continuous morbidity registration sentinel stations the netherlands

1992

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Author : A.I.M. Bartelds

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FOREWORD

This, the twenty-fourth annual report of the Continuous Morbidity Registration, Sentinel Stations, has two important aspects.
Firstly, the network of sentinel stations is used for the actual isolation of influenza viruses. In all sentinel station practices nose/throat swabs are now taken for virological examination. Up to now this type of examination had to take place above all in hospitals. However, general practice is a much more suitable 'site'. Weeks before the influenza epidemic broke out on a national scale viruses were isolated in this way. All this was done in close cooperation with the RIVM.

A second important task of the sentinel stations is connected with 'incidents' in health care.
Sometimes a symptom suddenly becomes manifest of which it is not clear at that moment how often and how far it is spread.
The sentinel stations can then be used to give a picture of the 'average general practices' and as such establish the degree of exceptionality of an incident. A well-known example of this concerned some years ago the prescribing of the medicine Rohypnol. Was this confined to a few practices? It could be derived from the registration by the sentinel stations that this was not the case: on a limited scale the agent was prescribed in four out of five practices. This situation arises again with the symptom 'side- effect of cosmetics'. On the basis of case reports the idea took root at the Chief Office of Health Protection that in some skin complaints a connection may exist with the use of cosmetics. The registration of skin or other complaints through the use of cosmetics provided an indication in 1992 of the extent of this problem: 20 out of 10 000 women report a skin problem that has possibly been caused by a cosmetic.

Without the sentinel station network establishing such an effect remains guesswork. From the above examples, taken from the 1992 report, it becomes clear that even after nearly 25 years this national network of registering general practices has lost nothing of its importance.

Prof. dr. J. van der Zee,
Chairman of the Sentinel Stations Counselling Committee

INTRODUCTION

Continuous Morbidity Registration is a method of registration based on general practice. A national network of general practices, the sentinel stations, covers 1% of the Dutch population. In the composition of this network allowance has been made for a geographical spread and for a spread over regions with a varying degree of urbanization (see p. 6-9).
The participating general practitioners, the spotter physicians, submit a form every week on which certain illnesses, occurrences and actions are reported, the weekly return. This weekly return comprises a distribution by age and where necessary a distribution by sex (see p. 129).
Every two years a census takes place of the practice populations concerned. In this way the population to which the collected data must be related is known.
On the whole frequencies are calculated according to age group per 10 000 men or women (see p. 16).
Every year the topics that are to be placed on the weekly return are selected by the Counselling Committee. Requests or suggestions from others are also taken into consideration. In order that a disease or occurrence may be placed on the weekly return, 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. 130 and 131) 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 1992 the contacts in the International Primary Care Network were continued. In this international network no research was performed in 1992; however, a further two publications appeared.

Since the end of 1988 participation has been taking place in a second 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 the 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 1990-1991 joint registration took place of influenza(-like illnesses) and requests for blood tests for H.I.V. antibodies.

The Eurosentinel project ended in June 1991[1]. However, contacts have been maintained between the project leaders that have led to continuation of the joint activities in the registration of influenza(-like illnesses) and requests for blood tests for H.I.V. antibodies in 1992.

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 1992 the committee functioned in the following composition:

	F.K.A. Fokkema, M.D.[5]
	J.J.L. Pieters, M.D.[4]
	W. Reijmerink[1] (from 1-7-'92)
	H.O. Sigling, M.D.[5,6]
	W.A. van Veen, M.D.[1]
	K. van der Velden, epidemiologist[3] (from 1-6-'92)
	J. van Wijngaarden, M.D.[4]
	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 1992. It had two vacancies in that year.

MEETING OF SPOTTER CO-WORKERS 1992

Contact between the registering physicians and their co-workers, the counselling committee, the topic holders and the project management is of great importance to a registration project like the CMR Sentinel Stations. Every year, at the start 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 appear for a number of years on the weekly return are discussed and new topics on the weekly return are introduced.

At the 1992 meeting Mr H.W. Hoek, psychiatrist/epidemiologist with the Psychiatry Division of Utrecht University Hospital, gave a survey of registration of eating disorders during the period 1985-1989*.
The incidence of anorexia nervosa is 6.9 per year per 10 000 persons in general practice and 5.1 per year per 10 000 persons in mental health care. In the period 1974-1982 an incidence of 5.0 per year per 10 000 persons was found in a psychiatric case register. There seems to be no question of an increase in the incidence.
The incidence of boulimia nervosa is 9.9 per year per 10 000 persons. A comparison with other large-scale studies is not possible on this point.
The incidence of boulimia nervosa is significantly higher in the cities and in the urbanized rural municipalities than in the rural municipalities. These differences are found to a much smaller extent for anorexia nervosa. Suggestions for an explanation of these differences were discussed.
The second subject dealt with by Mr Hoek is the follow-up investigation into the incident patients reported in the period 1985-1989. The problems to be expected in tracking down these patients are being discussed with the spotter physicians. Most patients are at the age at which they move house fairly frequently.

Mrs A.M.M. Hoogenboom-Verdegaal, agricultural engineer and medical microbiologist, formerly with the Laboratory for Water and FoodMicrobiology of the National Institute for Public Health and Environment al Protection (RIVM) and now at the Canisius-Wilhelmina Hospital, Nijmegen, next discussed with those present the registration of acute gastro-enteritis and the submission of faeces samples for further examination on a number of

pathogens. She emphasized the desirability of the examination; the limitations of the set-up were recognized.

After the end of the discussion a large majority of the spotter physicians proved prepared to assist with the registration of this topic and to submit faeces samples.

The Chairman of the Counselling Committee, Prof. dr. J. van der Zee, finally informed the sentinel station co-workers regarding the talks going on about the future of the sentinel stations. In essence his information amounted to the fact that as yet no concrete agreements exist on the new assignment for the sentinel stations as part of the Public Health Future Explorations.

During the business part of the meeting the 1992 weekly return was discussed.

* Hoek, H.W. The incidence and prevalence of anorexia nervosa and boulimia nervosa in primary care: Psychological Medicine, 1991, 21, 455-460

DISTRIBUTION OF THE SPOTTER PHYSICIANS OVER THE NETHERLANDS

Figure 1
SENTINEL STATIONS
Continuous Morbidity Registration
1992

The number of sentinel stations at the beginning of 1992 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)[2];
- 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. 127-128) gives a survey of the general practitioners who took part in the sentinel station project during 1992. 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 1992 the percentage of general practitioners cooperating throughout the Netherlands was 47, and among the spotter physicians 54. There are 7 dispensing spotter physicians, 3 in urbanization group 1 and 4 in urbanization group 2, that is 11% of the total number of spotter physicians. For the Netherlands as a whole this percentage is 10,9[3].

Tables 1 and 2 give a distribution of the number of spotter physicians and sentinel stations per province and urbanization group in the years 1983-1992. 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 1983-1992[4]

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
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
1992	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 1983-1992

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
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
1992	10	6	37	24	16	13	63	43

THE PRACTICE POPULATIONS

In 1991 a complete census of the practice populations took place; these details have been used for processing with effect from 1-1-1992. In 1993 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 1992 by 118 705 inhabitants (as per 1-1-1992).

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[5]	number of patients of sentinel stations[6] (with percentages)	
province group		A	1 602 661	22 776	(1.4%)
		B	3 094 049	24 902	(0.8%)
		C	6 730 466	64 556	(1.0%)
		D	3 700 021	36 142	(1.0%)
urbanization		1	1 663 861	22 085	(1.3%)
group		2	9 857 121	86 932	(0.9%)
		3	3 606 215	39 359	(1.0%)
sex	men		7 480 422	72 801	(1.0%)
	woman		7 648 728	75 575	(1.0%)
total			15 129 150	148 376	(1.0%)

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

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

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

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 1992 it was 11 395 (53 weeks x 5 days x 43 sentinel stations).
Table 4 shows the absolute numbers and the percentages.

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

year	maximum number of days which can be reported	actual number of absolute	reported days percentage
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%
1992	11 395	10 141	89 %

The percentage of reporting days is practically the same in 1992 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 urbanized rural municipalities, together with municipalities with urban characteristics, are with 88% the lowest of the urbanization groups, and the northern provincies with 91.9% the highest of the province group.

Per province group	Per urbanization group
A 91.9%	1 91.9%
B 89.6%	2 88. %
C 87.8%	3 89.3%
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 24 (maximum 43 x 5= 215).

Figure 2
The number of days registered in 1992 per week.

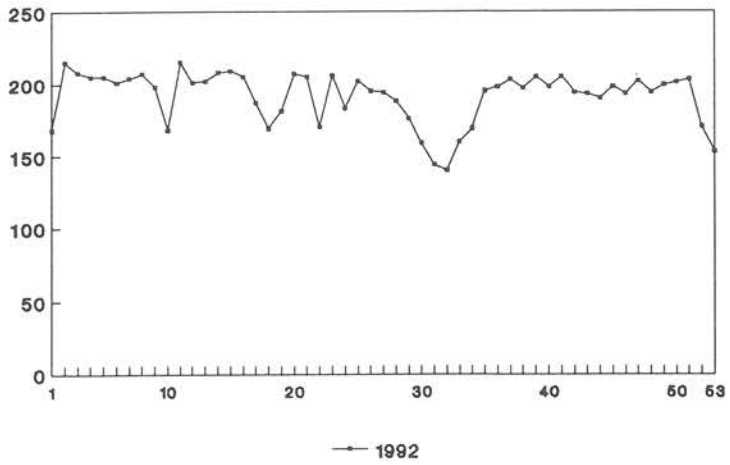


Table 5 presents the frequency distribution of the number of days not reported per sentinel station. The average number of non-reporting days per sentinel station in 1992 is 29, almost the same as in 1991.
A breakdown into single and group practices shows a clear difference here, viz 38 and 15 days respectively. 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									
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
≤ 0	2	2	1	0	0	1	1	2	1	2
1- 9	7	6	8	7	4	7	6	5	7	7
10-19	5	3	1	4	7	2	6	5	3	4
20-29	1	7	8	7	1	5	5	6	11	5
30-39	12	9	10	10	5	15	15	11	10	13
40-49	14	17	15	13	16	13	9	10	9	9
50-59	4	1	2	2	10	2	2	2	1	1
60-69	1	1	0	1	1	0	1	1	0	1
70-79	0	0	0	0	0	0	0	1	0	-
80-89	0	0	0	0	0	0	0	1	0	-
90-99	0	0	0	0	0	0	0	0	0	-
≥ 100	0	0	0	1	0	0	0	0	1	1
total number of sentinel stations	46	46	45	45	44	45	45	44	43	43
average	31	31	30	31	37	27	29	32	30	29
median	37	35	34	34.5	43	34	32	33	29	33

Further study of this table shows an improvement in reporting over the years. A major failure to report, i.e. more than 50 days per sentinel station, occurs in nearly 5% of the sentinel stations in 1992. This is a lower percentage than in 1991.

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. 129)

The questions on the weekly return for 1992 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. Side effect of cosmetics (suspicion of)(1992)
7. Diabetes mellitus (1990);
8. (Attempted) suicide (1979);
9. Acute unusual headache (1988);
10. Out-patient and clinical mammography (1988);
11. Sport-traumas (1992);
12. Bee or wasp sting (1992);
13. Urethritis of the man (1992);
14. Concern about AIDS (1988);
14. Gastro-enteritis (1992);

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. 130-131) together with the years of registration.

PROCESSING OF THE DATA ON THE WEEKLY RETURN

This report contains the results of the weekly return for 1992. 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 133) the age structure as on 1 January 1992 is given.

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

week are processed.
Until 1978 a correction factor was applied to this. Consideration of the number of times it was applied showed that the influence on the total was so small that this correction has been done away with effect from 1 January 1978. Moreover, enquiries among the spotter physicians revealed that in the cases of 1 or 2 days' absence the work was simply moved to a later date.
The returns are built up from the weekly return figures, the frequencies being calculated on the average population present in the quarter.
This annual report will not attempt to give a complete analysis of the material, as already mentioned in the introduction.

The following annual tables are included (page 134-141).

1. Cumulative, all sentinel stations standardized. Year 1992, week 01-53, p. 1-4[7].
2. Province group standardized by syndrome. Year 1992, week 01-53, p.1-4.
3. Urbanization group standardized by syndrome. Year 1992, week 01-53, p. 1-4.

INFLUENZA(-like illness)

Influenza[8] 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 1991-1992 and 1992-1993

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 1991-1992 season[9]. Figs. 4-1-4.3 give the number of new cases of influenza for the 1992-1993 season. The progress of influenza in the first weeks of 1992 was already discussed in the 1991 report.

Figure 3.1
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, for the Netherlands, 1991-1992

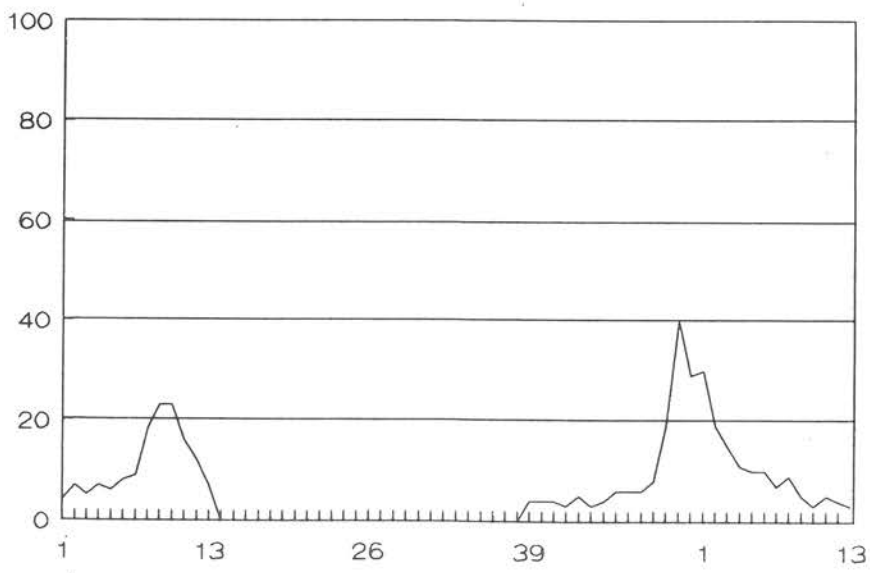


Figure 3.2
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per urbanization group,1991-1992

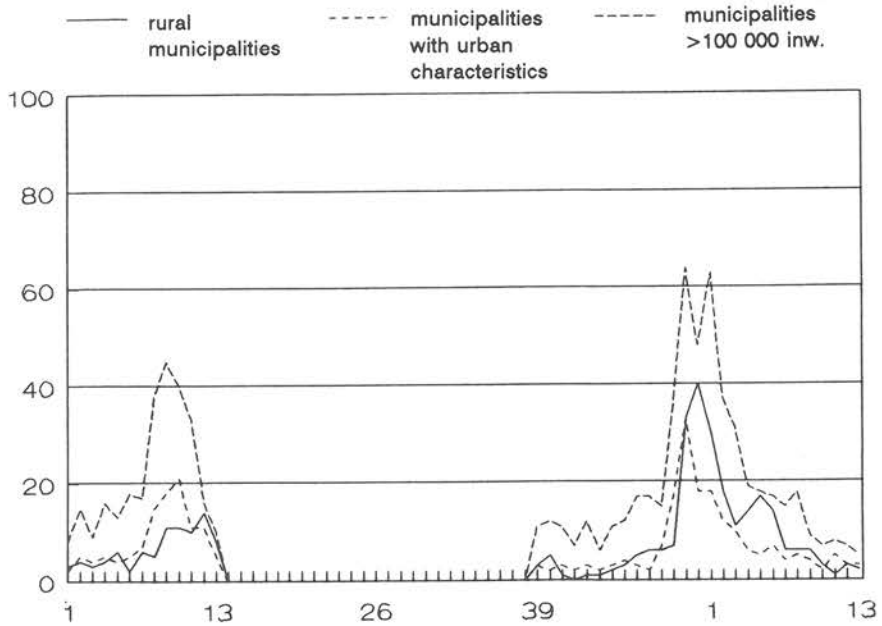


Figure 3.3
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per province group, 1991-1992

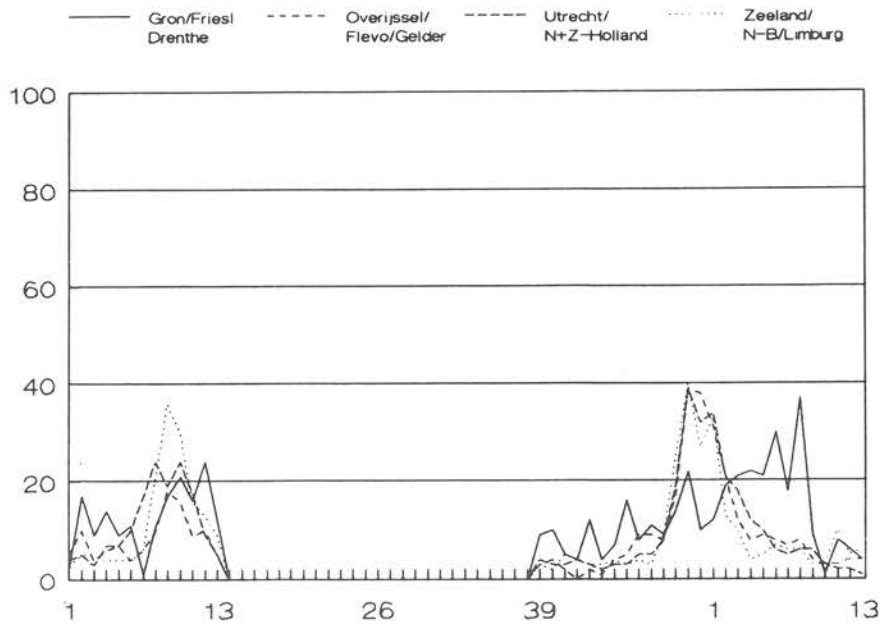


Figure 4.1
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, for the Netherlands, 1992-1993 (up to and including week 13)

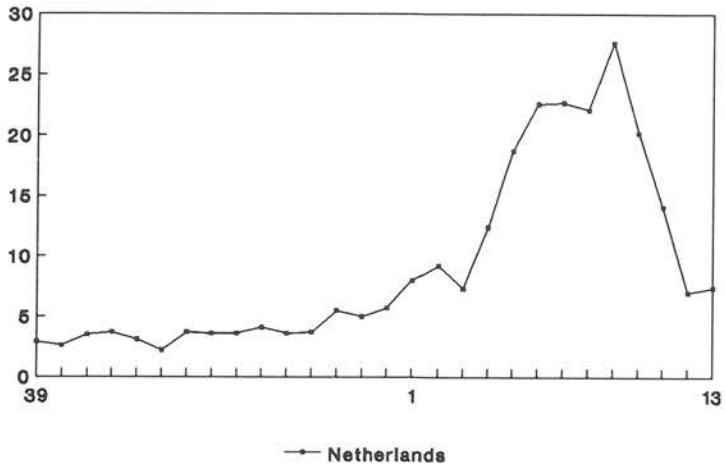


Figure 4.2
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per urbanization group, 1992-1993 (up to and including week 13)

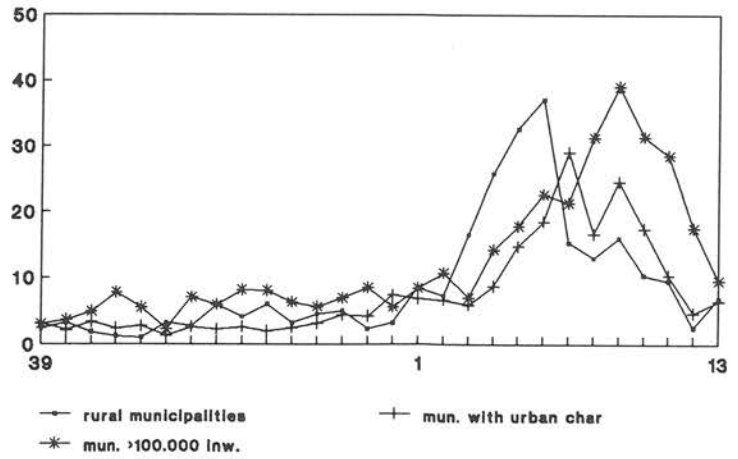
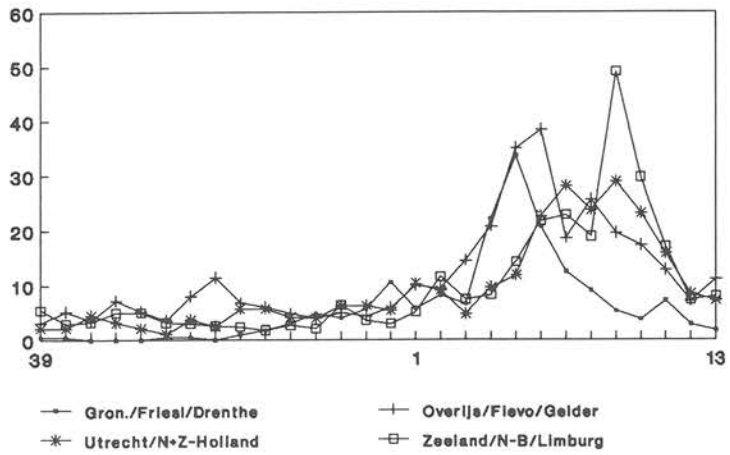


Figure 4.3
Number of patients with influenza(-like illness) per week and per 10 000 inhabitants, per province group, 1992-1993 (up to and including week 13)



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).

1992-1993 season

On 27 October 1992 the first influenza virus was isolated: it was the influenza A (H_1N_1) virus. However, at that time there was no question of increased activity.

In mid November 1992 the beginning was established in one of the sentinel stations in The Hague of what later proved to be a local epidemic (influenza B). At the end of December there was a local outbreak of the influenza B virus in Franeker.

At the end of January 1993 (week 4) the virus then broke out on a larger scale. At first, this occurred more in the north and east of the country, later in the west and south. In week 9 the highest incidence is found: 27 per 10 000 inhabitants. By week 12 the incidence has fallen again to below 10 per 10 000 inhabitants.

Of the province groups the southern provinces are most affected: 49 per 10 000 inhabitants in week 9.

This season the cities had more trouble with influenza-like disorders than the other urbanization groups: 39 as against 16 and 24 per 10 000 inhabitants in week 9.

The 1992-1993 season was dominated by the influenza B virus: about 75% of all isolated viruses. Influenza A/H_1N_1 and A/H_3N_2 viruses were isolated above all at the end of the influenza wave of this season.

Table 6: number of patients with influenza (-like illness), per 10 000 inhabitants, 1983-1993

year	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
total per calendar year	396	502	464	630	365	399	410	225	348	244	
highest weekly incidence per "season"	53	57	71	26	9	44	54	24	40	27	

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. In the 1992-1993 season there was increased influenza activity in February and March 1993.

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.

Virological surveillance of influenza-like diseases in the 1992-1993 season (NIVEL/RIVM)
After a pilot study in 1991/92, in the 1992/93 season the clinical influenza surveillance by NIVEL was supplemented on a larger scale by etiological examination of 388 patients in total. A virus was isolated among 127 patients (33%). In 87 of the cases this was an influenza virus (usually type B), which, almost independently of the patient's age, was encountered in about one out of five samples. The samples were also examined with a PCR technique for influenza virus and RS virus in the National Influenza Centre (NIC), Rotterdam. If the results of this are also taken into account, then an influenza virus infection was diagnosed in 110 (28%) of all patients.

The results of the surveillance may be described as good. This applies both in a quantitative respect - 43% of the Dutch influenza virus isolations were made in this surveillance - and in a qualitative respect - all four kinds of influenza virus that were isolated in other laboratories (A-H_3N_2, swine A-H_3N_2, A-H_1N_1 and B) were also brought to light in the NIVEL/RIVM system. The surveillance also functioned well as an early warning system: the first influenza virus isolations (type B) were available six weeks before the start of the influenza epidemic (likewise mainly type B).

The weeks with many influenza virus isolations coincided with those with

large numbers of clinical registrations of influenza-like diseases. Evidently the participating physicians recognized influenza unerringly as a separate clinical picture. This also emerges from the fact that if they had reported the disease as an influenza-like disease the chance of influenza virus isolation would have been five times as great as if they had not done so.

As regards the pathology of influenza, it can be established that fever above 39.0°C and muscular pain were significantly connected with a greater chance of isolation of an influenza virus.

This topic is to be maintained on the weekly return.

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

SPRENGER, M.J.W., P.G.H. MULDER, W.E.P. BEGER and N. MASUREL.
Influenza: Relation of Mortality to Morbidity Parameters-Netherlands, 1970-1989.
International Journal of Epidemiology, 1991, vol. 20, no. 4, p. 1118-1124

The purpose of this study is to investigate the relationship between the number of influenza-like illness cases (ILI), weekly registered by the general practitioners (sentinel stations), and the monthly overall influenza mortality in people over 60 years of age, provided by the Dutch Statistical Bureau during the period July 1970 to June 1989.

The quantitative impact of influenza-morbidity is expressed by three summary parameters, calculated from the 52 (53) weekly ILI-figures per season-year, (i) their sum (i.e. global extent of an epidemic), (i) their standard deviation, and (iii) their maximum (i.e. peak number of ILI during an epidemic). In the analysis influenza A subtype is also included. These four parameters are mutually compared with respect to their predictability for yearly total influenza mortality in the 19 season-years available.

In most cases, the standard deviation and the peak number of ILI are more powerful for prediction of mortality than the global extent of the epidemic.

The peak number of ILI is of special interest. It is particularly useful for estimating the effect on current influenza mortality during an ongoing epidemic. From the model it is possible to calculate a threshold (of week ILI) beyond which mortality increases proportionately more than the number of illness episodes.

By using the peak value of morbidity it is possible to calculate the minimal impact of epidemic mortality.

This study indicates that the weekly number of influenza-like illness cases has a certain prognostic value for the real impact of influenza. An electronic surveillance system could detect immediately the threshold above which influenza mortality increases more than proportionally. When this level is reached electronic bulletins could stress the importance of prophylactic measures or, especially for the high-risk patient, the use of amantadine to reduce excess mortality.

The benefits of such an electronic surveillance system are not restricted to the epidemic. We believe that such a system could improve the involvement of general practitioners and in this way improve the awareness of the consequences of influenza. This might result in greater vaccination coverage.

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 1992 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 1990. 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 1992 in 40 of the 43 sentinel stations. In 1988 mass screening was a fact in only 22 of the 45 sentinel stations.

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

Table 7: number of smears taken by spotter physicians by indication for taking a smear, per 10 000 women, 1983-1992

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
complaints and/or symptoms	65	57	62	65	59	76	72	55	73	72
"preventive"	294	336	324	398	345	369	521	577	537	523
repeat smear	168	182	184	170	211	246	237	273	239	233
total	527	575	570	633	615	691	830	905	849	828

The total number of smears (828 per 10 000 women) was somewhat lower in 1992 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 65 per 10 000 women. The years 1988-1989 and 1991-1992 displayed a higher level: over 70 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 number of repeat smears increased in the eighties to 273 per 10 000 women in 1990. In 1991 it was again lower: 239 per 10 000, as also in 1992: 233 per 10 000 women.

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 1990-1992 70 repeat smears per 10 000 women were taken on account of complaints and/or symptoms. In 1992 this number was again 62 per 10 000 women. 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 1983-1990 from 294 to 577 per 10 000 women. In 1991 it was somewhat lower: 537 per 10 000, as in 1992: 523 per 10 000 women.
In Table 8 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. 5 and 6).

Table 8: 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, 1983-1992

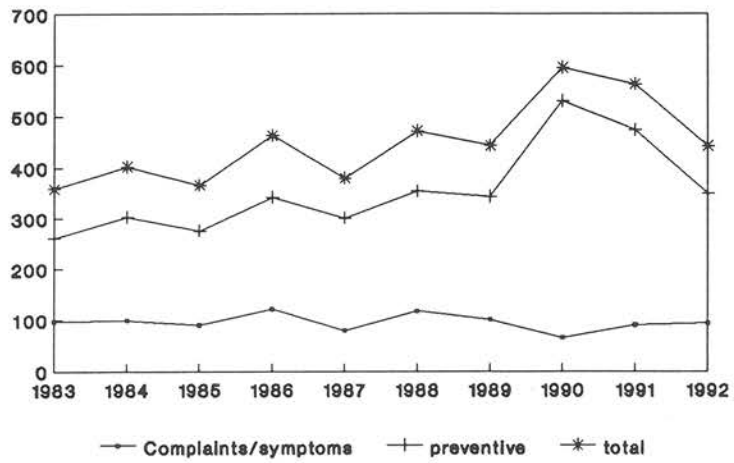
		province group				urbanization group			Nether-lands
		A	B	C	D	1	2	3	
complaints	1983	97	99	49	53	90	44	105	65
and/or	1984	99	97	37	45	78	42	84	57
symptoms	1985	90	92	45	52	85	49	78	62
	1986	121	106	42	43	93	54	75	65
	1987	79	92	46	48	79	49	69	59
	1988	117	127	56	51	118	58	96	76
	1989	100	127	54	48	102	57	90	72
	1990	65	95	43	41	66	52	56	55
	1991	90	91	57	79	72	64	102	73
	1992	91	89	65	59	42	68	93	72
"preventive"	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
	1992	352	439	586	582	455	511	585	525

Table 8: 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, 1983-1992 (continuation)

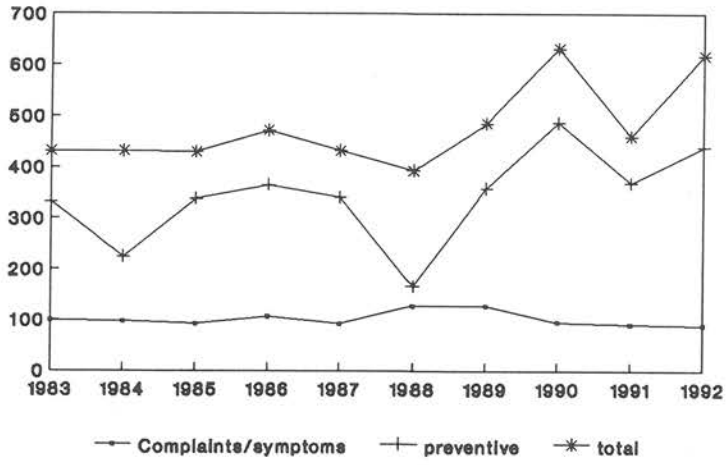
		province group				urbanization group			Nether-lands
		A	B	C	D	1	2	3	
total	1983	359	431	361	297	458	293	367	359
	1984	402	431	399	348	449	327	539	393
	1985	366	429	388	363	441	316	523	386
	1986	463	471	491	406	491	398	614	463
	1987	380	432	429	351	421	343	541	404
	1988	471	393	468	436	383	393	649	450
	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
	1992	443	618	651	641	487	579	678	597

Figure 5
Number of cervical smears taken per province group by indication for taking a smear, per 10 000 women, 1983-1992

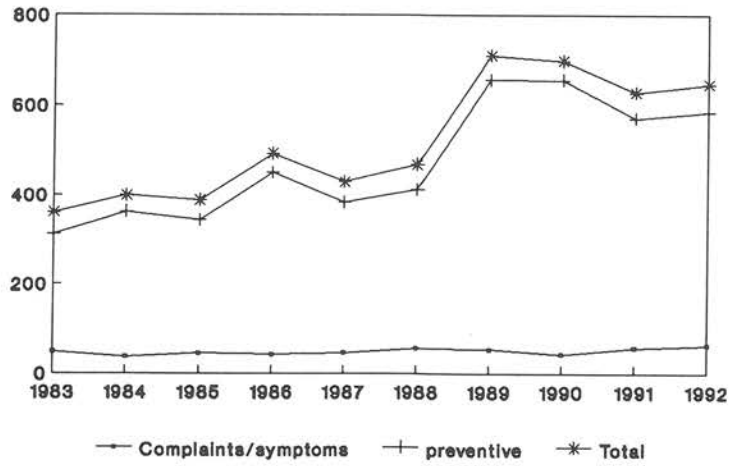
province group A



province group B



province group C



province group D

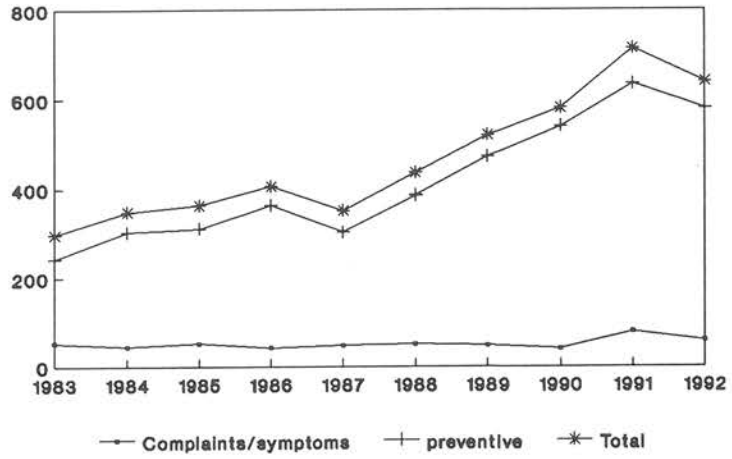
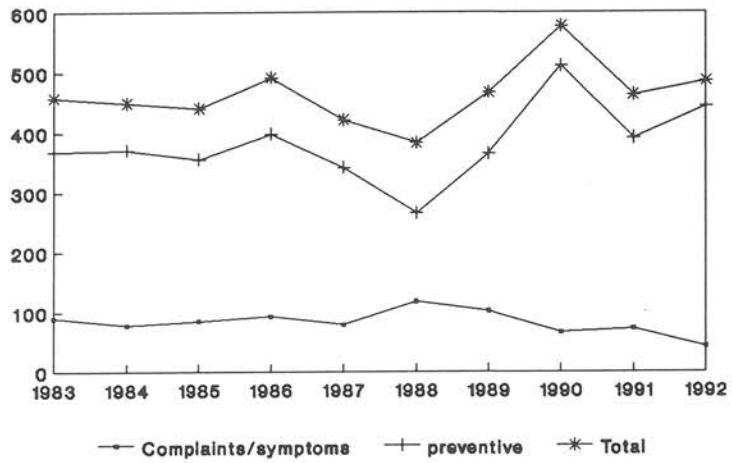
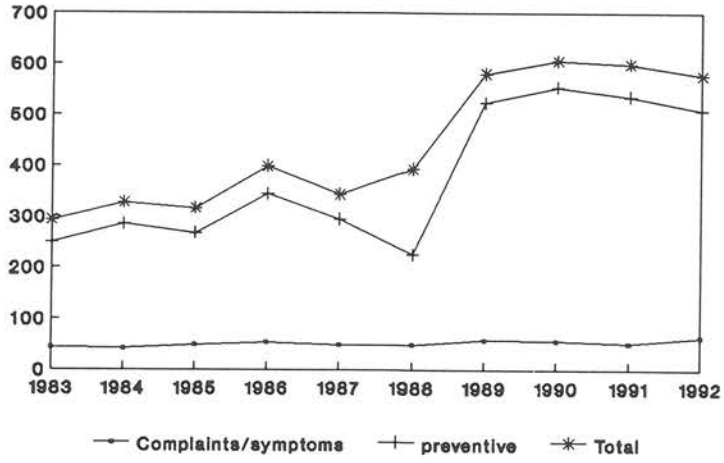


Figure 6
Number of cervical smears taken per urbanization group and for the Netherlands, by indication for taking a smear per 10 000 women, 1983-1992

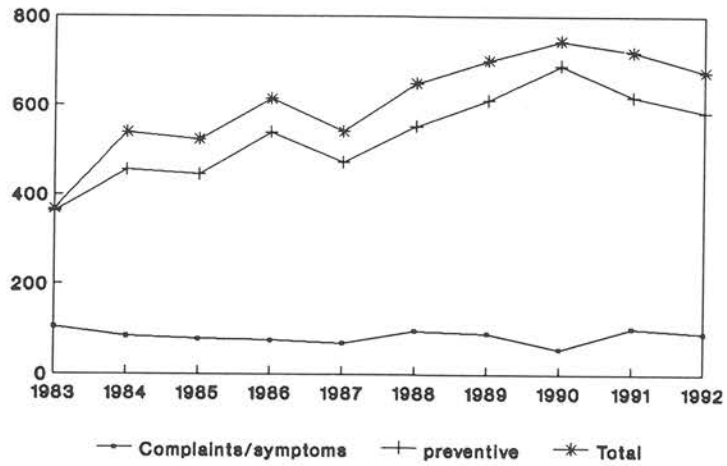
urbanization group 1



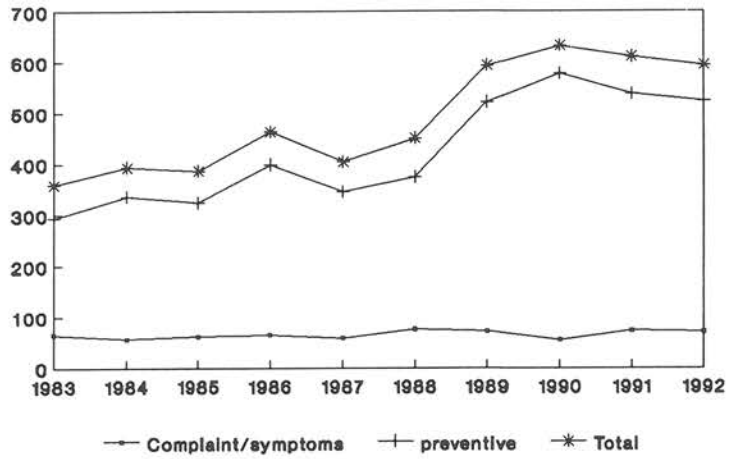
urbanization group 2



urbanization group 3



Netherlands



Age distribution

Table 9 gives a survey of the number of **"first"** smears by age group per 10 000 women (cf. Fig. 7).

Table 9: number of **"first"** smears taken by spotter physicians by age group, per 10 000 women, 1983-1992

	age group							
	10-14	15-19	20-24	24-34	35-44	45-54	55-64	≥65
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
1992	-	16	237	753	1739	1262	288	39

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 8.
The increase in the number of 'first' smears after 1988, which, as expected, is found above all in the 35-54 age group, was converted in 1991 into a drop, which continues in 1992.
In the 25-34 age group there have been lower numbers ever since 1987 in comparison with the years 1984-1986. In the even younger age groups too there is a drop.
This table makes it possible to calculate the percentage of women who are reached by the general practitioner at least once every three years. For the 35-44 age group that is 53% for the period 1990-1992 and 42% for the 45-54 age group.
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 7
Number of 'first' cervical smears taken by age group, per 10 000 women, 1983-1992

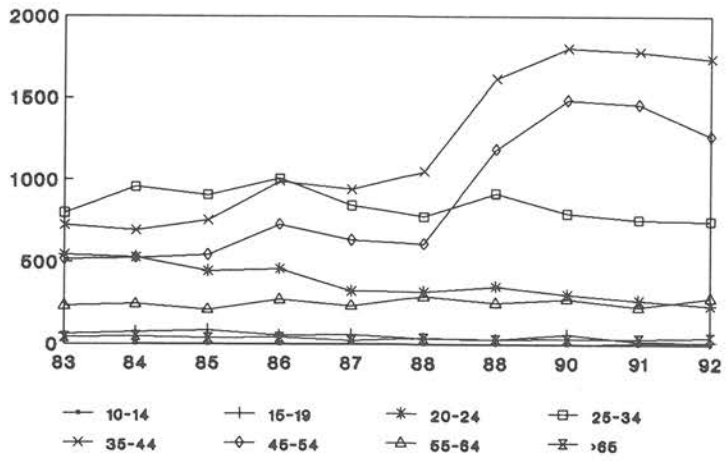


Table 10 gives a breakdown by age and indication for taking a smear, including the repeat smear (see also Figure 8).

Table 10: number of smears taken by spotter physicians by age group and by indication for taking the smear, per 10 000 women, 1983-1992

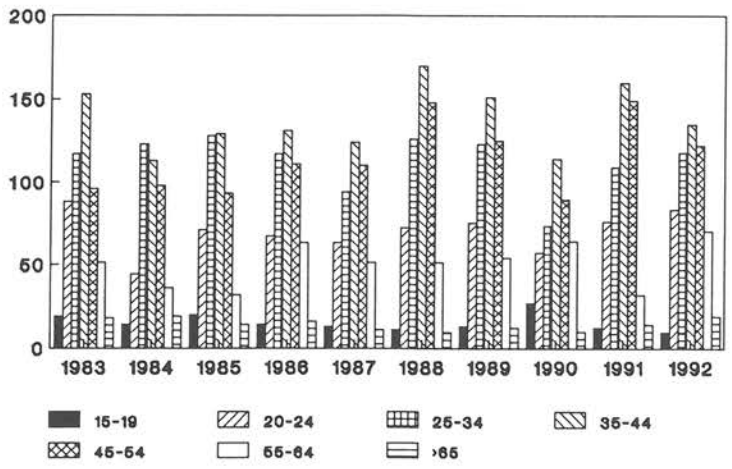
		age group						
		15-19	20-24	25-34	35-44	45-54	55-64	≥65
complaints and/	1983	19	88	117	153	96	51	18
or symptoms	1984	14	44	123	110	98	36	19
	1985	20	71	128	129	93	32	14
	1986	14	67	117	131	11	63	16
	1987	13	63	94	124	110	51	11
	1988	11	72	126	170	148	51	9
	1989	13	75	123	151	125	54	12
	1990	27	57	73	114	89	64	10
	1991	12	76	109	160	149	32	14
	1992	(9)	83	113	135	124	72	19
preventive	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
	1992	(7)	154	640	1604	1138	216	21
repeat smear	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
	1992	(2)	46	226	699	622	106	10

Table 10: number of smears taken by spotter physicians by age group and by indication for taking the smear, per 10 000 women, 1983-1992 (continuation)

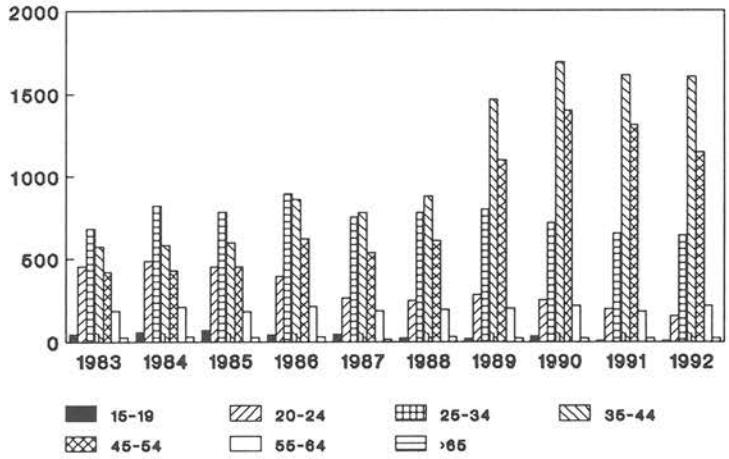
		age group						
		15-19	20-24	25-34	35-44	45-54	55-64	≥65
total	1983	66	603	1052	1263	912	365	50
	1984	77	594	1275	1139	969	380	63
	1985	93	603	1204	1181	1004	358	57
	1986	54	523	1333	1450	1098	398	53
	1987	65	402	1198	1432	1127	390	39
	1988	40	397	1310	1659	1363	367	50
	1989	44	437	1201	2274	1847	391	46
	1990	60	385	1081	2593	2221	423	50
	1991	20	333	1004	2518	2073	317	45
	1992	18	283	979	2438	1882	394	50

Figure 8
Number of smears taken by spotter physicians by age group and by indication for taking the smear, per 10 000 women, 1983-1992

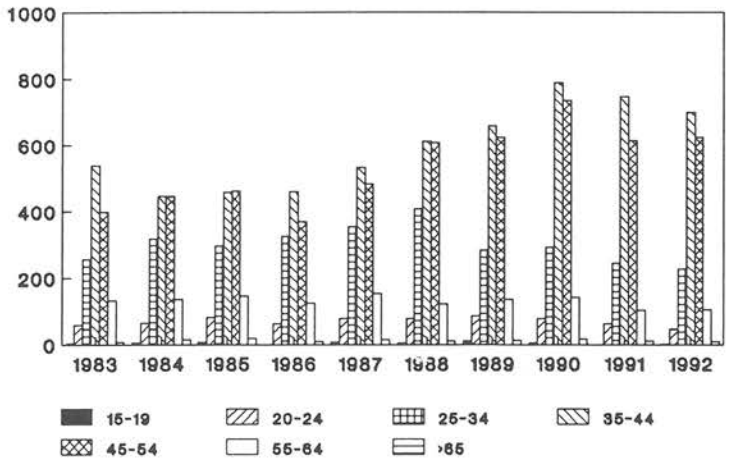
complaints and/or symptoms



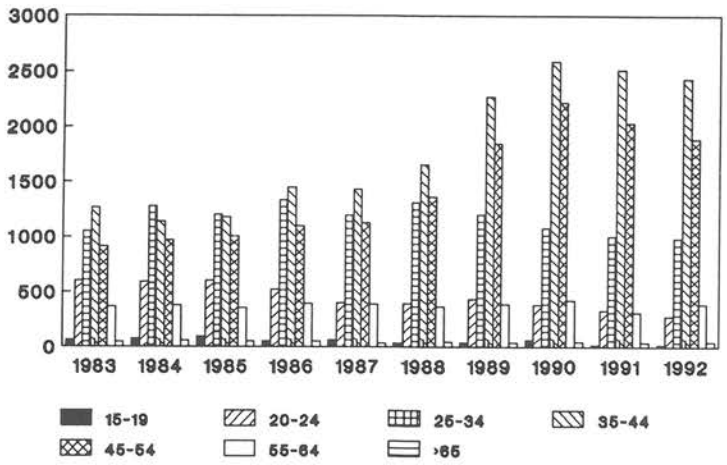
preventive



repeat smear



total



Among women from 55 years onwards the number of smears taken on account of complaints and/or symptoms is increasing.
In the case of the first smears taken on preventive indication the numbers in the 35-54 age group are once again the highest. In all younger age groups up to 35 years the number of first preventive smears is still falling. In 1992 as well hardly any smears on preventive indication were taken below the age of 20. Among older women (from 55 years) the numbers remain relatively stable.

For both the total number of smears and the 'first' smears the percentage for the 35-54 age group declined somewhat in 1992 (see Table 11). This is in contrast to previous years. Some decrease may also be noted among women younger than 35. Among women older than 54 there is some increase in relative terms.
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 11: proportional distribution of smears taken per age group for all sentinel stations (as percentages), 1984-1992

	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
1992	23.0	71.5	5.5	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
1992	24.8	69.5	5.7	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 1993.

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. Frachebound in the project 'Myocardial infarction - coronary care or home nursing?'[10].
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[11].

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 Environmental 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: first three letters of the surname, sex and date of birth. This 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 table are of a provisional nature.
The comprehensive reporting on the registration takes place at the RIVM.

In Table 12 the frequency data of the suspected and confirmed myocardial infarction per province and urbanization group and for the Netherlands are given. A suspected infarction that is then confirmed is reported in this table in the category suspected and in the category confirmed.

Table 12: 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, 1991-1992

		province group				urbanization group			Nether-lands
		A	B	C	D	1	2	3	
men									
suspected	1991	20	38	19	29	33	24	23	25
	1992	17	14	24	27	14	24	23	22
confirmed	1991	13	17	15	26	16	18	18	18
	1992	13	15	23	20	16	17	28	19
women									
suspected	1991	8	18	10	21	8	14	14	13
	1992	10	11	12	20	5	15	14	13
confirmed	1991	7	11	7	10	2	9	12	9
	1992	5	9	9	6	4	8	9	8
total									
suspected	1991	14	28	14	25	20	19	18	19
	1992	13	12	18	24	9	19	19	18
confirmed	1991	10	14	11	18	9	13	15	13
	1992	9	12	16	13	10	12	18	13

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 displayed relatively few reports in 1991. In 1992 the number of reports in the western and southern provinces was larger than in the north and east.
There are more reports in the cities than in the two other urbanization groups.

Age distribution

Table 13 gives the frequencies per age group.

Table 13: number of patients by age group with a suspected and confirmed myocardial infarction per 10 000 men and per 10 000 women, 1991-1992

age group	men						women					
	suspected		confirmed		total		suspected		confirmed		total	
	1991	1992	1991	1992	1991	1992	1991	1992	1991	1992	1991	1992
≤ 24	-	-	-	-	-	-	-	-	-	-	-	-
25-29	(3)	-	(3)	-	(6)	-	-	-	-	-	-	-
30-34	(2)	(7)	-	(0)	(2)	(7)	-	(2)	-	(2)	-	(2)
35-39	(8)	(2)	(2)	(6)	(10)	(8)	-	-	-	-	-	-
40-44	21	11	13	13	34	24	-	(2)	(4)	(2)	(4)	(4)
45-49	18	20	15	31	33	51	(3)	(5)	(3)	(0)	(6)	5
50-54	34	33	23	36	57	69	12	14	(6)	(6)	18	20
55-59	60	43	54	49	114	92	12	12	-	(3)	12	15
60-64	70	54	84	64	154	118	35	54	22	27	57	81
65-69	116	80	68	65	184	145	40	39	37	23	77	62
70-74	143	171	74	93	217	264	66	43	58	23	124	66
75-79	122	104	23	60	145	164	114	63	40	54	154	117
80-84	93	139	134	76	217	216	63	86	63	40	126	126
≥ 85	75	80	75	80	150	160	88	103	35	60	123	163

Among men the myocardial infarction occurs above all from the age on fifty onwards, and among women from the age of 60.
The highest incidence is found among men of 70-74; the highest incidence among women occurs from the age of 85.

The topic has been maintained for 1993.

STERILIZATION OF THE MAN

Sterilization of the man has been a topic on the weekly return since 1972. The data obtained on this subject, together with those on the subject sterilization of the woman, are being used inter alia for the compilation of a Dutch contribution to the Council of Europe's report: "Country Report of the Netherlands" and for computing the population trend.
The annually published data form a partial but as yet indispensable instrument for assessing developments in the field of birth control behaviour.

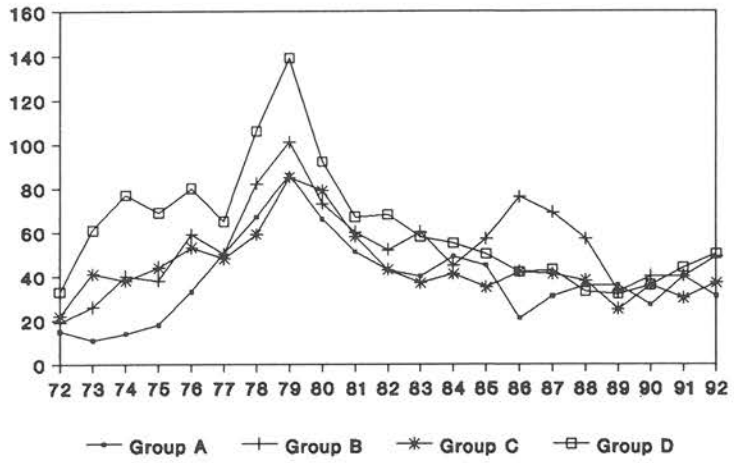
The number of sterilizations of men performed per 10 000 of all men and per province group and urbanization group is given in Table 14 (cf. Fig. 9).

Table 14: number of sterilizations of men performed, per province group and urbanization group per 10 000 men, 1983-1992

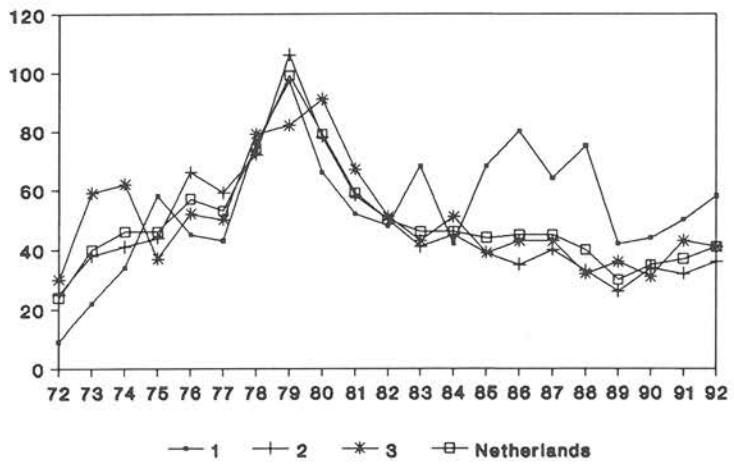
	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
1983	40	60	37	58	68	41	43	46
1984	49	45	41	55	42	45	51	46
1985	45	57	35	50	68	39	39	44
1986	21	76	42	42	80	35	43	45
1987	31	69	41	43	64	40	43	45
1988	36	57	38	33	75	33	32	40
1989	36	33	25	32	42	26	36	30
1990	27	40	36	36	44	34	31	35
1991	40	40	30	44	50	32	43	37
1992	32	49	35	50	59	37	41	41

Figure 9
Number of sterilizations of men performed, per province and urbanization group and for the Netherlands, per 10 000 men, 1972-1992

province group



urbanization group and the Netherlands



After peaks around 1979 the number of sterilizations stayed around 45 per 10 000 men for five years. In 1988 a fall in this number occurred; this development continued in 1989. In that year 30 sterilizations per 10 000 men still took place. However, in 1990 and 1991 the number was higher again: 35 per 10 000 men. In 1992 the number again exceeded 40 per 10 000 men.

After extrapolation one arrives at 30 500 sterilizations for the whole Netherlands in 1992. 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.
It is remarkable that the number of sterilizations performed in 1992 is almost exactly equal to the 2.9 replacement factor.
As a result the percentage of men sterilized at some time remained exactly the same as that of 1991, namely 12.2% of all men who, statistically speaking, belong to the fertile age category (17-51)[12].

In Figure 11 (see page 51) the number of sterilizations per 10 000 men per year of all subgroups together is compared with that of women. It is clear to see that in the past decade sterilization of the man in comparison with sterilization of the woman has become increasingly popular. In 1992 indeed twice as many men and women had themselves sterilized.

Age distribution
The age-specific distribution of the number of sterilizations performed per 10 000 men is given in Table 15 (cf. Fig. 12, see p. 52).

Table 15: number of sterilizations of men performed, by age group, per 10 000 men, 1983-1992

	age group					
	15-19	20-24	25-34	35-44	45-54	55-64
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)
1992	-	-	58	161	46	(6)

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 1.7% in 1992.

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

Table 16: number of sterilizations performed on men by age group, per 10 000 men, 1986-1992

	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)
1992	-	12	108	200	114	51	25

Sterilizations of men are performed above all between the ages of 30 and 45; the largest number of sterilizations has since 1987 been performed between 35 and 39.

In 1990 an end seemed to have come to the declining trend in the number of sterilizations performed on men. In the 30-44 age group there was again an increase, for the first time in years. This development clearly continued in 1991-1992.

A striking feature is the larger number of sterilizations of men above the age of 50. However, in absolute terms a relatively small number is involved.

A cumulative calculation shows that in the Netherlands since 1971 at least 733 000 sterilizations of men have been performed, that is on 9.8% of the present-day 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 1993 weekly return.

STERILIZATION OF THE WOMAN

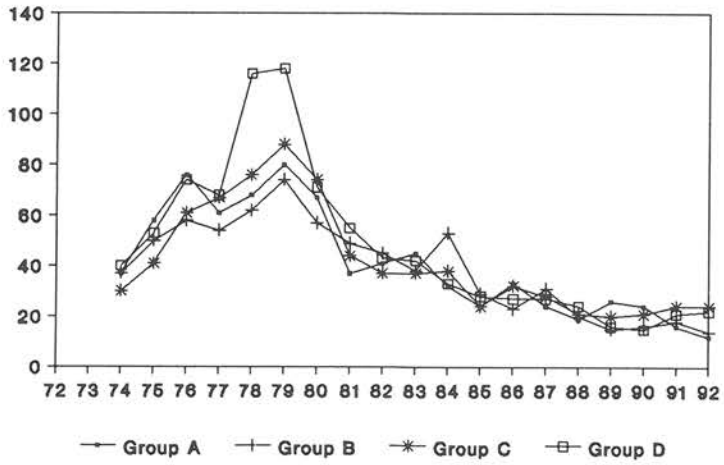
Sterilization of the woman performed was placed on the weekly return in 1974 (of the man performed in 1972). In 1991 21 sterilizations per 10 000 women were performed, practically equal to the preceding three years. Extrapolation of these figures to the whole of the Netherlands yields a number of over 15 000 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. 10).

Table 17: number of sterilizations of women performed, per province and urbanization group, and for the Netherlands per 10 000 women, 1983-1992

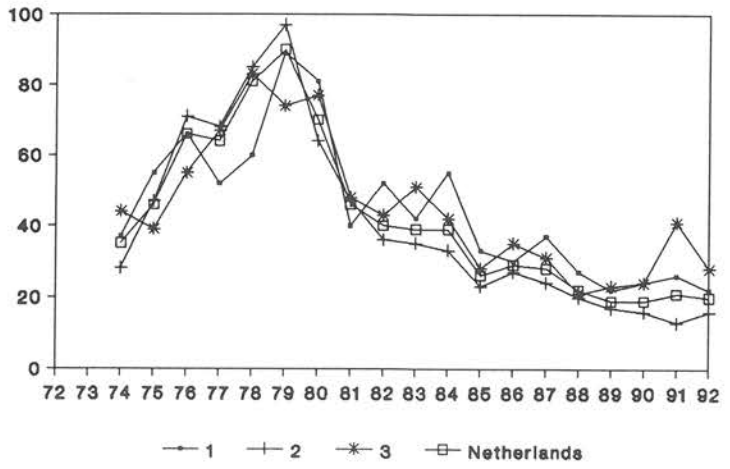
	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
1983	45	38	37	42	42	35	51	39
1984	32	53	38	33	55	33	42	39
1985	24	29	24	28	33	23	28	26
1986	33	23	32	27	30	27	35	29
1987	24	31	28	27	37	24	31	28
1988	19	20	21	24	27	20	21	22
1989	26	15	20	16	22	17	23	19
1990	24	16	21	15	24	16	24	19
1991	16	18	24	21	26	13	41	21
1992	12	14	24	22	22	16	28	20

Figure 10
Number of sterilizations of women performed, per province and urbanization group and for the Netherlands, per 10 000 women, 1972-1992

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. 11 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. 12).

Figure 11

Number of sterilizations performed per 10 000 men and 10 000 women, for the Netherlands, 1972-1992

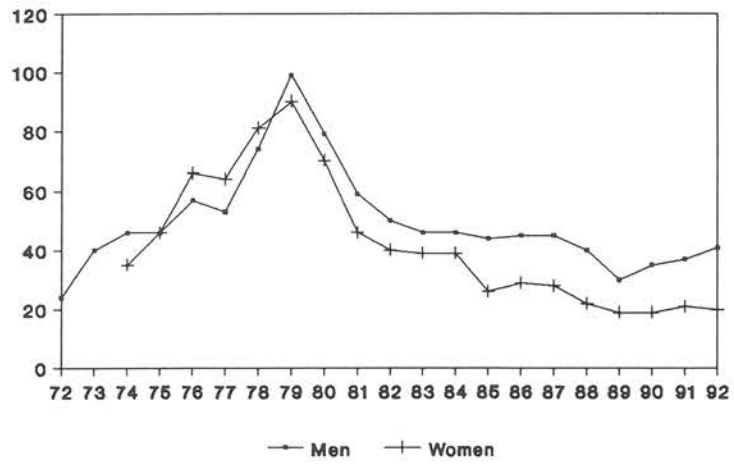


Figure 12
Number of sterilization performed by age group, per 10 000 men and women, 1972-1992

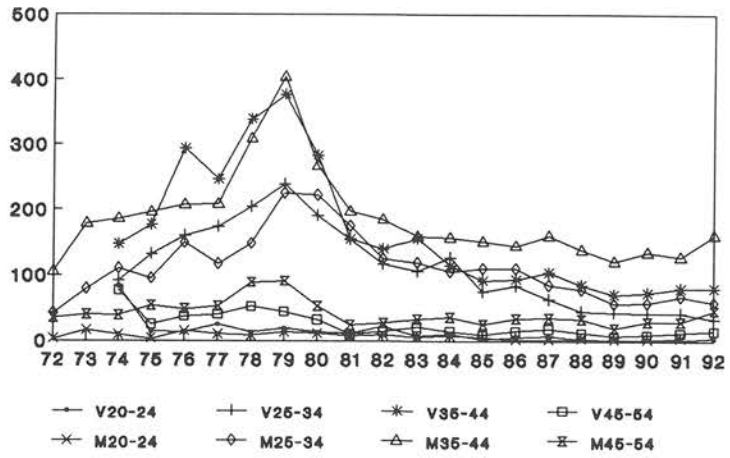


Table 18: number of sterilizations of women performed, by age group per 10 000 women, 1983-1992

	age group				
	15-19	20-24	25-34	35-44	45-54
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
1992	-	(4)	33	80	15

From 1986 the figures are available divided into five annual groups. Table 19 gives the data in five-year age groups.

Table 19: number of sterilizations performed on women by age group, per 10 000 women, 1986-1992

	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)
1992	(4)	18	48	110	50	25	(3)

Sterilization of women is performed above all between the ages of 30 and 45; the largest number of sterilizations is performed between 35 and 39. In this age group a clear increase could be seen in 1992. At a younger age the number of sterilizations continues to fall.

A cumulative calculation shows that in the Netherlands since 1973 in total sterilization has been performed on at least 570 000 women, i.e. 7.5% of the present-day total female population. However, it is more realistic to relate the figures only to women of fertile age (15-49) and at the same time to bring in the sterilization pattern of the man. In that case it proves that in 1975 the woman or the man had been sterilized in approx. 6% of (married) couples. This percentage later rose from 18.5 in 1980 via 22.4 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, in 1991 21.8 and in 1992 21.6. The number of sterilizations (of men **and** women) that ought to have been performed in 1992 on the basis of this calculation to keep the total percentage equal to that of 1991 was 56 500. In reality this number was only 46 000 (30 500 men and 15 500 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 9.4 in 1992. 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.
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 1.4% in 1992. Since 1985 there has now also been a considerable decline among the 30-34 age group of women (from 13.8% in 1985 to 5.0% in 1992). In the 35-44 age group the decline is much less (from 21.2% in 1985 to 17.9% in 1992).
Incidentally, it is interesting that the Netherlands, as far as is known, is the only country where clearly more men than women have been sterilized. This ratio is at present 58% men to 42% women. (In the fertile age group 508 000 men and 375 000 women are sterilized.)

The topic sterilizations has been maintained on the weekly return for 1993.

Skin or other complaints through cosmetics

The consumer can make complaints known about the soundness of food or products in a number of ways. One of the possibilities is the 'Food Complaints Line' of the Office of Health Protection. For products other than food the consumer can also contact the Consumer and Safety Foundation, Amsterdam, for complaints or advice.

The authorization or prohibition of substances in cosmetics is regulated by the Cosmetics substances order (Commodities Act). It is the task of the Office of Health Protection to see to it that these regulations are complied with and that the consumer is supplied with as safe a product as possible.

It is important to have an understanding of health complaints in relation to the use of cosmetics. In the first place so as to take stock of whether there are major problems with cosmetics, and what the extent of any problems is. In the second place so as to derive from this an indication as to whether the existing regulations are sufficient, or whether these may have to be adapted.
For the time being it is dubious whether health complaints in connection with the use of cosmetics reach the Office via the above channels. On the basis of case histories, the Chief Office of Health Protection does, however, suspect that a number of cases of above all skin complaints of an ortho or allergic nature are possibly connected with the use of cosmetics.

The registration of skin or other complaints through cosmetics should give an indication of the size of this problem.

The general practitioner is asked to report the first consultations by patients on account of skin or other complaints through cosmetics.
The patient is asked about the location of the complaint (head, trunk or extremities) and the tissue involved (skin, mucous membranes and other tissue). The nature of the cosmetic should also be stated.

In Table 20 the frequency of the first consultations on account of skin or other complaints through cosmetics is shown.

Table 20: number of first consultations of the general practitioner on account of skin or other complaints through cosmetics per province and urbanization group, and for the Netherlands, per 10 000 men and per 10 000 women, 1992

		province group				urbanization group			Nether-lands
		A	B	C	D	1	2	3	
men	1992	3	4	3	2	5	2	4	3
women	1992	14	21	24	17	25	15	31	20
M+F	1992	8	13	14	10	15	9	17	12

Complaints are reported above all by women, in this registration nearly seven times more often than men.
In the eastern and western provinces the number of reports is somewhat higher than in the north and south.
A relatively small number of reports come from the urbanized rural municipalities and the municipalities with urban characteristics. From the rural municipalities and the cities come nearly twice as many reports.

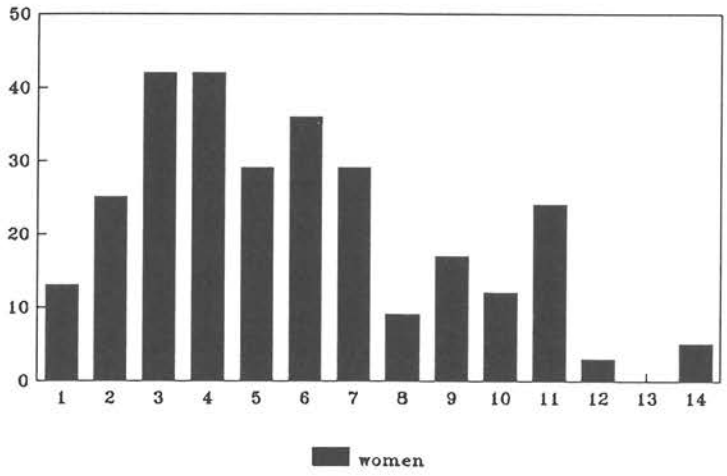
Seasonal influences
The number of reports is the highest in the first quarter (7 per 10 000 women), and the lowest in the third quarter (3 per 10 000 women).

Age distribution
Table 21 gives the age distribution of the number of first consultations on account of skin and other complaints through the use of cosmetics (cf. Figure 13).

Table 21: number of first consultations on account of skin and other complaints through the use of cosmetics, per age group per 10 000 women, 1992

age group	women
10-14	13
15-19	25
20-24	42
25-29	42
30-34	29
35-39	36
40-44	29
45-49	(9)
50-54	17
55-59	(12)
60-64	24
65-69	(3)
70-74	-
75-79	(5)

Figure 13
Number of first consultations on account of skin and other complaints through the use of cosmetics, 1992



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

The use of cosmetics by girls apparently begins in the 10-14 age group; at least, the first reports occur at that age. The reports on women with these complaints relate above all to women aged 20-44: 70%.

Location of the complaints
When people have problems through the use of cosmetics, these are nearly always problems relating to the scalp and/or mucous membranes. In nearly 20% of the cases the skin of the extremities is involved.

Nature of the cosmetic
The products for skin care and the make-up products are responsible for 63% of the complaints, and products for hair care and bath products/deodorants together for 18%. Perfumes and eaux de toilette are responsible for 8%.

This information on side-effects of and reactions to cosmetics does not seem very alarming.

The registration is to be repeated in 1993.

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", which is being performed by the Centre for Epidemiology of the National Institute for Public Health and Environmental Protection (Prof. Dr ir. D. Kromhout, Dr H. Verkleij and drs D. Ruwaard), the subject was placed on the 1990 weekly return[13].

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 abnormal 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 1990-1992 are reported on.

In Table 22 the incidence of diabetes mellitus by province and urbanization group and for the Netherlands per 10 000 men, per 10 000 women and per 10 000 persons.

Table 22: incidence of diabetes mellitus by province and urbanization group and for the Netherlands, per 10 000 men and per 10 000 women, 1990-1992

			province group				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
	1992	M	12	9	21	15	16	15	19	16
	1990	F	14	18	24	25	14	20	33	22
	1991	F	15	16	19	13	13	13	28	16
	1992	F	14	18	16	14	17	15	15	15
	1990	M+F	20	17	22	24	13	19	33	21
	1991	M+F	11	14	18	14	10	13	26	15
	1992	M+F	13	13	18	14	17	15	17	16

The decline in the number of reports came to a halt in 1992. No difference has been established between men and women. There are no great consistent differences between the province groups. However, differences have been established between the urbanization groups: there is a clear gradient from rural municipality to city in the first two years of registration. In 1990-1991 the incidence in the cities was more than twice that in rural municipalities. In 1992 this was no longer the case, but a remarkable feature here is the halving of reports in the cities.

Age distribution

Table 23 gives the age-specific distribution of the incidence of diabetes mellitus.

Table 23: Incidence of diabetes mellitus by age group per 10 000 men and per 10 000 women, 1990-1992

age group	incidence					
	M			V		
	1990	1991	1992	1990	1991	1992
> 9	(1)	(3)	-	(1)	(1)	(3)
10-19	(4)	(1)	(2)	(2)	(1)	(1)
20-29	5	(2)	(2)	(2)	(1)	(3)
30-39	6	8	10	(2)	(4)	(2)
40-49	13	23	11	23	9	9
50-59	41	28	43	37	29	32
60-69	55	43	45	55	58	47
70-79	120	59	50	88	69	55
> 80	97	0	62	85	33	41

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.

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. That will also be the case in 1993.

(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 96, 83, 89, 67, 60 and 84 in 1987-1992.
The number of attempts per province and urbanization group per 10 000 inhabitants may be found in Table 24. 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 24: number of reports of (attempted) suicide per province and urbanization group and for the Netherlands, per 10 000 inhabitants, 1983-1992

	province group				urbanization group			Netherlands
	A	B	C	D	1	2	3	
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
1992	12	4	6	5	3	7	7	6

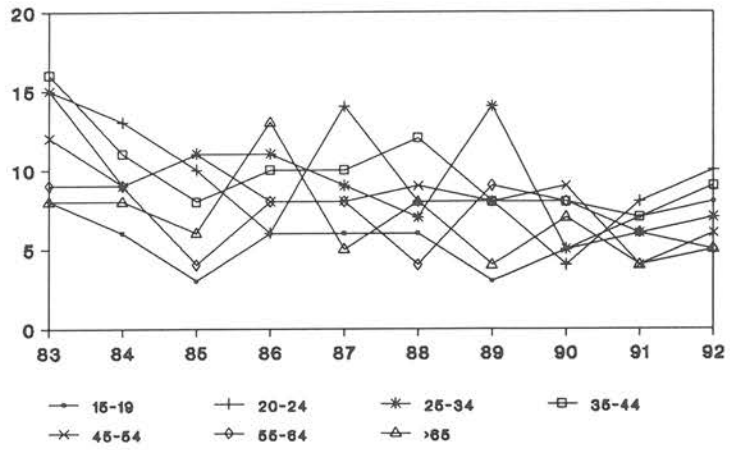
Age distribution

Table 25 gives the frequency of (attempted) suicide per 10 000 inhabitants by age group (see also Fig. 14).

Table 25: number of reports of (attempted) suicide by age group, per 10 000 inhabitants, 1983-1992

	age group							
	10-14	15-19	20-24	25-34	35-44	45-54	55-64	>64
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
1992	(1)	8	10	7	9	6	5	5

Figure 14
Number of reports of (attempted) suicide by age group, per 10 000 inhabitants, 1983-1992



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

This topic has been maintained on the weekly return for 1993.

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

DIEKSTRA, R.F.W., M. VAN EGMOND.
Suicide and attempted suicide in general practice, 1979-1986.
Acta Psychiatrica Scandinavica; 79, 1989, p. 268-275

Using data from the Continuous Morbidity Registration Sentinel Stations over the period 1979-1986, the authors tried to determine the incidence and the characteristics of patients in general practice who attempted or committed suicide. Almost half of the suicide attempters and suicides had contacted their general practitioner (GP) shortly before the suicidal act. A minority of these cases were recognized by the GP as having a high suicide risk. In almost 70% of the suicides and 58% of the suicide attempters the GPs reported the existence, currently or previously, of a depressive episode. About half of both suicides and the suicide attempters had been treated or seen by mental health professionals or social workers. Given the fact that suicide and suicide attempts are relatively rare events in general practice, and given the fact that for the patients who

contact their GP shortly before the suicidal act it is not at all certain whether they present clearly recognizable signs of suicide risk at that time, the authors conclude that GPs cannot play an important role in the prevention of suicidal behaviour.

ACUTE UNUSUAL HEADACHE

There are indications that a subarachnoidal haemorrhage is preceded by a "warning leak"[14]. 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.

First analysis of the data shows that acute unusual headache is caused among 24% of the patients by a subarachnoidal haemorrhage. Early recognition of the subarachnoidal haemorrhage may lead to a favourable prognosis for some patients but will have little effect on the prognosis for all patients with such a haemorrhage.
Acute unusual headache seems to be a condition that is based on serious pathology in a large number of cases.

Table 26 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 26: numbers of patients with acute unusual and violent headache per province and urbanization group and for the Netherlands per 10 000 inhabitants, 1988-1992

		province group				urbanization group			Netherlands
		A	B	C	D	1	2	3	
1988	M+F	(2)	(3)	2	2	(3)	2	2	2
1989		(1)	(1)	1	3	(1)	2	1	1
1990		-	(3)	1	1	(3)	1	1	1
1991		(2)	(2)	2	2	(1)	1	3	2
1992		(1)	(1)	1	2	(1)	1	2	1

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 registration has been stopped with effect from 1 January 1993.

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 acceptability of national mass screening for breast cancer by means of mammography. Thereupon the State Secretary of Public Health took a positive decision in principle on national introduction of the screening from 1990 onwards. On 29 April 1993 the definitive decision likewise proved positive. It is expected that the mass screening will cover the whole country by the end of 1994.

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 and those older than 69 will for the time being not be enabled to participate in the screening, in anticipation of the results of further research.
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. By the end of 1992 37 of the in all 50 planned screening centres had begin or been actwe some time with the screening.

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 1991. If at any time after 1 January 1991 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[15]. The same group is evaluating the actual cost and effects.

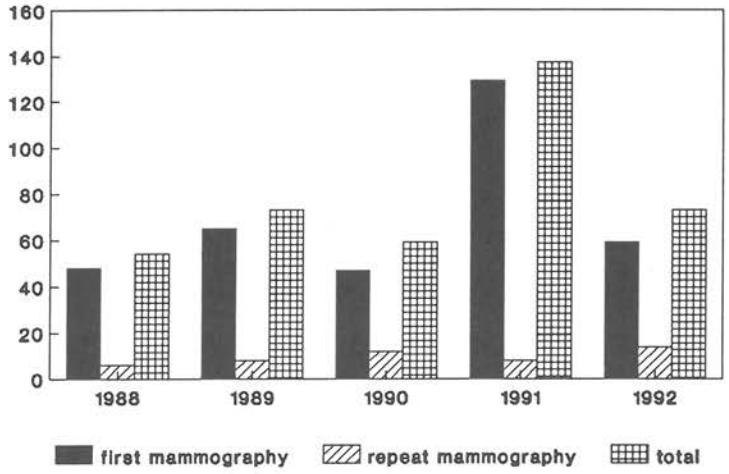
Table 27 gives the numbers of mammograms per province and urbanization group and for the Netherlands (cf. Figs 15 and 16).

Table 27: number of mammograms per province and urbanization group and the Netherlands per 10 000 women in 1988-1992

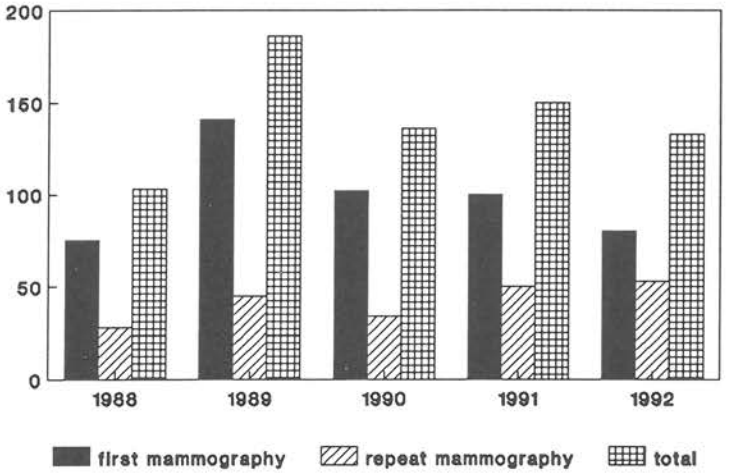
		province group				urbanization group			Nether-lands
		A	B	C	D	1	2	3	
first mammography	1988	48	75	92	81	80	79	81	80
	1989	65	141	77	84	154	71	87	87
	1990	47	102	88	125	102	87	101	92
	1991	129	100	93	112	103	92	142	105
	1992	59	80	105	101	87	95	90	93
repeat mammography	1988	6	28	9	17	26	11	8	12
	1989	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
	1992	14	53	34	18	61	25	28	30
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
	1992	73	133	139	119	148	120	118	123

Figure 15
Number of mammograms per province group, per 10 000 women, 1988-1992

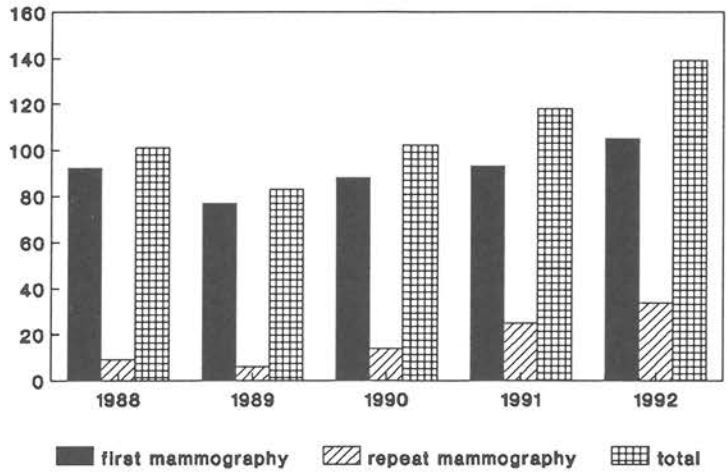
province group A



province group B



province group C



province group D

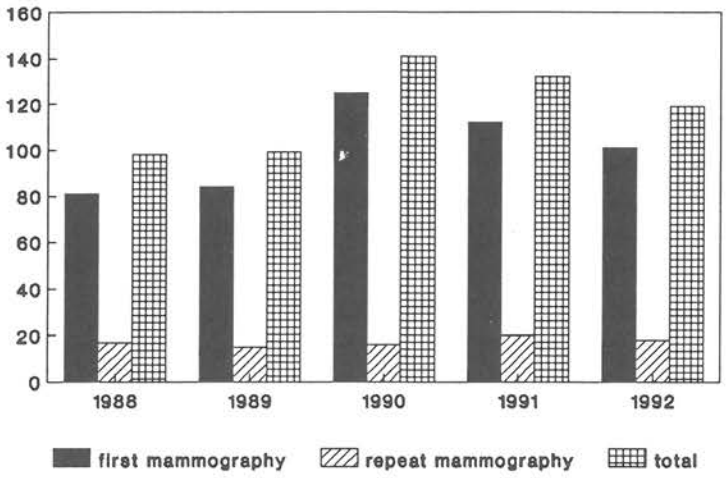
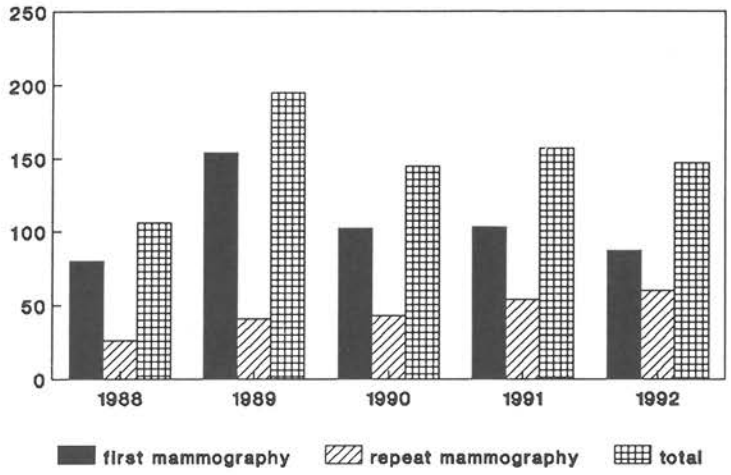
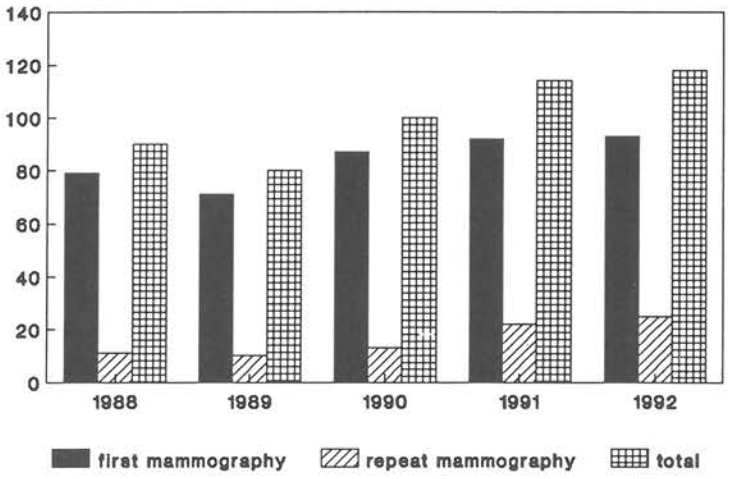


Figure 16
Number of mammograms per urbanization group and for the Netherlands per 10 000 women, 1988-1992

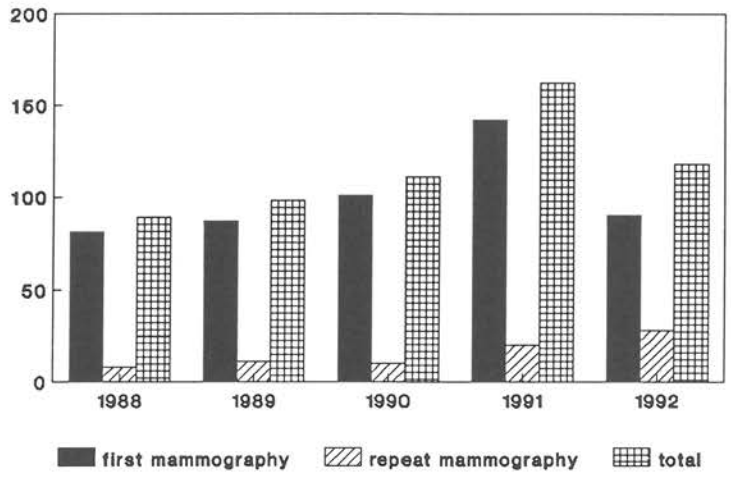
urbanization group 1



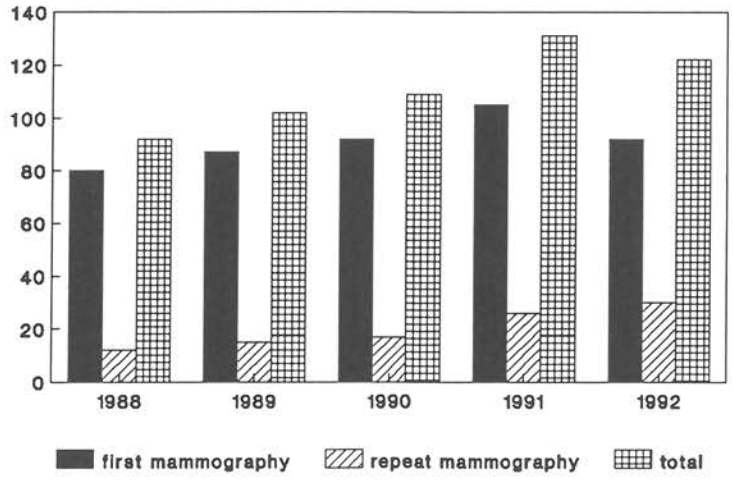
urbanization group 2



urbanization group 3



Netherlands



The total number of mammograms fell somewhat in 1992: from 131 to 122 per 10 000 women.
In two of the three urbanization groups and in three of the four province groups there is a decrease; in the northern provinces - where in 1992 only two of the necessary six screening centres had begun as yet with mass screening - the decrease is even remarkable: from 137 to 73 per 10 000 women.
This remarkable decrease, however, occurs after a very strong increase (more than a doubling) in 1991. Of all seven subgroups six remain at or above the 1990 level. Only the southern province group falls below the 1990 level.

Table 28 lists the numbers of mammograms by age group per 10 000 women.

Table 28: number of mammograms by age group per 10 000 women for 1988-1992

	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
1992	119	187	260	201	162	121	117	58	51	39
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
1992	43	59	65	76	78	53	60	6	12	15
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
1992	162	246	325	277	240	174	177	64	63	54

The registration shows that mammograms are requested above all in the age groups between 35 and 55 years. This "worried-well" pattern is broadly the same for the four years in which registration has been performed so far.

The greatest increase in the number of mammograms has occurred in the 50-69 age group in recent years. In 1992, however, there was a change: only in the age groups below the age of 40 was there still an increase. In all age groups from 40 upwards there was a decrease.

The majority (69%) of the mammograms requested by the spotter physicians lie outside those age groups that are covered by the proposed mass screening (see also Table 29).
The proportion of the 50-69 age group has fallen in comparison with 1990 and 1991.

Table 29: proportional distribution of mammograms by three age groups. Percentages, 1988-1992

	age distribution, total number of mammograms			
year	≤49	50-69	≥70	total
1988	73	24	3	100
1989	72	25	3	100
1990	65	31	4	100
1991	64	31	5	100
1992	69	27	4	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
1992	71	25	4	100

In 1993 the topic is maintained on the weekly return.

SPORT-TRAUMAS (first consultation)

'Number of sport injuries soars' was the headline in the Volkskrant on the eve of the campaign 'Keep sport injuries down'. The data from the investigation into accidents in the Netherlands in the period August 1986-August 1987 occasioned that heading to the article[16].

Every year nearly 1.2 million Dutch incur injuries during sport that require medical treatment. Of this number, 570 000 are assumed to have been treated by the general practitioner. The numbers found in this investigation are considerably higher than had been determined or assumed at that moment.

The question arose as to what the actual numbers were. One of the problems in answering that question is that the studies that yielded the differing results cannot be methodically compared.

For the registration of private accidents, into which category sport accidents fall, the Private Accidents Registration System (PORS) of the Consumer and Safety Foundation has been operating since 1983. PORS takes place in hospital (out-patient) clinics.
In this way the share of general practitioners in care for private accidents, including sport accidents, remains invisible.

CMR-Sentinel Stations fills this gap.
Appendix 3a lists the subjects on the weekly return since 1970. Accidents in the private sector were registered from 1981 to 1983, burns in 1988-1989, bites by pets/dog bites in 1986 and 1987.
After sport injuries had appeared on the weekly return in 1979-1983, a registration of sport-traumas was again performed in 1992 at the request of the Consumer and Safety Foundation (Mrs S. Mulder).

The general practitioner was asked to report patients when they consulted the GP for the first time with a sport-trauma in 1992. A sport-trauma means an acute trauma or a strain injury. An acute trauma is any trauma that occurs during sport and is directly or indirectly connected with the latter. A strain injury comes into being gradually.

A distinction is made by sex. Inquiries are made about the nature of the sport activity (at school, organized or unorganized), the type of sport, which injury/injuries were incurred, whether these were acute traumas or a strain injury and whether the patient was referred to a first aid department, an out-patient clinic surgery or to the clinic for admission.

In Table 30 the numbers of first consultations of the general practitioner on account of a sport-trauma are shown per province and urbanization group and for the Netherlands, per 10 000 men and per 10 000 women.

Table 30: number of first consultations of the general practitioner on account of a sport-trauma per province and urbanization group and for the Netherlands, per 10 000 men and per 10 000 women, 1992

		province group				urbanization group			Nether-lands
		A	B	C	D	1	2	3	
1992	m	121	128	147	223	116	155	186	158
	f	45	31	53	100	48	64	53	60
	m+f	82	79	99	161	82	109	118	109

It is noteworthy that the total frequency of 108 per 10 000 in 1992 is lower than in the period 1979-1983, when this frequency rose from 126 to 195 per 10 000 inhabitants.
Men report to the general practitioner with a sport-trauma nearly three times more often than women. In the southern provinces considerably more reports are made than in the other province groups: a striking finding. Likewise differing from the gauging in 1979-1983 is the finding that in 1992 fewer sport-traumas were reported in rural municipalities than in the cities.

Seasonal influences

As is to be expected, in the numbers of reports of a sport-trauma influence of the seasons has been established.
For men the number of reports is highest in the 4th quarter and 1st quarter: 45 and 49 respectively per 10 000 (as against 39 and 25 per 10 000). For women most reports were made in the 1st and 2nd quarters: 20 and 16 respectively per 10 000 (as against 8 and 15 per 10 000).

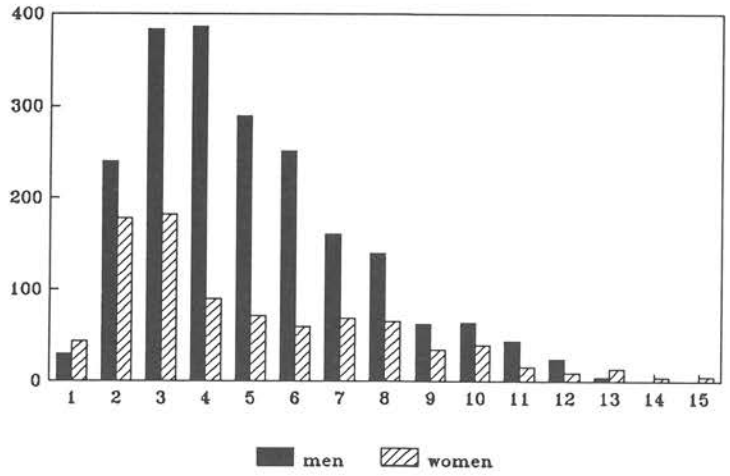
Age distribution

Table 31 gives the numbers of first consultations on account of a sport-trauma by age group (see also Figure 17).

Table 31: number of first consultations of the general practitioner per age group per 10 000 men and per 10 000 women, 1992

age group	men	women
< 5	-	-
5- 9	29	43
10-14	240	178
15-19	383	182
20-24	386	90
25-29	289	70
30-34	251	59
35-39	161	68
40-44	140	65
45-49	62	34
50-54	63	39
55-59	43	15
60-64	24	(9)
65-69	(4)	(13)
70-74	-	(4)
75-79	(0)	(5)

Figure 17
Number of first consultations of the general practitioner per age group per 10 000 men and per 10 000 women, 1992



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

Sport-traumas occur with both men and women between the ages of 5 and 80. In the case of men most traumas through sport are reported between 10 and 45. Women seem to practise sport for a much shorter length of time, at least sports in which the risk of injury is clearly present; most reports of sport-traumas by women occur in the age of 10-20.

It is known that sports in which many injuries occur (indoor and outdoor football) are mainly (> 90%) practised by boys and men. According to the PORS, football is responsible for nearly 36% of the sport-traumas reported in 1989 via the first-aid department of a hospital. In the same registration in 1989 school sport was responsible for over 10% of the traumas. It is expected that girls participate in this form of sport just as often as boys.

Further reporting on the results of this registration will take place elsewhere.

With effect from 1993 this registration has been halted.

BEE OR WASP STING

It is unknown how often people are stung by a bee or a wasp. The prevailing view is that bees sting almost only beekeepers, their family or their neighbours and market gardeners. Wasps are assumed to be responsible for practically all other unexpected insect stings.

Symptoms after a bee or wasp sting may remain local - to fully swollen or red limbs, 0-3 days after the sting - or be general. For the general symptoms the Mueller classification is used (degrees I-IV).
Degree I relates to the occurrence of only general skin symptoms: generalized urticaria and/or erythema, coupled with itching and restlessness of the victim.
When these symptoms are accompanied by nausea, vomiting, lightheadedness, stomach-ache, diarrhoea and a non-radiating feeling of pressure on the chest degree II is concerned.
In degree III the reaction has extended to the bronchial tubes: symptoms as in degree I or II with in addition a stridor, dysphagia, hoarseness, shortage of breath and unclear speech. The very severe reaction (degree IV) is dominated by the problems with the circulation: hypotension, cyanosis, collapse, incontinence, severe arrhythmia and loss of consciousness, whether or not with symptoms listed above under degree I, II or III.

In 1992 the spotter physicians were asked to report bee and/or wasp stings, stating whether the reaction was local or general. In the latter case they were requested to state the severity of the reaction according to Mueller's classification, and also to state whether the patient had been stung by a wasp or a bee.

Table 32 gives the number of bee and wasp stings per province and urbanization group and for the Netherlands per 10 000 inhabitants.

Table 32: number of bee and wasp stings per province and urbanization group and for the Netherlands, per 10 000 inhabitants, 1992

	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
M+F	9	18	11	16	19	11	14	13

Bee and wasp stings are reported by the physicians in the eastern and southern provinces more often than in the northern and western provinces. The number of reports from rural municipalities is clearly higher than from the other two urbanization groups.

Seasonal influences

Reports of bee or wasp stings are made mainly in the third quarter of the year: 12 per 10 000 inhabitants. Outside this quarter reports hardly came in.

Age distribution

In 1992 no bee or wasp sting was reported for children aged below one year; for old people above the age of 80 the frequency is also low: < 10 per 10 000 persons. In the intermediate age groups the frequency lies between 10 and 20 per 10 000 inhabitants.

Reactions to the bee or wasp stings

In the greater part of the cases reported only local symptoms were determined (80%).

Of the reported bee and wasp stings with which general symptoms occurred, these related in particular to the general skin symptoms: two thirds. One patient was reported with a very serious Mueller grade IV reaction.

As far as it is known by what someone was stung, the number of wasp stings was four times the number of bee stings.

This topic is to be maintained on the weekly return in 1993.

URETHRITIS OF THE MAN

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

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

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

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

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

The number of patients with urethritis per 10 000 men per province and urbanization group, along with the number of the whole of the Netherlands, is given in Table 33.

Table 33: number of patients with urethritis per province and urbanization group and for the Netherlands, per 10 000 men, 1992

	province group				urbanization group			Nether-lands
	A	B	C	D	1	2	3	
1992	16	40	45	10	46	14	65	31

The national incidence of urethritis is about a third of that in Amsterdam: 31 and 99 respectively per 10 000[17].
Urethritis is clearly reported more in the eastern and western provinces.
In rural municipalities more men with urethritis are seen by the general practitioner than in the commuting municipalities and the smaller towns: 46 and 14 respectively per 10 000 men. However, the highest incidence is found in the cities: 64 per 10 000 men.

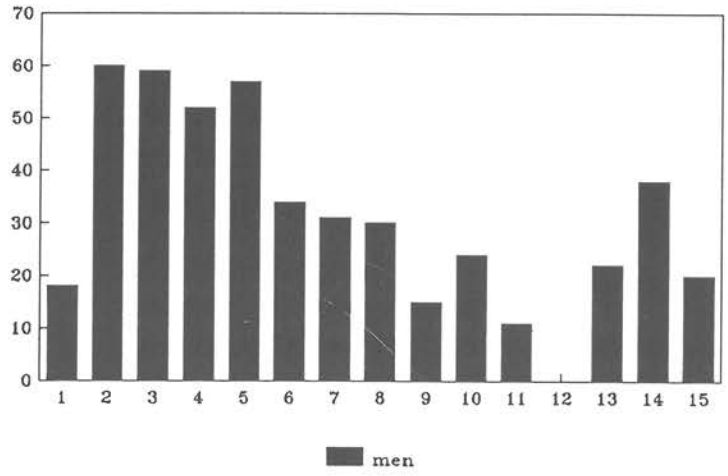
Seasonal influences
Major differences between the seasons are not found; only in the second quarter of the year was a somewhat smaller number of men with urethritis reported.

Age distribution
In Table 34 the age distribution is given of the patients with urethritis reported by the general practitioner (see also Figure 18).

Table 34: number of patients with urethritis per age group per 10 000 men, 1992

age group	men
< 15	(0)
15-19	18
20-24	60
25-29	59
30-34	52
35-39	57
40-44	34
45-49	31
50-54	30
55-59	15
60-64	24
65-69	(11)
70-74	-
75-79	(22)
80-84	(38)
> 85	(20)

Figure 18
Number of patients with urethritis per age group per 10 000 men, 1992



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

Urethritis is seldom reported under the age of 15.
The majority of the patients are aged between 20 and 40. These results tally with those of the Amsterdam Sentinel Station Project.

The topic will be repeated in 1993.

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 H.I.V.
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[18] (M. Moons and L. Peters, Netherlands Institute for Research into Primary Health Care).

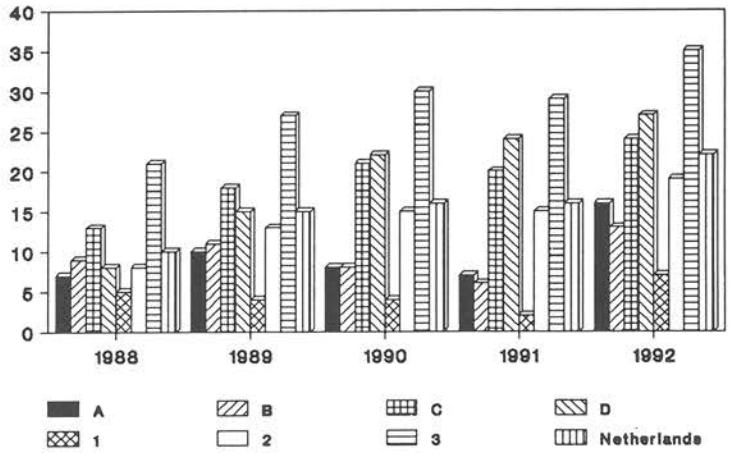
Table 35 lists the number of consultations in which AIDS comes up for discussion, by province and urbanization group and for the Netherlands, per 10 000 inhabitants, 1988-1992.

Table 35: numbers of consultations in which AIDS comes up for discussion, by province and urbanization group and for the Netherlands, per 10 000 inhabitants, 1988-1992

	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
1992	16	13	24	27	7	19	35	22

The number of consultations on AIDS remained constant for three years; however, in 1992 an obvious increase occurred.
In the northern and eastern provinces there was a doubling. In the western and southern provinces the increase was slight. Since 1991 the general practitioners in the southern provinces have been confronted with questions about AIDS more than elsewhere in the Netherlands. The general practitioners in the cities also have more consultations in which AIDS comes up for discussion (see Figure 19).
It emerges from the supplementary data that the number of consultations in which a request is made for a test for H.I.V. antibodies is rising steadily: from 131 in 1990 to 203 in 1992.
Although not every request for a test is granted, the number of tests that is being performed is also growing: from 121 in 1990 to 177 in 1992. In a small number of these cases the general practitioner takes the initiative for performing a test.

Figure 19
Number of consultations in which AIDS comes up for discussion, per province and urbanization group and for the Netherlands, per 10 000 inhabitants, 1988-1992

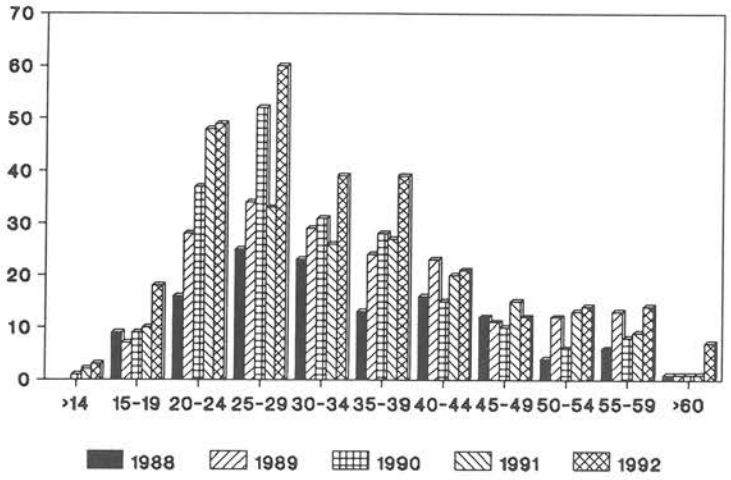


Age distribution
Table 36 gives the number of consultations in which AIDS comes up for discussion per 10 000 inhabitants per age group, for both sexes together (cf. Fig. 20).

Table 36: number of consultations in which AIDS comes up for discussion per age group, per 10 000 inhabitants, 1988-1992

Age group	1988	1989	1990	1991	1992
< 14	-	-	(1)	(2)	(3)
15-19	9	7	9	10	18
20-24	16	28	37	48	49
25-29	25	34	52	33	59
30-34	23	29	31	26	39
35-39	13	24	28	27	39
40-44	16	23	15	20	21
45-49	12	11	10	15	12
50-54	(4)	12	(6)	13	14
55-59	6	13	8	9	14
> 60	(1)	(1)	(1)	(1)	7

Figure 20
Number of consultations in which AIDS comes up for discussion per age group, per 10 000 inhabitants, 1988-1992



The majority of the questions about AIDS put to the general practitioner are asked in the 20-44 age group: the proportion of the total fluctuated around 80% in 1988-1991. In 1992 this percentage was 73. The annual report of the AID info line for 1988-1990 likewise gives a high percentage: about 70% of those ringing this line are between 20 and 50 years[19]. In the sentinel station registration 84% of the persons who come to talk about AIDS are between 20 and 50.

The topic has been maintained on the weekly return for 1993. Registration under Eurosentinel is also being continued for 1993.

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

CASTEREN, V. van, P. LEURQUIN, A. BARTELDS, et al
Demand Patterns for H.I.V.-tests in General Practice: Information Collected by Sentinel Networks in 5 European Countries.
European Journal of Epidemiology. 1993, Vol 9, p. 169-175

This study describes a 1 year international data collection on the demand pattern for HIV-antibody tests in general practice recorded by 6 sentinel networks in 5 European countries. The purpose of the recording was to evaluate the use of HIV-testing by general

practitioners and the demand for testing among the general population. Sentinel networks of general practitioners are a possible and available instrument for monitoring the perception of the HIV-test, and indirectly of the threat of the HIV-epidemic by the public and by the general practitioners (GPs). Differences were found between the countries in the frequency of testing, the person asking the test and the reason for testing. Possible explanatory factors, such as differences in the routine testing of specific groups, differences in the training and in the role of the GP, differences in the characteristics of prevention policy, are discussed. The European comparison also offers the opportunity to reflect on common medical practice in dealing with demands for HIV-tests.

MOONS, M.A.W., L. PETERS
General practitioners and questions about AIDS.
Medisch Contact; 45, 1990, No. 36, p. 1055-1057

In addition to the incidence and prevalence of AIDS, general practitioners are confronted with requests for help from patients not known to them as seropositive that betray fear and uncertainty. Since April 1988 NIVEL has been registering such requests for help, as part of the Continuous Morbidity Registration, Sentinel Stations, the Netherlands. Assistant researcher Mrs M.A.W. Moons and project leader L. Peters discuss the results so far and consider the role of the general practitioner in AIDS prevention.

ACUTE GASTRO-ENTERITIS

Incidental mass occurrences of food poisoning are reported with some regularity in the news media. Instances are the 1985 Euro summit in Maastricht and the fatalities in the Venlo old people's home and in Urk.
However, food infections do not usually occur in the form of outbreaks. They form a permanent background 'noise' whose harm to the Dutch economy is estimated at 100 million guilders per year. In the United States the damage is reckoned at 2 billion dollars per year.

There are estimates about the number of persons with complaints of acute gastro-enteritis who visit the general practitioner: some 225 000 per year. Since likewise on estimate only 5% of the people with such complaints go to the GP, the total number of sickness episodes is perhaps twenty times as high, viz over 4 000 000[20].

This sketches the importance of setting up a methodology for monitoring these disorders and their possible pathogens. After registration from 1987 onwards of acute gastro-enteritis in general practices in Amsterdam and Helmond in cooperation with the Municipal Medical and Health Service and the regional laboratory of Amsterdam, the Municipal Health Service of Helmond, the Eindhoven regional laboratory and the RIVM, in 1992 registration began in the national sentinel stations in collaboration with various regional laboratories and the RIVM.

In this registration the spotter physician is asked to report a person with acute gastro-enteritis when there is the following:

- three or more times a day thin faeces, differing from normal for the person in question, or
- thin faeces and two of the following symptoms (fever, nausea, stomach-ache and blood or mucus in the faeces) or
- vomiting and one of the following symptoms (fever, nausea, stomach-ache and blood or mucus in the faeces) and after a complaint-free period of at least 14 days.

In addition to the report on the weekly return the general practitioner is asked to hand the patient a numbered questionnaire and likewise numbered faeces transport material.

The questionnaires are sent to the RIVM and the faeces samples to the regional laboratories, which send the result of the examination both to the general practitioner and to the RIVM (Mrs A. Hoogenboom-Verdegaal, formerly Laboratory for Water and Food Microbiology, RIVM, now Canisius-Wilhelmina Hospital, Nijmegen).

In Table 37 the numbers of reports of acute gastro-enteritis are reported per province and urbanization group and for the Netherlands.

Table 37: number of cases of acute gastro-enteritis per province and urbanization group and for the Netherlands, per 10 000 men and per 10 000 women, 1992

		province group				urbanization group			Nether-lands
		A	B	C	D	1	2	3	
1992	M	38	40	52	112	38	59	82	62
1992	F	35	53	52	97	43	57	74	60
1992	T	37	47	52	104	41	58	78	62

Acute gastro-enteritis is registered by the general practitioner just as often among men as among women.
In the cities complaints of gastro-enteritis are reported more often by the general practitioner than in rural municipalities, nearly twice as often.

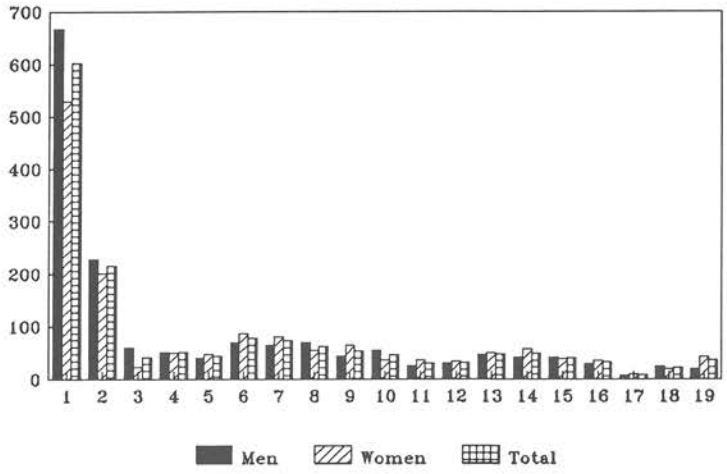
In the southern provinces the general practitioner reports complaints of acute gastro-enteritis over twice as often as in the other province groups.

Age distribution
In Table 38 the data on the gastro-enteritis patients reported by the general practitioners are stated per age group (see also Figure 21).

Table 38: number of reports of acute gastro-enteritis by age group per 10 000 men and per 10 000 women, 1992

age group	M	F	T
< 1	667	530	602
1- 4	228	201	215
5- 9	60	23	42
10-14	51	50	51
15-19	40	48	44
20-24	69	87	78
25-29	64	81	73
30-34	69	55	62
35-39	44	64	54
40-44	55	36	46
45-49	26	36	31
50-54	30	34	32
55-59	46	50	48
60-64	41	57	49
65-69	42	39	40
70-74	29	35	33
75-79	(7)	(10)	(9)
80-84	(25)	(20)	22
> 84	(20)	43	36

Figure 21
Number of reports of acute gastro-enteritis by age group per 10 000 men and per 10 000 women, 1992



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

Most cases of acute gastro-enteritis are diagnosed among babies and then among children from 1-4 years. From the age of 5 the number of reports of acute gastro-enteritis is relatively constant, viz from 30 to 50 per 10 000 inhabitants. In only a few age groups do the numbers lie outside these limits.

Seasonal influences

In the third quarter more cases of gastro-enteritis are reported than in any other quarter: 20 as against 15 per 10 000 inhabitants.

Results of the faeces cultures

The faeces samples submitted are examined for Campylobacter, Salmonella and Shigella strains.

In about 12% of the samples Campylobacter are found, Salmonella bacteria in about 3% and Shigella bacteria in 1% of the samples.

The registration will be continued in 1993.

EXTRAPOLATION OF FREQUENCIES FOUND TO THE DUTCH POPULATION

The following survey gives an approximate impression of the number of patients, consultations, actions and occurrences in the Netherlands, on the basis of the frequencies calculated from the results of the Continuous Morbidity Registration by Sentinel Stations. As was remarked in the previous reports, it must be borne in mind, when studying the following tables, that although the population of the sentinel stations is a reasonably good representation (see also p. 10-11) the spotter physicians are a selected group. Consequently, it cannot be automatically established to what extent the results differ from the actual situation; the differences can vary depending on the nature of the question. Particular caution should be observed regarding those topics for which there is intervention by a general practitioner. As an example one may think of the topic 'cervical smear' question; it is quite feasible that the spotter physicians differ from the typical general practitioner in this respect. In the '(attempted) suicide' topic there proves to be a difference in respect of registrations from elsewhere, as a result of the fact that this event is presumably not always reported to the general practitioner[21].
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, 1983-1992 (Central Statistical Office)*

year	men	women	total
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
1992	7 480	7 649	15 129

* 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	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
	1992			244			370 000
cervical smear	1983		65			47 000	
-with complaints	1984		57			41 000	
and/or symptoms	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	
	1992		72			55 500	
-preventive	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	
	1992		524			400 000	

* see page 104

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)	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	
	1992		233			178 000	
cervical smear total	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	
	1992		829			632 500	
myocardial infarction							
- suspected	1991	25	13	19	18 500	10 000	28 500
	1992	22	13	18	16 500	10 000	27 000
- confirmed	1991	18	9	13	12 500	7 000	19 500
	1992	18	7	13	13 500	5 000	20 000

* see page 104

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***
sterilization	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
	1992	41	20		30 500	15 500	47 000
cumulative					733 000[1]	570 000[2]	
side-effect of cosmetics (suspicion of)	1992	3	20	12	2 500	15 500	18 000
diabetes	1980			13			18 000
mellitus	1981			12			17 000
incidence	1982			12			17 000
	1983			11			16 000
	1990	21	22	21	15 000	16 000	31 000
	1991	15	15	16	11 000	12 000	23 000
	1992	16	15	16	12 000	11 500	23 500
(attempted)	1983			10			14 500
suicide	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
	1992			6			9 000

* see page 104

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***
first	1988		80			59 500	
mammograms	1989		87			65 000	
	1990		92			69 000	
	1991		105			80 000	
	1992		92			75 500	
repeat mammo-	1988		12			9 000	
grams	1989		15			11 000	
	1990		17			13 000	
	1991		26			19 500	
	1992		30			23 000	
mammograms	1988		92			68 500	
total	1989		102			76 000	
	1990		109			82 000	
	1991		131			99 500	
	1992		122			93 500	
sport-traumas	1992	158	59	108	120 000	45 000	165 000
bee or wasp string	1992			13			20 000
urethritis of the man	1992	31			23 000		
concern about	1988			10			15 000
aids	1989			15			22 000
	1990			16			24 000
	1991			16			24 000
	1992			22			33 500
gastro-enteritis	1992	62	60	61	47 500	46 000	92 500

* 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 1992 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 at the beginning of the year of the coming investigation. A form is sent to all spotter physicians at the end of the year with the request that they report whether the question was asked of them in the past year by a patient himself or herself for the application of active euthanasia directly or indirectly and, if so, what the motive was for this. In addition, information is sought on the age, sex, disease, place of care or nursing and the use or otherwise of a 'euthanasia declaration'[22].
The results per patient can be found at the end of this section.
This table does not require much explanation.

In 1992 the number of requests was 41. Of the patients making a request for application of euthanasia, 73% 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 (PAAZ); for three patients this information is not stated.

In 28 cases the request was supported by a written 'euthanasia declaration'. Requests for euthanasia were made by 40 patients; six patients likewise asked for assistance with suicide. One patient asked only for assistance with suicide. One patient asked only for assistance with suicide. In 36 of the 41 requests the general practitioner consulted another physician. In the case of a number of reports whereby no other physician was consulted, it is indi-

cated that the patient already died naturally before the possible application of euthanasia.
It also happened that no other physician was consulted because that had not yet come up for discussion. Of the 40 patients, 29 signed a written 'euthanasia declaration'.

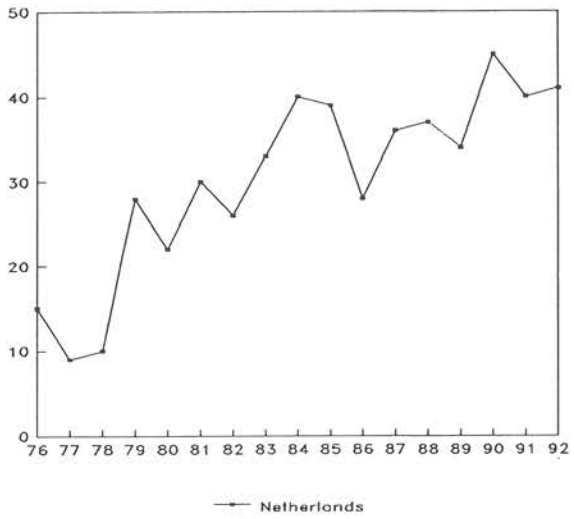
Requests for application of euthanasia 1976-1992

The distribution of the number of requests per province and urbanization group and per sex may be found in Table 39 (cf. Fig. 22).

Table 39: absolute number of patients who requested the general practitioner to apply active euthanasia by sex, per province and urbanization group and for the Netherlands 1976-1992

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
1992	22	19	7	8	20	6	4	20	17	41

Figure 22
Absolute number of patients who requested the general practitioner for the application of active euthanasia or assistance with suicide, for the Netherlands, 1976-1992



Over the whole period 1976-1992 per sentinel station (i.e. not per general practitioner) the average number of requests for euthanasia and the distribution per province and urbanization group appears in Table 40 and Table 41.

Table 40: average number of requests per sentinel station by province group 1976-1992*

	province group			
	A	B	C	D
number of sentinel stations	6	7	17	10
average number of requests	12	9	16	7
scatter	0 - 24	2 - 28	0 - 30	2 - 30

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

Table 41: average number of requests per sentinel station by degree of urbanization 1976-1992*

	degree of urbanization		
	1	2	3
number of sentinel stations	6	21	13
average number of requests	7	11	15
scatter	2 - 20	0 - 24	2 - 30

* 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 42.

Table 42: absolute number of patients who requested the general practitioner for application of active euthanasia or assistance with suicide by age group, 1976-1992

	≤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
1992	7	7	9	12	6	41

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[23].
Meanwhile the data are known on 513 requests for application of euthanasia. Of these requests, 279 were made by a man (54%).

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,
- 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 43.

Table 43: disorders for which euthanasia was requested, 1976-1992

	n	%
malignant neoplasms	367	71
cardio-vascular disease	39	8
chronic obstructive pulmonary disease	24	5
symptoms and incompletely described diseases	31	6
other diseases	52	10
total	513	100

The distribution of the disorders for which euthanasia was requested by age is given in Table 44.

Table 44: percentage of requests per disorder of the total number of reports by age (absolute numbers between parentheses), 1976-1992

	≤54 % n=83	55-64 % n=98	65-74 % n=160	75-84 % n=139	≥85 % n=52
malignant disorders	78	88	88	59	21
cardio-vascular disease	0	1	2	15	25
chronic obstructive pulmonary disease	1	4	2	7	10
symptoms and incompletely described diseases	3	2	1	5	37
other diseases	18	5	7	14	7
	100	100	100	100	100

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

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

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

Table 45 gives the percentage distribution of the number of requests for application of euthanasia by patients younger and older than 65 per disorder.

Table 45: percentage of requests for application of euthanasia by patients younger and older than 65 by disorder, 1976-1992 (n=absolute numbers of requests)

		≤ 64 %	≥ 65 %	total %
all disorders	(n=513)	36	64	100
all malignancies	(n=367)	41	59	100
cardio-vascular disease	(n= 39)	3	97	100
chronic obstructive pulmonary disease	(n= 24)	21	79	100
symptoms and incompletely described diseases	(n= 31)	13	87	100
other diseases	(n= 52)	38	62	100

A further subdivision of the malignancies by localization of the tumour and the age of the patient displays the following picture (Table 46).

Table 46: percentage of requests for application of euthanasia by patients younger and older than 65 with a malignancy by localization of the tumour (n=absolute numbers)

		≤ 64 %	≥ 65 %	total %
all malignancies	(n=367)	41	59	100
stomach	(n= 40)	35	65	100
colon/rectum	(n= 60)	35	65	100
trachea/lung	(n= 94)	40	58	100
breast	(n= 34)	55	47	100
other	(n=139)	45	55	100

When breast cancer is the motive for the request, the percentage of female patients below the age of 65 clearly differs from the percentage for the other localizations.
The use of a "euthanasia declaration" has increased in recent years: from 15% in 1984 to 64% in 1992.

Extrapolation of these data to the Dutch population is possible, but rather pointless. 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, 1992

age	sex	disease	motive for the request
93	F	carcinoma of the mamma	dyspnoea, fatigue, general decay
92	M	cardio-myopathy	physical decay, exhaustion
91	M	metastasized carcinoma of the bladder with continued growth	pain, decay
89	M	cerebrovascular accident	invalidity
86	F	metastasized carcinoma of the lung	increasing dyspnoea and pain
85	F	aplastic anaemia through unknown cause	dead tired, cannot gon on, does not want weekly blood transfusion
84	M	carcinoma of the gall bladder	
83	M	carcinoma of the prostate	unbearable suffering
82	F	carcinoma of the colon	unbearable suffering, pain
81	F	depression	depression
80	M	carcinoma of the lung	pointlessness of life
78	F	mental	
77	M	carcinoma of the colon	continued growth, pain, cachexia
77	M	multiple cerebral infarctions	rapidly progressive functional disorders
77	F	metastasized carcinoma of the mamma	14 years' pain
76	F	carcinoma of the stomach	decay
76	F	carcinoma of the colon	hopeless suffering, terminal
75	M	carcinoma of the lung	hopeless situation
73	M	carcinoma of the stomach with metastases	unbearable suffering, lacklustre
72	M	carcinoma of the lung	dyspnoea, decay
70	M	carcinoma of the lung	fear of dying in pain
70	F	carcinoma of the lung	increasing dyspnoea
69	M	terminal decompensatio cordis	sick of medication, no hope left
69	M	metastasized carcinoma of the larynx	completely dependent, communication (speech) impossible
68	M	terminal emphysema	severe dyspnoea
68	F	carcinoma of the pancreas	for the event of unbearable tail suffering
65	F	carcinoma of the thyroid	decay
64	F	terminal renal insufficiency	stomach-ache, diarrhoea, general decay
62	F	carcinoma of the stomach	hopeless situation
61	M	non-Hodgkin's lymphoma	approaching death phase, dyspnoea
57	M	carcinoma of the lung with metastases	pain, depression
56	F	carcinoma of the ovary	hopeless situation

Request by the patient for active euthanasia, 1992 (continuation)

age	sex	disease	motive for the request
56	F	carcinoma of the lung with metastases	suffering
55	F	carcinoma of the jejunum	too much pain
54	F	carcinoma of the jejunum	pain, metastases
50	M	carcinoma of the colon	fear of decay, dependence
46	M	AIDS	terminal phase
44	M	metastasized carcinoma of the colon	completely bedridden, bowel obstruction vomiting despite gastric tube
43	M	AIDS	
38	M	carcinoma of the stomach	terminal, lacklustre
27	M	brain tumour	can no longer go on, agony

The investigation is being continued in 1993

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[24]. 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 1992 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 1992 12 reports were made. The age varies from 14 to 61 years. Of the 12 reports, 5 were serologically confirmed. The probable place of infection is unknown for 4 patients; two patients were bitten abroad by a tick. Six patients were infected outdoors in the Netherlands.
There are reports from all province groups. Reports have been made from each of the three urbanization groups, most of them from the cities.

The registration of this syndrome is being repeated in 1993.

VACCINATION AGAINST INFLUENZA

Every year the physicians and pharmacists in the Netherlands receive from the Government Public Health Inspectorate announcements about groups of patients with syndromes with regard to which it has been established or is assumed on theoretical grounds that they entail an increased risk concerning influenza.

A distinction is made between patients for whom annual vaccination is **urgently recommended**, patients for whom vaccination is **recommended** and patients for whom vaccination should be **considered**. For the time being no indication of age is used.

In its letter of August 1992 the Government Public Health Inspectorate stated for the first time explicitly that increasing the degree of vaccination prevents illness and mortality. As in 1992, a campaign was started aimed at both the public and the physicians and pharmacists to improve structurally the organization around the annual influenza vaccination. The endeavour is in the future to call up all persons at risk actively via the general practitioner for vaccination.

The choice of the Inspectorate to have vaccination against influenza performed by the general practitioner fits in with the existing situation[25].
In 1991 the degree of vaccination against influenza in the Netherlands was approx. 6%. If it is assumed that in the main high-risk patients are vaccinated, this means that about one third of all patients at risk are reached[27,31].
However, there are considerable differences in the way in which general practitioners give substance to their activities in relation to influenza vaccination[26]. Considerable differences in the percentages of vaccinated patients are the result[28,29,30]. The same publications show that it is quite feasible considerably to improve the degree of vaccination among the groups at risk.

The campaign started in 1992 to improve the organization around the annual influenza vaccination is an initiative of the Ministry of Welfare, Public Health and Culture. This Ministry requested the sentinel stations to examine in an incidental investigation what the extent of vaccination was in 1992.

Before the start of the vaccination month, November 1992, the spotter physicians were asked to draw up lists of the patients called up for vaccination against influenza. They were asked to record the following details of the patients: year of birth, the indication for vaccination, whether the patient lives in an old people's home and whether the vaccination was administered.

Vaccination against influenza in 1992

Out of a population of 101 599 persons, 7677 were vaccinated by the spotter physicians, that is to say 7.6% (scatter 2-14%).
Of the number of 7677 vaccinated persons 4901 are 65 and older. This figure is 36% of the number of persons in the population of 101 599 who are 65 years and older.

In 15 sentinel stations it is possible to investigate what the response was to a summons for vaccination.
Of this population, 51 347 persons, 4907 people were called up for vaccination: 91% of them heeded this summons (scatter 80-100%).
The vaccination percentage in these more active sentinel stations is on average higher than in the group as a whole: 8.7% as against 7.6%.

Discussion

There is no agreement about the size of the groups at risk that qualify for vaccination against influenza.
In American publications it is argued that at least 20% of the population belong to a group at risk[31]. Everyone above the age of 65 is placed in a group at risk, as also the patients below the age of 65 with lighter risks.

Hofstra et al. followed the guidelines of the Chief Medical Office and established among 6.4% of their patients an indication for vaccination against influenza[28]. Govaert et al. apply a more extensive method for the detection of patients with an indication and use the American standards, whereby they omit only the age indication. They arrive at a percentage of 11.6 (637 patients out of a population of 5300 patients).

The percentage of patients called up in the population of 15 sentinel stations for which these data are available is 9.6 and approaches the percentage of Govaert et al. It is clearly higher than the percentage found by Hofstra et al. The scatter over these 15 sentinel stations is 6-14%; this scatter reflects the differences in age structure of the practice populations and the extent to

which general practitioners are active in detecting the patients who qualify for this vaccination.

Of the 4907 patients called up out of a population of 51,347 patients from the 15 sentinel stations mentioned above, 4468 (91%) were also actually vaccinated (scatter 80-100%).
This degree of vaccination is comparable with that established by Govaert et al.:93%. Hofstra et al. attained in 1988 a degree of vaccination of 35% and in 1989 of 50%.

The data from the single sounding into vaccination against influenza give a less sombre picture of the efforts made in general practice than is sometimes suggested. It has been asserted that only one third of the patients at risk were vaccinated[27,31].
If it is assumed that about 12% of the population in general practice qualifies for vaccination, then nearly two thirds of this target group were reached.

GENERAL REMARKS

1. The weekly return for 1993 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. Out-patient or clinical mammography
   j. Bee or wasp sting
   k. Urethritis of the man
   l. P.I.D. (pelvic inflammatory disease)
   m. Concern about AIDS
   n. Gastro-enteritis

2. The incidental investigations for 1993 relate to the subjects euthanasia, and Lyme disease.

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

4. Data from this report may be reproduced with acknowledgment of the source.

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

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

Survey as per 1 July 1993 (from 1 January 1987)

BARTELDS, A.I.M. Continue Morbiditeits Registratie Peilstations, Nederland, 1985. Huisarts en Wetenschap; 1987, 30, 1987, no. 7, p. 222-226

BARTELDS, A.I.M. Continue Morbiditeits Registratie Peilstations, Nederland, 1986. Huisarts en Wetenschap; 1989, 32, 1989, no. 10, p. 392-394

BARTELDS, A.I.M. Continue Morbiditeits Registratie Peilstations, Nederland, 1987. Huisarts en Wetenschap; 1990, 33,1990, no. 2, p. 74-77

CASTEREN, V. van, DECLERCQ, E, e.a. Study of the use of some selected groups of laboratory tests in general practice Brussel: Eurosentinel, Instituut voor Hygiëne en Epidemiologie, 1991

EGMOND, M. VAN. De beoordeling van suiciderisico door de huisarts. Kan de huisarts suicidepogingen voorkomen? Leiden: Rijksuniversiteit, 1988. Dissertatie (Hoofdstuk 1)

FRACHEBOUD, J. Hartinfarct: hartbewaking of thuisblijven? Utrecht: Nivel, 1987

MEER, K., VAN DER, R.J.A. SMITH, G.J. BREMER. Cerebrovasculaire aandoeningen gepeild. Utrecht, Nivel, 1990

NIEUWSBRIEF Influenza Surveillance 1992-1993. Uitgave NIC, NIVEL, RIVM en GHI. Uitgebracht door NIC, 1992-1993

SANTEN, M.R. VAN. Postcoital interception and contragestion. Dissertatie. Utrecht: 1987

SPRENGER, M.J.W. The impact of influenza. Dissertatie Rotterdam, 1990

VECHT-HART, C.M., P.A.H. VAN NOORD. Kankerregistratie gepeild. Utrecht: Nivel, 1989

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

BARTELDS, A.I.M., J. FRACHEBOUD, J. VAN DER ZEE.
The Dutch Sentinel Practice Network; relevance for public health policy.
Nivel, Utrecht, 1989

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

The book consists of two parts.

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

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

The authors of the chapters in the second part of the book are often also the applicants for registration of a certain topic. One of the questions that is discussed in the chapters is what the importance has been of registration of the topics by the CMR Sentinel Stations.
The results of registration of topics are presented in a number of chapters in a different way from that usual in the annual reports, of which to date 18 have been published (1970 to 1987 inclusive).

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

BARTELDS, A.I.M.

Validation of Sentinel Data.

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

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

FRACHEBOUD, J., J. BERKEL, F.H. BONJER, H.J.A. COLLETTE.

Home treatment after an acute myocardial infarction: how often and which patients?

Huisarts en Wetenschap; 32, 1989, No. 5, p. 162-164

It was possible to calculate from the figures of the Continuous Morbidity Registration Sentinel Stations the Netherlands that in 1978 one of the five patients with a possible acute myocardial infarction was not yet being admitted to hospital. Renewed registration in the period 1983-1985 yielded the same picture. However, a further investigation of 249 patients shows that more than half of the 'non-admitted' patients had already died before medical aid could be given. Of the 137 patients with a later confirmed myocardial infarction, only eight proved to have actually been treated at home. These were above all (very) old patients. A comparison with registration data from 1985 shows that the suspicion of an acute myocardial infarction was correct in some 60 percent of the cases reported.

FROOM, J., L. CULPEPPER, P. GROB.

Diagnosis and antibiotic treatment of acute otitis media: report from International Primary Care Network;

British Medical Journal; vol. 300, 1990, p. 582-586

Study objective-The relation between a history of disorders suggestive of acute otitis media, symptoms, and findings of an examination of the tympanic membrane and doctors' certainty of diagnosis. Also, to examine differences in prescribing habits for acute otitis media among doctors from different countries.

Design-Questionnaires were completed by participating doctors for a maximum of 15 consecutive patients presenting with presumed acute otitis media.

Setting-General practices in Australia, Belgium, Great Britain, Israel, The Netherlands, New Zealand, Canada, Switzerland, and the United States.

Patients-3660 Children divided into the three age groups 0-12 months, 13-30 months, and >31 months.

Main outcome measures-General practitioners' responses to questions on their diagnostics certainty and resolution of patients' symptoms after two months.

Results-The diagnostics certainty in patients aged 0-12 months was 58.0%. This increased to 66.0% in those aged 13-30 months and 73.3% in those aged >31 months. In all age groups diagnostic certainty was positively associated with the finding of a tympanic membrane that was discharging pus or bulging. Redness of the membrane and pain were also associated with certainty in patients aged 13-30 months, and a history of decreased hearing or recent

upper respiratory infection was positively associated in patients aged >31 months. The proportion of patients prescribed antibiotics varied greatly among the countries, from 31.2% in The Netherlands to 98.2% in both Australia and New Zealand, as did the duration of treatment. Patients who did not take antibiotics had a higher rate of recovery than those who did; rate of recovery did not differ between different types of antibiotic.

Conclusion-Doctors' certainty of diagnosis of acute otitis media was linked to patient's age. Improved criteria or techniques for diagnosing acute otitis media, especially in very young children, need to be developed. Antibiotic treatment did not improve the rate recovery of patients in this study.

FROOM, J., L. CULPEPPER.

Otitis Media in Day-Care Children.

A Report From the International Primary Care Network. Journal of Family Practice, Vol 32, no. 3 1991 p. 289-294

The relationship between day care and acute otitis media and its adverse consequences was analyzed as part of a collaborative multinational study. Data from primary care research networks in eight countries were collected on 1335 children, aged 0 to 60 months, at the time of initial visits to their primary care physicians for acute otitis media. A history of recurrent acute otitis media, poor hearing, and tonsillectomy or adenoidectomy were all more evident in day-care children aged 25 to 60 months, compared with those cared for at home. Day-care children were brought to their physicians more promptly after the onset of symptoms and recieved more referrals to the otolaryngologist at the time of the index visit for acute otitis media. Day care may pose a significant risk for otitis media and its adverse consequences.

CULPEPPER, L., J. FROOM,

Acute Otitis Media in Adults.

Journal of the American Board of Family Practice, 1993 in press

Background: Of 22 million visits annually to United States physicians for acute otitis media (AOM), almost 4 million are by patients 15 years or older. Yet the clinical spectrum and variables related to recovery have not been reported for adults.

Method: Data originated from 3,224 primary care patients with AOM, of whom 500 were 15 years and older, enrolled in a prospective study in eight countries. At initial visit, past history, symptoms, physical findings, and treatment were recorded. Follow-up at two months identified changes in treatment and recovery.

Results: Compared with children, adults sought care more quickly after symptoms onset, were more likely to have a tonsillectomy and/or adenoidectomy, and to complain of ear pain, decreased hearing, sore throat, and ear discharge. Children were more likely to have a history of recent upper respiratory infection, serous otitis, and ear tubes; symptoms of fever, diarrhoea and vomiting; and tympanic membrane (TM) findings of redness, bulging, and ear tubes in place.

History of reduced hearing, allergy, prophylactic antibiotics, and TM findings characterized as opaque or dull, fluid, draining pus, perforation, and not visualized were equally frequent in both age groups. For adults, neither type nor duration of antibiotic affected outcome. Patients receiving antibiotics had lower rates of recovery than those who did not. The likelihood of a

poor outcome increased with an increasing number of past episodes of OAM and with increasing age.

Conclusion: Altrough past history and symptoms differ in adults and children, the similarity of TM findings probably indicates similar pathophysiological mechanisme in both groups. Recovery is more related to individual patient characteristics and past history than to antibiotic therapy.

DEKKER, J., J.M. DRIESSEN, H. STUMPEL et al.
Referrals by general practitioners to speech therapists
Huisarts en Wetenschap; 35, 1992, No. 11, p. 425-427

For two years the participants in the Continuous Medical Registration the Netherlands kept a record of the patients who were referred to the speech therapist, for which disorders this happened and which persons had been the first to point out that referral was called for. On average 1.7 per 1000 patients were referred per year; however, there was a great interdoctor variation. A minority (38 percent) of the patients were identified by the general practitioner, the patients themselves or parents/guardians. The majority were identified by the school doctor, the school advisory service, other speech therapists, teaching staff or others. General practitioners identified above all voice/respiratory disorders. Language disorders were identified above all by school advisory and speech therapy services; patients themselves and general practitioners played a less great role in identifying these disorders. Stuttering was identified above all by patients themselves and by parents/guardians, less by school advisory services.

HOEK, H.W.
The incidence and prevalence of anorexia nervosa and bulimia nervosa in primary care.
Psychological Medicine, 1991, 21, p. 455-460

General practitioners using DSM-III criteria have studied the incidence and prevalence of anorexia nervosa and bulimia nervosa in a large (N=151,781) representative sample of the Dutch population. The incidence rate for anorexia nervosa is 6.3 and for bulimia nervosa 9.9 per year per 100 000 population. The prevalence of bulimia nervosa is three times higher in larger cities than in smaller urbanized or rural areas, while anorexia nervosa is found with almost equal frequency in areas with a different degree of urbanization.

HOEK, H.W., M. MAIWALD, A. BARTELDS, J. BOSVELD.
The incidence of eating disorders and the influence of urbanization.
1992. Abstract Fifth International Conference on Eating Disorders, New York

From 1985-1989 general practitioners using DSM-III criteria studied the incidence of anorexia nervosa and bulimia nervosa in a large (N=151,781) representative sample of the Dutch population. The first results (prevalence at 1-1-1985 and the incidence 1985-1986) have been published recently (Hoek, Psychological Medicine, 1991, 21, 455-460).
During 1985-1989 the mean incidence of anorexia nervosa was 8.1 per year per 100 000 population and 11.4 for bulimia nervosa. The period 1987-1989 shows an increase of the incidence rates compared to 1985-1986, which will be discussed.

The prevalence of bulimia nervosa is four times higher in larger cities than in rural areas. Anorexia nervosa is found about equally frequently in areas with a different degree of urbanization. The question will be discussed, whether there is a causal relation between degree of urbanization and bulimia nervosa. There seems more evidence for a causal theory than a drift hypothesis, which has been put forward before (Hoek, 1991). Possible causal factors may be more social control in rural areas and more provoking stimuli in cities.

HOFMAN, A., H.J.A. COLLETTE, A.I.M. BARTELDS.
Incidence and Risk Factors of Parkinson's Disease in The Netherlands.
Neuro-Epidemiology; 1989, no. 8, p. 296-299

The incidence and some risk factors of Parkinson's disease were investigated in a study performed in The Netherlands. The study was based on a disease register of the Sentinel Stations, which provide a complete ascertainment of new patients with Parkinson's disease in 60 general practices in The Netherlands. The incidence rate of Parkinson's disease in The Netherlands is estimated to be 11/100 000 person-years for men and 12/100 000 person-years for women. Risk factors for Parkinson's disease were investigated in a case-control study in which 86 cases. with the diagnosis of Parkinson's disease confirmed by a neurologist, were compared with 172 reference subjects, matched for age and gender. Cigarette smoking was associated with a lower risk of Parkinson's disease (relative risk 0.6, 95% confidence interval 0.3-1.0). No association was observed between Parkinson's disease and severe head trauma with loss of consciousness, or surgery with total anaesthesia.

KERSSENS, J.J., P.P. GROENEWEGEN.
Referrals to physiotherapy: the relation between the number of referrals and the inclination to refer.
Social Science Medicine; 30, 1990, no. 7, p. 797-804

This article studies the relation between the referral rate and the type of patients general practitioners refer for physiotherapy. The study population consists of GP's participating in the Netherlands Sentinel Stations Network who recorded data on all referrals to physiotherapy during one year and filled in a questionnaire. Results show that the pattern of referral indications of high referring GP's does not differ systematically from that of low referring GP's. High referring GP's evaluate their patients complaints more as purely or mainly somatic. High referring GP's were no more inclined to give in to their patients demands, had busier practices, closer relations with physiotherapists and viewed their knowledge of physiotherapy as more satisfactory than low referring GP's. Some policy implications are discussed in respect to these results.

MEER, K. VAN DER, R.J.A. SMITH.
Cerebrovascular accident patients in general practice: an investigation among 1 percent of The Dutch population.
Huisarts en wetenschap; 33, 1990, No. 4, p. 141-144

In 1986 and 1987 general practitioners of the NIVEL sentinel stations registered all new cerebrovascular accident (CVA) patients. Of the 273 patients reported, two thirds were older than 70 years. The total incidence was 1.3 per 1000 inhabitants per year; for the 65-69 age group that was 4 per 1000, and for the >80 group 20 per 1000. The disorder was equally divided between the sexes. In the first week after the occurrence of the CVA 72 percent of the

patients were admitted to hospital; the very old patients in particular were kept at home. The distribution of the patients over the various places of abode was after eight weeks and after one year practically identical: nearly half of the patients were again (or still) at home, 10 percent were in an old people' home and 10 percent in a nursing home. Mortality among the CVA patients was high. In the first week 16% died, half of whom in the first two days. After eight weeks 26% of all CVA patients had died and after a year one third. In the case of 20 percent of the patients a CVA recurred within a year. A quarter of the people were severely infirm within a year.

MEER, K. VAN DER, R.J.A. SMITH.
Transient ischaemic attack patients in general practice: an investigation among 1 percent of the Dutch population.
Huisarts en wetenschap, 33, 1990, No. 5, p. 184-188

In 1986 and 1987 the general practitioners who cooperate with the NIVEL Sentinel Stations project reported 132 patients with a transient ischaemic attack (TIA). The average incidence was 0.7 per 1000 inhabitants per year. Three quarters of the patients were older than 70. In the case of 48 percent speech defects occurred. The general practitioners referred over 40 percent of the patients to a specialist, nearly always a neurologist. Half of the patients were prescribed aspirin. Within one year after the TIA 11 patients had died: 6 of the 30 that had already experienced a TIA before and 5 of 102 new TIA patients. In the case of 11 patients a CVA was reported within one year of the TIA. Of the patients who experienced a first TIA, a TIA recurred and deaths occurred more often in the group that had been referred to the specialist. Evidently general practitioners are well capable of selecting the patients with a greater chance of complications for referral.

RIJN, O.J.L. van.
Burn injuries among young children.
Dissertatie Maastricht, 1991 (hoofdstuk 2)

During the period of January 1988 to December 1989, medically treated burn injuries in the Netherlands were recorded prospectively by three registration systems. These systems cover patients treated in burns units, in general and university hospitals, and by general practitioners. Incidence rates and 95% confidence intervals were calculated, and basic epidemiologic data about severity and localization of the burns and about accident circumstances were collected. The overall incidence rate of medically treated burns over all levels of medical care is estimated to be about 280 per 100 000 persons per year. This overall incidence figure appeared to be about 34 times as high for 0-4 year old children: 775 per 100 000 persons per year. At all levels of medical care, scalds are the most frequent type of burns, resulting in an overall incidence rate among 0-4 year old children of 430 per 100 000 persons per year. Incidence rates are lowest among the elderey (55+), but this age group suffers a higher mortality from burns. Furthermore, it turned out that males are more prone to serious burns than females, whereas females are more often treated for less severe burns. Most of the accident circumstances for serious burns were related to profession, whereas most of the circumstances for less severe burns were related to household activities.

Appendix 1

CONTINUOUS MORBIDITY REGISTRATION, SENTINEL STATIONS
Participating General Practitioners in 1992

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
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

Appendix 1 (continuation)

Participating General Practitioners in 1992

Name:	Residence:	Province:
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 (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 (group practice)	Eindhoven	Noord-Brabant
R.A.M. de Jong	Maastricht	Limburg

*) With dispensary

Weekstaat t.b.v. centrale registratie

CONTINUE MORBIDITEITSREGISTRATIE, PEILSTATION 1992

Proj. no.			verslagjaar		Code peilstat.			Week no.	
4	0	0	9	2	№				

	Leeftijdsgroep	Influenza (-achtig) ziektebeeld[2])	Cervixuitstrijkje[3]) 1e maal: Klachten/ symptomen	Cervixuitstrijkje[3]) 1e maal: Louter preventieve overwegingen[4])	Cervixuitstrijkje[3]) herhaling: Klachten/ symptomen[5])	Cervixuitstrijkje[3]) herhaling: Louter preventieve overwegingen	Hartinfarkt: Vermoed[6])	Hartinfarkt: Bevestigd[6])	Sterilisatie verricht[7])	Vermoeden op bijwerking cosmetica[8])	Diabetes Mellitus Incidentie[9])	Suïcide(poging)[10])	Acute ongewone hoofdpijn[11])	Mammografie: Na 1-1-1991 voor 1e maal	Mammografie: Herhalings-onderzoek	Sportletsels[12]) (1e consult)	Bije- of wespsteek[13])	Urethritis bij man	C.A.I.D.S.[14]) (concern about AIDS)	Gastro-enteritis[15])		
		M+V	V	V	V	V	M	V	M	V	M	V	M	V	M	V	M+V	M+V	V	V	M	V	M+V	M	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	
8	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 1970-1993

subjects	
abortion (spontaneous)	1982-1983
abortion (request)	1970-1975
abortus provocatus	1971-1979
accidents	1971
accidents in the private sector	1981-1983
acute unusual headache	1988-1993
admission of psychiatric patient	1988
AIDS (concern about)	1988-1993
alcoholism	1975
anti-hypertensivum or diuretic (prescription)	1976
battered child syndrome (suspicion of)	1973-1974
bee or wasp sting	1992-1993
bites by pets	1986
burns	1988-1989
cervical smear	1976-1993
cerebrovascular accident	1986-1987
dementia	1987-1988
depression	1983-1985
diabetes mellitus	1980-1983 and 1990-1993
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	1992-1993
hay fever	1978-1982
influenza (-like illness)	1970-1993
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

Subjects on the weekly returns in alphabetical order 1970-1993 (continuation)

subjects	
myocardial infarction (suspicion of	1978 and 1983-1985 and
and/or confirmed)	1991-1993
otitis media acuta	1971 and 1986
out-patient or clinical mammography	1988-1993
Parkinson's disease	1980-1985
partus immaturus	1982-1983
partus at gravidity ≥28 weeks	1982-1983
penicillin (prescription and side effects)	1982-1983
p.i.d. (pelvic inflammatory disease)	1993
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)	1992-1993
skull traumas in traffic	1975-1977
smoking (consultation with regard to addiction)	1974
sport traumas	1979-1983 and 1992-1993
sterilization of the man performed	1972-1993
sterilization of the woman performed	1974-1993
suicide (attempted)	1970-1972 and 1979-1993
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	1992-1993

Appendix 3b

Incidental investigations and other extra investigations, 1977-1993 (alphabetical)

subjects	
alternative forms of treatment (registration feasible?)	1980
anorexia nervosa and boulimia	1985-1989
euthanasia (request for application)	1976-1993
incest	1988
influenza (vaccination against)	1992
Lyme disease	1991-1993
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 1992 (C.B.S.)

age	men	women	total*
0- 4	492	470	962
5- 9	458	439	896
10-14	463	443	906
15-19	509	488	997
20-24	644	619	1 263
25-29	671	637	1 308
30-34	641	615	1 256
35-39	596	575	1 171
40-44	602	575	1 177
45-49	518	491	1 009
50-54	412	398	810
55-59	363	366	729
60-64	328	355	683
65-69	283	340	623
70-74	215	290	505
75-79	149	239	388
80-84	85	172	257
≥ 85	51	137	188
total	7 480	7 694	15 129

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

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS

CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD

ALLE PEILSTATIONS

JAAR: 1992 WEEK: 01 T/M 53

LEEFTIJDS-GROEP	POPULATIE			INFLU-ENZA"	CERVIXUITSTRIJKJE				HARTINFARKT					
				INFLU-ENZA"	1.1.90 1E MAAL WEGENS	1.1.90 1E MAAL PREVENT	HERHAL. WEGENS	HERHAL. PREVENT	VERMOED AMI			BEVESTIGD AMI		
	M	V	T	M+V	V	V	V	V	M	V	T	M	V	T
<1 JR	424	381	805	1179	0	0	0	0	0	0	0	0	0	0
1-4 JR	3505	3336	6841	458	0	0	0	0	0	0	0	0	0	0
5-9 JR	4164	3956	8120	339	0	0	0	0	0	0	0	0	0	0
10-14 JR	4118	3989	8107	195	0	0	0	0	0	0	0	0	0	0
15-19 JR	4466	4405	8871	225	9	7	2	0	0	0	0	0	0	0
20-24 JR	5669	5781	11450	216	83	154	23	23	0	0	0	0	0	0
25-29 JR	6093	6017	12110	196	121	455	60	76	0	0	0	0	0	0
30-34 JR	5818	5616	11434	266	103	839	96	226	7	2	4	0	2	1
35-39 JR	5286	5296	10582	236	125	1692	157	491	2	0	1	6	0	3
40-44 JR	5281	5220	10501	242	146	1515	180	571	11	2	7	13	2	8
45-49 JR	4547	4480	9027	188	141	1206	130	447	20	5	12	31	0	16
50-54 JR	3643	3584	7227	215	103	1055	137	536	33	14	24	36	6	21
55-59 JR	3299	3375	6674	222	68	335	65	77	43	12	27	49	3	26
60-64 JR	2967	3323	6290	229	75	96	27	42	54	54	54	64	27	45
65-69 JR	2630	3106	5736	190	32	48	16	0	80	39	58	65	23	42
70-74 JR	2049	2559	4608	206	23	20	0	12	171	43	100	93	23	54
75-79 JR	1347	2052	3399	197	15	5	0	10	104	63	80	60	54	56
80-84 JR	790	1516	2306	208	7	0	0	0	139	86	104	76	40	52
>85 JR	504	1165	1669	191	0	0	0	0	80	103	96	80	60	66
TOTAAL	66600	69157	135757	244	72	523	62	171	22	13	18	19	7	13

ALLE PEILSTATIONS JAAR: 1992 WEEK: 01 T/M 53

LEEFTIJDS-GROEP	POPULATIE			STERILISATIE			COSMETICA			DIABETES MELLITUS			SUICIDE (POGING)
				STERILISATIE			BIJWERKING			INCIDENTIE			SUICIDE (POGING)
	M	V	T	M	V	T	M	V	T	M	V	T	M+V
<1 JR	424	381	805	0	0	0	0	0	0	0	27	13	0
1-4 JR	3505	3336	6841	0	0	0	0	0	0	0	0	0	0
5-9 JR	4164	3956	8120	0	0	0	2	0	1	0	3	1	0
10-14 JR	4118	3989	8107	0	0	0	0	13	6	2	3	3	1
15-19 JR	4466	4405	8871	0	0	0	2	25	14	2	0	1	8
20-24 JR	5669	5781	11450	0	4	2	7	42	24	4	0	2	10
25-29 JR	6093	6017	12110	12	18	15	5	42	23	0	5	3	12
30-34 JR	5818	5616	11434	108	48	79	3	29	16	5	4	4	5
35-39 JR	5286	5296	10582	200	110	155	2	36	19	15	0	8	10
40-44 JR	5281	5220	10501	114	50	82	6	29	17	8	8	8	9
45-49 JR	4547	4480	9027	51	25	38	2	9	6	15	11	13	8
50-54 JR	3643	3584	7227	25	3	14	0	17	8	30	20	25	4
55-59 JR	3299	3375	6674	6	0	3	6	12	9	58	44	51	9
60-64 JR	2967	3313	6280	7	0	3	3	24	14	44	54	49	0
65-69 JR	2630	3106	5736	0	0	0	0	3	2	46	39	42	4
70-74 JR	2049	2559	4608	0	0	0	5	0	2	39	55	48	7
75-79 JR	1347	2052	3399	0	0	0	0	5	3	67	54	59	12
80-84 JR	790	1516	2306	0	0	0	0	0	0	63	53	56	0
>85 JR	504	1165	1669	0	0	0	0	0	0	60	26	36	0
TOTAAL	66600	69157	135757	41	20	30	3	20	12	16	15	16	6

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS

CUMULATIEF ALLE PEILSTATIONS GESTANDAARDISEERD

ALLE PEILSTATIONS

JAAR: 1992 WEEK: 01 T/M 53

LEEFTIJDS-GROEP	POPULATIE			ACUTE ONGEWONE HOOFDPYN 1E MAAL			MAMMOGRAFIE HERHAL.	SPORTLETSELS				BIJE-/WESPE-STEEK
	M	V	T	M	V	T	V	V	M	V	T	M+V
<1 JR	424	381	805	0	0	0	0	0	0	0	0	0
1-4 JR	3505	3336	6841	0	0	0	0	0	0	0	0	18
5-9 JR	4164	3956	8120	0	0	0	0	0	29	43	36	12
10-14 JR	4118	3989	8107	0	0	0	0	0	240	178	210	6
15-19 JR	4466	4405	8871	0	0	0	9	0	383	182	283	19
20-24 JR	5669	5781	11450	0	2	1	29	2	386	90	237	17
25-29 JR	6093	6017	12110	2	2	2	62	13	289	71	181	7
30-34 JR	5818	5616	11434	5	2	4	119	43	251	59	156	14
35-39 JR	5286	5296	10582	0	0	0	187	59	161	68	114	12
40-44 JR	5281	5220	10501	0	2	1	260	65	140	65	103	14
45-49 JR	4547	4480	9027	9	0	4	201	76	62	34	48	14
50-54 JR	3643	3584	7227	3	3	3	162	78	63	39	51	8
55-59 JR	3299	3375	6674	0	0	0	121	53	43	15	29	21
60-64 JR	2967	3323	6290	3	0	2	117	60	24	9	16	10
65-69 JR	2630	3106	5736	0	0	0	58	6	4	13	9	12
70-74 JR	2049	2559	4608	5	0	2	51	12	0	4	2	15
75-79 JR	1347	2052	3399	0	0	0	39	15	0	5	3	12
80-84 JR	790	1516	2306	0	0	0	40	7	0	0	0	4
>85 JR	504	1165	1669	0	0	0	9	0	0	0	0	6
TOTAAL	66600	69157	135757	2	1	1	92	30	158	59	108	13

ALLE PEILSTATIONS JAAR: 1992 WEEK: 01 T/M 53

LEEFTIJDS-GROEP	POPULATIE			CAIDS	GASTRO-ENTERITIS			URETHRI-TIS
				CAIDS	GASTRO-ENTERITIS			URETHRI-TIS
	M	V	T	M+V	M	V	T	M
<1 JR	424	381	805	0	667	530	602	0
1-4 JR	3505	3336	6841	0	228	201	215	0
5-9 JR	4164	3956	8120	0	60	23	42	2
10-14 JR	4118	3989	8107	3	51	50	51	0
15-19 JR	4466	4405	8871	18	40	48	44	18
20-24 JR	5669	5781	11450	49	69	87	78	60
25-29 JR	6093	6017	12110	59	64	81	73	59
30-34 JR	5818	5616	11434	39	69	55	62	52
35-39 JR	5286	5296	10582	39	44	64	54	57
40-44 JR	5281	5220	10501	21	55	36	46	34
45-49 JR	4547	4480	9027	12	26	36	31	31
50-54 JR	3643	3584	7227	14	30	34	32	30
55-59 JR	3299	3375	6674	14	46	50	48	15
60-64 JR	2967	3323	6290	14	41	57	49	24
65-69 JR	2630	3106	5736	2	42	39	40	11
70-74 JR	2049	2559	4608	0	29	35	33	0
75-79 JR	1347	2052	3399	0	7	10	9	22
80-84 JR	790	1516	2306	0	25	20	22	38
>85 JR	504	1165	1669	0	20	43	36	20
TOTAAL	66600	69157	135757	22	62	60	61	31

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS

PROVINCIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD

JAAR: 1992 WEEK: 01 T/M 53

PROVINCIE-GROEP	POPULATIE			"INFLU-ENZA"	CERVIXUITSTRIJKJE				HARTINFARKT					
				"INFLU-ENZA"	1.1.90 1E MAAL WEGENS	1.1.90 1E MAAL PREVENT	HERHAL. WEGENS	HERHAL. PREVENT	VERMOED AMI			BEVESTIGD AMI		
	M	V	T	M+V	V	V	V	V	M	V	T	M	V	T
GR+FR+DR	10467	11134	21602	358	91	352	35	152	17	10	13	13	5	9
OV+GLD+FLE	11379	11416	22794	308	89	439	89	156	14	11	12	15	9	12
UTR+NH+ZH	28265	29847	58110	209	65	586	64	209	24	12	18	23	9	16
ZLD+NB+LIM	16487	16770	33257	201	59	582	57	127	27	20	24	20	6	13
TOTAAL	66598	69167	135763	248	72	525	62	172	22	13	18	19	8	13

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS

PROVINCIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD

JAAR: 1992 WEEK: 01 T/M 53

PROVINCIE-GROEP	POPULATIE			STERILISATIE			COSMETICA			DIABETES MELLITUS			SUICIDE (POGING)
				STERILISATIE			BIJWERKING			INCIDENTIE			SUICIDE (POGING)
	M	V	T	M	V	T	M	V	T	M	V	T	M+V
GR+FR+DR	10467	11134	21602	32	12	21	3	14	8	12	14	13	12
OV+GLD+FLE	11379	11416	22794	49	14	32	4	21	13	9	18	13	4
UTR+NH+ZH	28265	29847	58110	35	24	29	3	24	14	21	16	18	6
ZLD+NB+LIM	16487	16770	33257	50	22	36	2	17	10	15	14	14	5
TOTAAL	66598	69167	135763	41	20	30	3	20	12	16	15	16	6

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS BLAD 3

PROVINCIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD 05-11-93

JAAR: 1992 WEEK: 01 T/M 53

PROVINCIE-GROEP	POPULATIE			ACUTE ONGEWONE HOOFDPYN			MAMMOGRAFIE		SPORTLETSELS			BIJE-/WESPE-
				ACUTE ONGEWONE HOOFDPYN 1E MAAL			1.1.91 HERHAL.		SPORTLETSELS			STEEK
	M	V	T	M	V	T	V	V	M	V	T	M+V
GR+FR+DR	10467	11134	21602	1	1	1	59	14	121	45	82	9
OV+GLD+FLE	11379	11416	22794	2	0	1	80	53	128	31	79	18
UTR+NH+ZH	28265	29847	58110	2	1	1	105	34	147	53	99	11
ZLD+NB+LIM	16487	16770	33257	2	2	2	101	18	223	100	161	16
TOTAAL	66598	69167	135763	2	1	1	93	30	158	60	109	13

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS BLAD 4

PROVINCIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD 05-11-93

JAAR: 1992 WEEK: 01 T/M 53

PROVINCIE-GROEP	POPULATIE			CAIDS	GASTRO-ENTERITIS			URETHRI-TIS
				CAIDS	GASTRO-ENTERITIS			URETHRI-TIS
	M	V	T	M+V	M	V	T	M
GR+FR+DR	10467	11134	21602	16	38	35	37	16
OV+GLD+FLE	11379	11416	22794	13	40	53	47	40
UTR+NH+ZH	28265	29847	58110	24	52	52	52	45
ZLD+NB+LIM	16487	16770	33257	27	112	97	104	10
TOTAAL	66598	69167	135763	22	62	60	62	31

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS

BLAD 1

URBANISATIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD

05-11-93

JAAR: 1992 WEEK: 01 T/M 53

URBANISATIE-GROEP	POPULATIE			"INFLU-ENZA"	CERVIXUITSTRIJKJE				HARTINFARKT					
				"INFLU-ENZA"	1.1.90 1E MAAL WEGENS	1.1.90 1E MAAL PREVENT	HERHAL. WEGENS	HERHAL. PREVENT	VERMOED AMI			BEVESTIGD AMI		
	M	V	T	M+V	V	V	V	V	M	V	T	M	V	T
A1+A4	8114	8092	16206	285	42	445	37	130	14	5	9	16	4	10
B1-B3,C1-C4	41160	42693	83850	158	68	511	60	204	24	15	19	17	8	12
C5	17324	18382	35707	439	93	585	75	114	23	14	19	28	9	18
TOTAAL	66598	69167	135763	248	72	525	62	172	22	13	18	19	8	13

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS

BLAD 2

URBANISATIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD

05-11-93

JAAR: 1992 WEEK: 01 T/M 53

URBANISATIE-GROEP	POPULATIE			STERILISATIE			COSMETICA			DIABETES MELLITUS			SUICIDE (POGING)
				STERILISATIE			BIJWERKING			INCIDENTIE			SUICIDE (POGING)
	M	V	T	M	V	T	M	V	T	M	V	T	M+V
A1+A4	8114	8092	16206	59	22	41	5	25	15	16	17	17	3
B1-B3,C1-C4	41160	42693	83850	37	16	26	2	15	9	15	15	15	7
C5	17324	18382	35707	41	28	34	4	31	17	19	15	17	7
TOTAAL	66598	69167	135763	41	20	30	3	20	12	16	15	16	6

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS

BLAD 3

URBANISATIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD

05-11-93

JAAR: 1992 WEEK: 01 T/M 53

URBANISATIE-GROEP	POPULATIE			ACUTE ONGEWONE HOOFDPYN			MAMMOGRAFIE	SPORTLETSELS				BIJE-/WESPE-
				ACUTE ONGEWONE HOOFDPYN 1E MAAL			1.1.91 HERHAL.	SPORTLETSELS				STEEK
	M	V	T	M	V	T	V	V	M	V	T	M+V
A1+A4	8114	8092	16206	1	0	1	87	61	116	48	82	19
B1-B3+C1-C4	41160	42693	83850	2	1	1	95	25	155	64	109	11
C5	17324	18382	35707	2	2	2	90	28	186	53	118	14
TOTAAL	66598	69167	135763	2	1	1	93	30	158	60	109	13

CONTINUE MORBIDITEITSREGISTRATIE PEILSTATIONS

BLAD 4

URBANISATIEGROEP NAAR ZIEKTEBEELD GESTANDAARDISEERD

05-11-93

JAAR: 1992 WEEK: 01 T/M 53

URBANISATIE-GROEP	POPULATIE			CAIDS	GASTRO-ENTERITIS		URETHRI-TIS	
				CAIDS	GASTRO-ENTERITIS		URETHRI-TIS	
	M	V	T	M+V	M	V	T	M
A1+A4	8114	8092	16206	7	38	43	41	46
B1-B3+C1-C4	41160	42693	83850	19	59	57	58	14
C5	17324	18382	35707	35	82	74	78	65
TOTAAL	66598	69167	135763	22	62	60	62	31

FOOTNOTES

1. Casteren V. van, P. Lerquin. Eurosentinel: Development of an International Sentinel Network of General Practitioners. Meth. Inform. Med. 1992; 31:147-52

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

3. Figures from the registration of professions in primary health care, 1 Jan. 1992, p. 32, Table 10. NIVEL, Utrecht.

4. The tables indicated only by figures are text tables.

5. 1-1-1992, Central Statistical Office. Persons who are entered in the Central Register of Vital Statistics (CPR) have been left out of consideration.

6. Practice census 1991.

7. 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.

8. This must satisfy the following criteria (Pel, 1965):
   a. An acute beginning, i.e. at most a prodromal stage of three to four days (including pre-existent infection of the respiratory organs at a non-pathogenic level);
   b. The infection must be accompanied by a rise in rectal temperature to at least 38°;
   c. At least one of the following symptoms must be present: cough, coryza, sore throat, frontal headache, retrosternal pain, myalgia.
   Pel, J.Z.S. (1965) Proefonderzoek naar de frequentie en de aetiologie van griepachtige ziekten in de winter 1963-1964. (Huisarts en Wetenschap 8, 321).

9. Here and elsewhere in the text incidence or frequency means the frequency per 10 000 inhabitants (either men or women).

10. Fracheboud J., Hartinfarct, hartbewaking of thuisblijven. Nivel, Utrecht, 1987.

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

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

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14. 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

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17. Amsterdam Sentinel Station Project, Annual Report, 1990. Municipal Medical and Health Service, Amsterdam, p. 10-12.

18. Moons, M.A.W., L. Peters in Huisarts en vragen over AIDS. M.C.; 45, 1990, no 35, p. 1055-1057

19. National Committee for AIDS control, AIDS info line, annual report. 1988-1989, Amsterdam 1991.

20. Hoogenboom-Verdegaal, A.M.M. Epidemiologisch en microbiologisch onderzoek met betrekking tot gastro-enteritis bij de mens in de regio's Amsterdam en Helmond, in 1987 en 1988. RIVM, rapportnr. 148612 002, augustus 1990.

21. R.F.W. Diekstra and M. van Egmond. Suicide and attempted suicide in general practice. In the Dutch Sentinel Practice Network; relevance for public health policy, p. 202. Nivel, Utrecht 1989.

22. A euthanasia declaration is a written request for euthanasia on certain conditions.

23. A.I.M. Bartelds. Requests for application of euthanasia. In the Dutch Sentinel Practice Network; relevance for public health policy, p. 259. Nivel, Utrecht 1989.

24. Nohlmans M.K.E., Bogaard A.F.J.M. van den, Blaauw A.A.M. et al. Prevalentie van Lyme borreliosis in Nederland. Ned Tijdschrift Geneeskunde, 1991.

25. Recommendation regarding vaccination against influenza. National Public Health Inspecto-r-rate GHI/INFZ 921819), Rijswijk, August 1992.

26. Meynaar, I.A., van 't Wout, J.W., Vandenbroucke, J.P., van Furth, R. De opvattingen van huisartsen en specialisten over de vaccinatie tegen influenza. Ned. Tijdschrift Geneeskunde, 1992; 4: 176-9.

27. Diepersloot, R.J.A., Sprenger, M.J.w. Verhoging vaccinatiegraad. Med. Medicin, 1992, 705-709.

28. Govaert, Th.M.E., Dinant, G.J., Knotnerus, J.A. Vaccinatie tegen influenza in een huisartspraktijk. Opkomst vaccinatiegraad van risicopatienten. Huisarts en Wetenschap, 1991; 34: 478-81.

29. Hofstra, M.L., ter Braak, E.M., van der Werf, G.Th., Smith, R.J.A. Een geautomatiseerd zoeken oproepsysteem voor vaccinatie tegen influenza. Huisarts en Wetenschap, 1990; 33: 429-32.

30. Essen van, G.A. Oproepen van alle 65-plussers voor de influenza-vaccinatie. Huisarts en Wetenschap, 1992; 35: 345-49.

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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 registratie	- Weekly return for central 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 1-1-1990 voor de eerste maal afgenomen op grond van	- Taken for the first time after 1-1-1990 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
Vermoeden op bijwerking cosmetica	- Side effect of cosmetics (suspicion of)
Diabetes Mellitus	- Diabetes Mellitus
- incidentie	- - incidence
Suïcide(poging)	- (Attempted) suicide
Acute ongewone hoofdpijn	- Acute unusual headache
(Poli) klinische mammografie	- mammography
na 1-1-1991 voor eerste maal	- Taken for the first time after 1-1-1991
Herhalingsonderzoek	- Repeat examination
Sportletsels (1e consult)	- Sport-traumas (1ste consultation)
Bije- of wespesteek	- Bee or wasp sting
Urethritis bij man	- Urethritis of the man

C.A.I.D.S.
Gastro-enteritis
Weeknummer
Opgemaakt d.d.
Aantal dagen gerapporteerd
(zie voetnoot[1])
Zie ommezijde voor voetnoot

1. Door vakantie, ziekte en andere oorzaken zal deze rapportage zich echter ook over minder dan 5 dagen kunnen uitstrekken. Het wordt van belang geacht om, zo mogelijk, ook tijdens het weekeinde waargenomen patiënten te rapporteren. (M.u.v. influenzapatiënten.)
2. Betreft uitsluitend nieuwe patiënten, ook telefonisch consult melden
3. Betreft rapportering van vrouwen bij wie na 1-1-1990 om welke reden dan ook een cervixuitstrijkje heeft plaatsgevonden. Indien bij een vrouw na 1-1-1990 opnieuw een cervixuitstrijkje wordt gemaakt, dient dit altijd onder de subrubriek "herhalingsonderzoek" geboekt te worden (zie ook voetnoot 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.
5. Bijvoorbeeld wegens verdacht preparaat of wegens technische onvolkomenheden bij onderzoek vorig preparaat.
6. per melding invullen
   Vermoed hartinfarct
   patiënt 1
   1e 3 letters achternaam:.....
   geboortedatum:..-..-..
   Fataal: ja/nee
   waarop is vermoeden gebaseerd*
   - cardiologische voorgeschiedenis ja/nee
   - anamnese/onderzoek arts ja/nee

- Concern about AIDS
- Gastro-enteritis
- Number of the week
- Completed on
- Number of days over which reporting took place
- (See footnote number[1])
- For footnotes see reverse

1. As a result of vacation, sickness and other causes this reporting may extend over fewer than 5 days. It is considered to be of importance to report, if possible, patients observed during the weekend as well. (Influenza patients excluded.)
2. Relates solely to new patients. Report telephone calls as well.
3. Concerns reporting of women on whom a cervical smear was taken after 1-1-1990 for whatsoever reason. If a cervical smear was taken again of a women after 1-1-1990 this should always be entered under the subheading "Repeat examination" (see also footnote 5).
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. For example on account of suspect preparation or technical imperfections in the examination of the previous preparation.
6. complete per report
   Suspected myocardial infarction
   patient 1
   first three letters of surname .....
   date of birth ..-..-..
   fatal yes/no
   on what is suspicion based?*
   - previous cardiological history yes/no
   - anamnesis/examination by GP yes/no

- hetero anamnese ja/nee

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

- hetero anamnesis yes/no

Confirmed myocardial infarction
patient 1
first three letters of surname
date of birth
date of diagnosis
fatal: yes/no
previous cardiological history
yes/no
diagnosis by specialist/
GP/other physician
diagnosis on basis of*
- positive ECG yes/no
- enzyme increase yes/no
- autopsy yes/no

*several answers possible

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. S.v.p. per melding invullen
   1.1. aard van de klacht
   a. huid
   b. slijmvliezen
   c. overig
   2.2. lokalisatie
   a. hoofd
   b. romp
   c. extremiteiten
   2. aard van het cosmeticum
   a. haarverzorging
   b. geur (parfum/eau)
   c. mond hygiëne
   d. huidverzorging
   e. make-up (decoratie)
   f. badprodukten/deodorant
   g. zonnecosmetica
   h. overig
9. S.v.p. apart formulier invullen en bij de weekstaat voegen.
   Code
   Geboortedatum.....
   Geslacht

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. Please complete per report
   1.1. nature of the complaint
   a. skin
   b. mucous membranes
   c. other tissues
   2.2. localisation
   a. head
   b. trunk
   c. extremities
   2. nature of the cosmetic
   a. haircaring product
   b. smell (perfume/eau)
   c. hygiene of mouth
   d. skincaring product
   e. make-up
   f. bathprodukts/deodorant
   g. sunburn lotion
   h. others
9. Please complete a separate form and attach to the weekly return.
   Code
   Date of birth: .....
   Male/female

Incident	Incidence
10. S.v.p. apart formulier invullen en bij de weekstaat voegen.	10. Please complete a separate form and attach to the weekly return.
11. S.v.p. apart formulier invullen en bij de weekstaat voegen.	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. per melding invullen 1. steek door 1. bij 2. wesp 2. verschijnselen 1. lokaal 2. algemene aard I/II/III/IV* *zie voor de definitie van de lokale en algemene verschijnselen de toelichting	13. Please complete per report 1. sting by 1. bee 2. wasp 2. symptoms 1. local 2. general I/II/III/IV* * see for the definition of local and general symptoms the information
14. S.v.p. apart formulier invullen en bij de weekstaat voegen.	13. Please complete a separate form and attach to the weekly return.
15 S.v.p. faeceskoker en enquêteformulieren aan patiënt uitreiken	15. Please hand out questionnaire and faeces transport material to the patient

Tables (p 135 - p 142)

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
Vermoeden op bijwerking cosmetica	- Side-effect of cosmetics (suspicion of)
Diabetes Mellitus	- Diabetes Mellitus
Suïcide(poging)	- (Attempted) suicide
Acute ongewone hoofdpijn	- Acute unusual headache
(poli) klinische mammografie	- (Clinical) mammography
na 1-1-1991 voor de eerste maal	- Taken for the first time after 1-1-1991
Herhalingsonderzoek	- Repeat examination
Sportletsels	- Sport-traumas
Bije- of wespesteek	- Bee or wasp sting
Urethritis bij man	- Urethritis of the man
C.A.I.D.S.	- Concern about AIDS
Gastro-enteritis	- Gastro-enteritis
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	- Urbanization groups
A_1 - A_4 -	Rural municipalities
B_1 - B_3 + C_1 - C_4	- Municipalities with urban characteristics and urbanized municipalities
C_5	- Municipalities with a population of 100 000 or more
Voetnoot	- Footnote
N.B. Als gevolg van het afronden bij het berekenen van de relatieve frequenties kunnen kleine verschillen in de totalen zijn ontstaan	N.B. As a result of rounding off when calculating relative frequencies, small differences may have occurred in the totals