	48
TOTAAL	65015	67676	132691	348	73	537	71	168	25	13	19	18	9	13

CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD 16-06-92

ALLE PEILSTATIONS JAAR: 1991 WEEK: 01 T/M 52

LEEFTIJDS-GROEP	POPULATIE			STERILISATIE			M.A.PIL		DIABETES MELLITUS						
				STERILISATIE			M.A.PIL		INCIDENTIE			PREVALENTIE			ACUTE ONTREGELING
	M	V	T	M	V	T	V		M	V	T	M	V	T	M+V
<1 JR	330	331	661	0	0	0	0		0	0	0	0	0	0	0
1-4 JR	3314	3218	6532	0	0	0	0		3	3	3	0	0	0	0
5-9 JR	4092	3940	8032	0	0	0	0		2	0	1	0	0	0	0
10-14 JR	3921	4095	8016	0	0	0	10		0	2	1	3	2	3	0
15-19 JR	4845	4880	9725	0	2	1	113		2	0	1	2	2	2	1
20-24 JR	5648	5557	11205	4	2	3	130		4	0	2	7	0	4	3
25-29 JR	6021	5931	11952	28	22	25	74		0	2	1	3	7	5	2
30-34 JR	5546	5487	11033	110	64	87	62		6	6	6	7	2	5	7
35-39 JR	5098	5102	10200	153	88	121	45		10	4	7	4	2	3	0
40-44 JR	5299	5144	10443	108	72	90	23		13	8	11	2	6	4	0
45-49 JR	3995	3988	7983	53	20	36	18		33	13	23	15	10	13	6
50-54 JR	3531	3456	6987	3	3	3	0		26	29	27	6	26	16	4
55-59 JR	3358	3377	6735	3	0	2	0		27	27	27	45	21	33	10
60-64 JR	2864	3188	6052	0	0	0	0		28	60	45	52	31	41	5
65-69 JR	2671	3000	5671	0	0	0	0		60	53	57	64	47	55	9
70-74 JR	1885	2406	4291	0	0	0	0		64	75	70	138	108	121	16
75-79 JR	1310	2024	3334	0	0	0	0		54	64	60	99	133	120	27
80-84 JR	751	1423	2174	0	0	0	0		0	28	18	120	91	101	18
>85 JR	536	1129	1665	0	0	0	0		0	35	24	56	71	66	24
TOTAAL	65015	67676	132691	37	21	28	37		15	16	15	19	19	19	5

CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD 16-06-92

ALLE PEILSTATIONS JAAR: 1991 WEEK: 01 T/M 52

LEEFTIJDS-GROEP	POPULATIE			SUICIDE (POGING)	ACUTE ONGEWONE HOOFDPYN			ZWANGER ONDANKS	MAMMOGRAFIE		CAIDS	MONONUCLEOSIS INFECTIOSA		
				SUICIDE (POGING)	ACUTE ONGEWONE HOOFDPYN			ZWANGER ONDANKS	1.1.90 1E MAAL	HERHAL.	CAIDS	MONONUCLEOSIS INFECTIOSA		
	M	V	T	M+V	M	V	T	V	V	V	M+V	M	V	T
<1 JR	330	331	661	0	0	0	0	0	0	0	0	0	0	0
1-4 JR	3314	3218	6532	0	0	0	0	0	0	0	0	6	3	5
5-9 JR	4092	3940	8032	0	0	0	0	0	0	0	3	10	0	5
10-14 JR	3921	4095	8016	1	0	0	0	2	5	0	4	23	22	22
15-19 JR	4845	4880	9725	6	0	0	0	10	2	2	10	54	103	78
20-24 JR	5648	5557	11205	8	0	0	0	20	49	0	48	39	34	37
25-29 JR	6021	5931	11952	4	0	0	0	19	67	7	33	15	20	18
30-34 JR	5546	5487	11033	7	2	4	3	16	140	15	26	7	0	4
35-39 JR	5098	5102	10200	7	0	6	3	14	170	35	27	8	8	8
40-44 JR	5299	5144	10443	7	11	6	9	4	253	89	20	0	2	1
45-49 JR	3995	3988	7983	5	0	5	3	0	226	70	15	0	3	1
50-54 JR	3531	3456	6987	3	0	0	0	0	229	67	13	3	0	1
55-59 JR	3358	3377	6735	7	0	0	0	0	166	50	9	0	0	0
60-64 JR	2864	3188	6052	5	11	3	7	0	147	41	3	4	0	2
65-69 JR	2671	3000	5671	4	0	3	2	0	117	20	2	19	0	9
70-74 JR	1885	2406	4291	0	0	4	2	0	75	25	2	0	0	0
75-79 JR	1310	2024	3334	3	0	0	0	0	54	10	6	0	5	3
80-84 JR	751	1423	2174	9	0	0	0	0	28	0	0	0	0	0
>85 JR	538	1129	1665	6	0	0	0	0	18	0	0	0	0	0
TOTAAL	65015	67676	132691	5	2	2	2	7	105	26	16	13	15	14

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS — BLAD 1

PROVINCIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD — 14-07-92

JAAR: 1991 — WEEK: 01 T/M 52

PROVINCIE-GROEP	POPULATIE			"INFLU-ENZA"	CERVIXUITSTRIJKJE				HARTINFARKT					
				"INFLU-ENZA"	1.1.89 IE MAAL WEGENS	1.1.89 IE MAAL PREVENT	HERHAL. WEGENS	HERHAL. PREVENT	VERMOED AMI			BEVESTIGD AMI		
	M	V	T	B	V	V	V	V	M	V	T	M	V	T
GR+FR+DR	10475	10705	21180	469	90	473	50	135	20	8	14	13	7	10
OV+GLD+FLE	10988	11337	22238	359	92	372	105	205	38	18	28	17	12	14
UTR+NH+ZH	28115	29857	57972	301	58	579	71	195	19	10	14	15	7	11
ZLD+NB+LIM	15440	15713	31151	377	79	637	61	119	29	20	25	26	10	18
TOTAAL	65018	67612	132541	354	74	541	71	170	25	14	19	18	9	13

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS — BLAD 2

PROVINCIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD — 14-07-92

JAAR: 1991 — WEEK: 01 T/M 52

PROVINCIE-GROEP	POPULATIE			STERILISATIE			M.A.PIL		DIABETES MELLITUS						
				STERILISATIE			M.A.PIL		INCIDENTIE			PREVALENTIE			ACUTE ONTREGE-LING
	M	V	T	M	V	T	V		M	V	T	M	V	T	M+V
GR+FR+DR	10475	10705	21180	40	16	28	24		7	15	11	15	19	17	3
OV+GLD+FLE	10988	11337	22238	40	19	29	41		13	16	14	13	13	13	5
UTR+NH+ZH	28115	29857	57972	30	24	27	41		17	19	18	22	25	24	4
ZLD+NB+LIM	15440	15713	31151	45	21	33	36		16	13	14	25	16	21	7
TOTAAL	65018	67612	132541	37	21	29	37		15	16	15	20	20	20	5

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS — BLAD 3

PROVINCIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD — 14-07-92

JAAR: 1991 — WEEK: 01 T/M 52

PROVINCIE-GROEP	POPULATIE			SUICIDE (POGING)			ACUTE ONGEWONE HOOFDPYN		ZWANGER ONDANKS	MAMMOGRAFIE		CAIDS	MONONUCLEOSIS INFECTIOSA		
				SUICIDE (POGING)			ACUTE ONGEWONE HOOFDPYN		ZWANGER ONDANKS	1.1.90 1E MAAL	HERHAL.	CAIDS	MONONUCLEOSIS INFECTIOSA		
	M	V	T	M+V	M	V	T	V	V	V	M+V	M	V	T
GR+FR+DR	10475	10705	21180	4	1	2	1	5	135	8	7	8	5	6
OV+GLD+FLE	10988	11337	22238	5	4	2	3	10	101	50	6	20	17	19
UTR+NH+ZH	28115	29857	57972	5	1	2	2	6	95	26	20	8	10	9
ZLD+NB+LIM	15440	15713	31151	4	1	2	2	7	112	20	24	23	28	26
TOTAAL	85018	87612	132541	5	2	2	2	7	106	26	17	13	15	14

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS — BLAD 1

URBANISATIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD — 14-07-92

JAAR: 1991 — WEEK: 01 T/M 52

URBANISATIE-GROEP	POPULATIE			"INFLU-ENZA"	CERVIXUITSTRIJKJE				HARTINFARKT					
				"INFLU-ENZA"	1.1.89 1E MAAL WEGENS	1.1.89 1E MAAL PREVENT	HERHAL. WEGENS	HERHAL. PREVENT	VERMOED AMI			BEVESTIGD AMI		
	M	V	T	B	V	V	V	V	M	V	T	M	V	T
A1+A4	7952	8379	16331	305	72	397	82	112	33	8	20	16	2	9
B1-B3;C1-C4	43263	44476	87649	252	64	541	62	182	24	14	19	18	9	13
C5	13803	14757	28561	701	104	626	92	183	23	14	19	18	12	15
TOTAAL	85018	87612	132541	354	74	541	71	170	25	14	19	18	9	13

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS BLAD 2

URBANISATIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD 14-07-92

JAAR: 1991 WEEK: 01 T/M 52

URBANISATIE-GROEP	POPULATIE			STERILISATIE			M.A.PIL			DIABETES MELLITUS			
				STERILISATIE			M.A.PIL			INCIDENTIE			PREVALENTIE			ACUTE ONTREGE-LING
	M	V	T	M	V	T	V	M	V	T	M	V	T	M+V
A1+A4	7952	8379	16331	50	26	38	39	8	13	10	33	35	34	6
B1-B3,C1-C4	43263	44476	87649	32	13	23	36	13	13	13	17	16	16	3
C6	13803	14757	28561	43	41	42	39	23	28	26	25	25	25	8
TOTAAL	65018	67612	132541	37	21	29	37	15	16	15	20	20	20	5

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS BLAD 3

URBANISATIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD 14-07-92

JAAR: 1991 WEEK: 01 T/M 52

URBANISATIE-GROEP	POPULATIE			SUICIDE (POGING)	ACUTE ONGEWONE HOOFDPYN		ZWANGER ONDANKS	MAMMOGRAFIE			CAIDS	MONONUCLEOSIS INFECTIOSA		
				SUICIDE (POGING)	ACUTE ONGEWONE HOOFDPYN		ZWANGER ONDANKS	1.1.90 IE MAAL	HERHAL.		CAIDS	MONONUCLEOSIS INFECTIOSA		
	M	V	T	M+V	M	V	T	V	V	V	M+V	M	V	T
A1+A4	7952	8379	16331	4	1	1	1	0	105	54	2	29	13	21
B1-B3,C1-C4	43263	44476	87649	3	2	1	1	7	93	22	15	13	14	13
C6	13803	14757	28561	10	1	5	3	9	146	21	29	7	17	12
TOTAAL	65018	67612	132541	5	2	2	2	7	106	26	17	13	15	14

FOOTNOTES

1. Typology of the Dutch municipalities by degree of urbanization, 1-1-1971 (Central Statistical office).

2. Figures from the registration of professions in primary health care, 1 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. 1-1-1991, Central Statistical Office. 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^{o};
   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. Fracheboud J., Hartinfarct, hartbewaking of thuisblijven. Nivel, Utrecht, 1987.

10. Hoogendoorn D., Enkele opmerkingen over de stand van zaken betreffende de epidemiologie van het acute hartinfarct. NTvG; (1990); 134; blz 592-594.

11. Mackenbach J.P., Kunst A.E. en Loman C.W.N., Regionale verschillen in sterfte aan ischemische hartziekten. N.T.v. Geneeskunde (1990) 134, blz 596-601.

12. The calculations made in this chapter have been performed by Dr E. Ketting, now employed by the Netherlands Institute for Socio-Sexological Research

13. Wibaut, p. De onbetrouwbaarheid van de alternatieve morning-after pil, Huisarts en Wetenschap, 1986, p. 306-307.

14. 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.

15. Onderzoek Gezinsvorming C.B.S. Beets, G.C.N. Geboorteregeling in Nederland, 1982 en 1988, Maandstatistiek van de Bevolking, 37 (1989), 1: 21-27.

16. Vennix, P., De Pil en haar alternatieven. (NISSO-studies nr.6) Ebuton, Delft, 1990.

17. 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.

18. 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

19. 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.

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Explanatory notes pertaining to:

Bijlage 1	
Bijlage	- Appendix
Continue morbiditeits registratie,	- Continuous morbidity registration,
peilstations	- sentinel stations
Deelnemende artsen	- Participating general practitioners
Naam	- Name
Plaats	- Residence
Provincie	- Province
Comb.-praktijk	- Group practice
Apotheek-houdend	- With dispensary
Bijlage 2	
Bijlage	- Appendix
Weekstaat t.b.v. centrale	- Weekly return for central
registratie	registration
Continue morbiditeits registratie,	- Continuous morbidity registration,
peilstations	- sentinel stations
Proj. no.	- Project number
Week no.	- Number of the week
Verslagjaar	- Year under review
Code peilstations	- Code number sentinel stations
Rapport. dagen	- Number of days over which reporting took place
Regel no.	- Line number
Leeftijdsgroep	- Age group
Influenza (-achtig ziektebeeld)	- Influenza (-like illness)
Cervixuitstrijkje	- Cervical smear
Na 1-1-1989 voor de eerste maal	- Taken for the first time after 1-1-1989
afgenomen op grond van	on the ground of
Klachten/symptomen	- Complaints/symptoms
Louter preventieve overwegingen	- Purely preventive considerations
Hartinfarkt	- Myocardial infarction
- vermoed	- suspected
- bevestigd	- confirmed
Sterilisatie verricht	- Sterilization performed
Morning-after pil voorgeschreven	- Prescription of morning-after pill
Diabetes Mellitus	- Diabetes Mellitus
- incidentie	- incidence
- prevalentie	- prevalence
- acute ontregeling	- acute destabilization
Suïcide(poging)	- (Attempted) suicide
Acute ongewone hoofdpijn	- Acute unusual headache
Zwangerschap (ondanks a.c.)	- Pregnancy despite adequate contraception
(Poli) klinische mammografie	- mammography
na 1-1-1990 voor eerste maal	- Taken for the first time after 1-1-1990
Herhalingsonderzoek	- Repeat examination
C.A.I.D.S.	- Concern about AIDS
Mononucleosis infectiosa	- Mononucleosis infectiosa

M	- Male
V	- Female
Weeknummer	- Number of the week
Opgemaakt d.d.	- Completed on
Aantal dagen gerapporteerd	- Number of days over which reporting took place
(zie voetnoot[1])	- (See footnote number[1])
Zie ommezijde voor voetnoot	- For footnotes see reverse
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.)	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. Betreft uitsluitend nieuwe patiënten, ook telefonisch consult melden	2. Relates solely to new patients. Report telephone calls as well.
3. Betreft rapportering van vrouwen bij wie na 1-1-1989 om welke reden dan ook een cervixuitstrijkje heeft plaatsgevonden. Indien bij een vrouw na 1-1-1989 opnieuw een cervixuitstrijkje wordt gemaakt, dient dit altijd onder de subrubriek "herhalingsonderzoek" geboekt te worden (zie ook voetnoot 5).	3. Concerns reporting of women on whom a cervical smear was taken after 1-1-1989 for whatsoever reason. If a cervical smear was taken again of a women after 1-1-1989 this should always be entered under the subheading "Repeat examination" (see also footnote 5).
4. Bijvoorbeeld in het kader van pilcontrole, op verzoek van de vrouw zonder dat ze klachten heeft of in het kader van het bevolkingsonderzoek.	4. For example as part of check-up for the pill, of the woman's request without for having complaints or as part of the mass screening.
5. Bijvoorbeeld wegens verdacht preparaat of wegens technische onvolkomenheden bij onderzoek vorig preparaat.	5. For example on account of suspect preparation or technical imperfections in the examination of the previous preparation.
6. per melding invullen Vermoed hartinfarct patiënt 1 1e 3 letters achternaam:..... geboortedatum:..-..- niet fataal: cadiologische voorgeschiedenis ja/nee	6. complete per report Suspected myocardial infarction patient 1 first three letters of surname ..... date of birth ..-..-.. not fatal previous cardiological history yes/no

Fataal: waarop is vermoeden gebaseerd*
- cadiologische voorgeschiedenis ja/nee
- anamnese/onderzoek arts ja/nee
- hetero anamnese ja/nee

Bevestigd hartinfarct
patiënt 1
1e 3 letters achternaam
geboortedatum: .....
datum diagnose: .....
diagnose door : specialist/ huisarts/andere arts
diagnose op basis van*
- positief ECG ja/nee
- enzymverhoging ja/nee
- obductie ja/nee

* meerdere antwoorden mogelijk

7. Indien het een patient(e) betreft uit een van de leeftijdgroepen, waarvan het vak gerasterd is, dus jonger dan 20 jaar en ouder dan 49 jaar, tevens exacte leeftijd hierachter vermelden.
   Leeftijd:.....
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).
   Naam van de pil:.....
9. S.v.p. apart formulier invullen en bij de weekstaat voegen.
   Code
   Geboortedatum.....
   Geslacht
   Incident
   Prevalent
   Acute ontregeling
10. S.v.p. apart formulier invullen en bij de weekstaat voegen.
11. S.v.p. apart formulier invullen en bij de weekstaat voegen.

fatal on what is suspicion based?*
- previous cardiological history yes/no
- anamnesis/examination by GP yes/no
- hetero anamnesis yes/no

Confirmed myocardial infarction
patient 1
first three letters of surname
date of birth.....
date of diagnosis .....
diagnosis by specialist/ GP/other physician
diagnosis on basis of*
- positive ECG yes/no
- enzyme increasey es/no
- autopsy yes/no

* several answers possible

7. If a patient is concerned in one of the age groups whose box is filled in, younger than 20 years and older than 49 years, also give the exact age here.
   Age:.....
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.)
   Name of the pill:.....
9. Please complete a separate form and attach to the weekly return.
   Code
   Date of birth: .....
   Male/female
   Incidence
   Prevalence
   Acute destabilization
10. Please complete a separate form and attach to the weekly return.
11. Please complete a separate form and attach to the weekly return.

12. S.v.p. apart formulier invullen en bij de weekstaat voegen.	12. Please complete a separate form and attach to the weekly return.
13. S.v.p. apart formulier invullen en bij de weekstaat voegen.	13. Please complete a separate form and attach to the weekly return.
14. Betreft uitsluitend nieuwe patiënten	14. Concerns new patients only.
De klinische diagnose dient door:	The clinical diagnosis should be bevestigd te zijn confirmed by:
- hetzij een positieve reaktie van Paul Bunell	- a positive Paul Bunell reaction, or
- hetzij een positieve monosticon reaktie	- a positive monosticon reaction, or
- hetzij een karaktiristiek bloedbeeld	- a characteristic blood picture

Tables (p 124 - p 129)

Continue morbiditeits registratie peilstations	- Continuous morbidity registration sentinel stations
Kwartaal	- Quarter
Leeftijdsgroep	- Age group
Influenza (-achtig ziektebeeld)	- Influenza (-like illness)
Cervixuitstrijkje	- Cervical smear
Klacht/symptoom	- Complaint/symptom
Herhalingsonderzoek	- Repeat smear
Hartinfarkt	- Myocardial infarction
Sterilisatie verricht	- Sterilization performed
Morning-after pil voorgeschreven	- Morning-after pill prescribed
Diabetes Mellitus	- Diabetes Mellitus
Suïcide(poging)	- (Attempted) suicide
Acute ongewone hoofdpijn	- Acute unusual headache
Zwangerschap (ondanks a.c.)	- Pregnancy despite adequate contraception
(poli) klinische mammografie	- (Clinical) mammography
na 1-1-1990 voor de eerste maal	- Taken for the first time after 1-1-1990
Herhalingsonderzoek	- Repeat examination
C.A.I.D.S.	- Concern about AIDS
Mononucleosis infectiosa	- Mononucleosis infectiosa
M	- Male
V	- Female
Provinciegroepen	- Province group
Gr + Fr + Dr	- Groningen, Friesland, Drenthe
Ov + Gld + Fl	- Overijssel, Gelderland, Flevoland
Utr + NH + ZH	- Utrecht, North Holland, South Holland
Zld + NB + Lim	- Zeeland, North Brabant, Limburg

Urbanisatiegroepen
A_1 - A_4
B_1 - B_3 + C_1 - C_4

C_5

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

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

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