

Use of Selected Medical Procedures Associated With Preventive Care United States-1973

Statistics by selected demographic and health variables on proportion of specific population groups ever receiving electrocardiograms, glaucoma tests, chest X-rays, eye examinations, pap smears, breast examinations, and routine physical examinations; the interval since the last exam; and patterns of prenatal and postnatal medical care. Based on data collected in the Health Interview Survey during 1973.

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Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the Division of Health Interview Statistics, the Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

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SYMBOLS

Data not available-----	---
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Quantity more than 0 but less than 0.05----	0.0
Figure does not meet standards of reliability or precision (more than 30 percent relative standard error)-----	*

USE OF SELECTED MEDICAL PROCEDURES ASSOCIATED WITH PREVENTIVE CARE

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INTRODUCTION

During 1973, information about the use of selected kinds of medical procedures for the early detection of disease was collected by the Division of Health Interview Statistics from a sample of persons representing the United States civilian, noninstitutionalized population. The specific types of medical procedures were electrocardiograms (EKG), glaucoma tests, chest X-rays, eye examinations, pap smears (Papanicolaou test for cervical cancer), breast examinations, and routine physical examinations. Questions pertaining to a particular examination were asked only for certain age groups. This report contains data on the proportion of persons ever receiving these tests and the time interval since the last exam; these data are shown by selected demographic and health variables.

Information about prenatal and postnatal medical care was also collected during 1973 and appears in this report. These data were collected because routine medical care during and after a pregnancy is recognized by health professionals as an important preventive health care practice.

Of the approximately 74 million persons 40 years of age and over in the civilian, noninstitutionalized population, about 60 percent have received an electrocardiogram and about 54 percent have been tested for glaucoma. Whereas proportionately more men (64.6 percent) than women (56.8 percent) had been given electrocardiograms, a slightly higher percentage of women reported receiving a glaucoma test (56.7 percent compared to 50.1 percent of men).

Four out of five persons 17 years of age and over have had at least one chest X-ray. Data from this survey show no differences between the proportion of men and women or white and all other color groups ever having a chest X-ray.

About 88 percent of all persons 3 years of age and over have had their eyes examined to determine the need for glasses. Slightly more females (89.6 percent) reported an eye examination than did males (85.7 percent). Differences between white and all other persons were more pronounced; 89.1 percent of white persons 3 years and over have had an eye examination while only 77.9 percent of all other persons reported one. Among persons with an eye exam, proportionately more children 3-16 years of age (75.7 percent) had their last exam within the year than any other age group had. In contrast, among individuals 25 years of age and over only 36.4 percent had an exam during this period.

About three-fourths of all adult women surveyed have had a pap smear. However, this proportion varied appreciably by age groups—from a low of 53.7 percent of women 65 years of age and over to 90.0 percent of women ages 25-44. White women were somewhat more likely to have a pap smear than other women—76.0 and 69.4 percent, respectively. Among women reporting a pap smear, over four-fifths of the 17-24 year age group (81.6 percent) were tested within the year prior to interview compared to only 40.9 percent of those 65 years and over.

Similarly, about three-fourths of the 75 million women 17 years of age and over in this country have had a breast examination by a doctor. The highest proportion of examined

SOURCE AND LIMITATIONS OF THE DATA

women were aged 25-44 (88.8 percent) whereas only about 59 percent of women 65 years of age and over had ever been examined. The proportion of women ever having a breast exam was about 9 percent higher for the white population than for all other color groups (77.1 and 70.5 percent, respectively).

About 86 percent of all children under 17 years of age have received a routine physical examination. For this survey, a routine physical examination or general checkup is defined as a visit to the doctor for the purpose of determining the general state of a person's health. More than one-half of the examined youngsters had their last physical exam within the prior year. By age group, however, about three-fourths of the examined children under 6 years of age had an exam during this period compared to about one-half of the school-age population (6-16 years).

Data in this report also show that family income and education level are directly related to the proportion of persons ever receiving each of the selected medical procedures just described. Although the actual impact on the specific procedures varies, a pattern of increasing participation as income and education rise is clearly apparent.

The following patterns of prenatal and postnatal medical care were found for live births to ever-married women 17-44 years of age. About 99 percent of pregnancies where a live birth occurred received some prenatal medical care and about 84 percent had a postnatal checkup. The first prenatal doctor visit was made during the first 3 months of pregnancy in about four of every five pregnancies. Pregnant women with family incomes below \$5,000 or without a high school degree were less likely to receive prenatal care during the first trimester than women with greater income or education. Altogether, about 11 prenatal doctor visits were made for each pregnancy ending in a live birth. Bed rest of 2 weeks or more some time before delivery was recommended by a medical doctor in about 8 percent of all pregnancies culminating in a live birth.

Preliminary data on breast examinations and pap smears have already appeared in *Monthly Vital Statistics Report*, Vol. 24, Numbers 6 and 7 Supplements.

This report contains information from the Health Interview Survey which was obtained in household interviews conducted throughout the Nation on a continuing basis. Each week a probability sample of households is interviewed by trained personnel of the U.S. Bureau of the Census to obtain information about the health and other characteristics of each member of the household in the civilian, noninstitutionalized population of the United States. During 1973 approximately 120,000 persons living in about 41,000 households were included in the sample.

Descriptions of the design of the survey, the methods used in estimation, and general qualifications of the data obtained from this survey are presented in appendix I. Since the estimates shown in this report are based on a sample of the population, they are subject to sampling error. Therefore particular attention should be paid to the section entitled "Reliability of Estimates." Sampling errors for most of the estimates are of relatively low magnitude. However, where an estimated number or the numerator or denominator of the rate or percentage is small, the sampling error may be high. Charts of relative sampling errors and instructions for their use are shown in appendix I.

Appendix II contains definitions of certain terms used in this report, some of which have specialized meanings for the survey. For example, routine physical examinations among children under 17 years of age are defined as visits to a doctor for the purpose of determining the general state of the child's health. This category includes checkups for specific purposes, such as periodic (yearly) checkups, visits to the well-baby clinic, or examinations at school for athletics. Not included are visits to a doctor for a checkup or examination for a specific condition or visits for the sole purpose of receiving immunizations.

The questionnaire used in the Health Interview Survey during 1973 appears in "Current Estimates from the Health Interview Survey, United States, 1973" (*Vital and Health Statistics*, Series 10, Number 95). The portions of this questionnaire dealing with selected medical

procedures and prenatal and postnatal care appear in appendix III of this report.

Estimates of live births in this report are based on information obtained in household interviews. Where these data are compared with those of the Division of Vital Statistics for the same time period, however, for the most part the interview estimates of live births are underreported. However, the extent of underreporting varies appreciably with specific population groups. A more detailed description of this fact and the differences are presented in the pregnancy care section of this report.

The specific medical procedures which appeared on the 1973 Health Interview Survey questionnaire were selected for inclusion for several reasons. Primarily these procedures are the ones which are most commonly used by health practitioners for specific age groups to diagnose illness and disease at an early and often treatable stage. Furthermore, these medical procedures were ones which both proxy and self-respondents would most likely have some knowledge of and be willing to report in an interview situation.

Only summary tables have been included in this report. More detailed cross-classification by age and sex for the selected demographic and health variables shown in this report can be provided upon request.

SELECTED MEDICAL PROCEDURES

As mentioned in an earlier section of this report, information about each medical procedure was obtained only for certain age groups. Data on two of the medical procedures, electrocardiograms and glaucoma tests, were obtained only for persons 40 years of age and over. This age restriction was used for electrocardiograms

because this test is not a routine preventive health care procedure received by younger individuals. The questions about glaucoma tests were limited to this same age group because glaucoma poses more of a health problem to older persons.

Questions about chest X-rays were asked for all persons 17 years of age and over, and the eye examination questions were asked for all persons who were at least 3 years of age.

Two medical procedures applicable to women only were included in the survey, pap smears (Papanicolaou test for cervical cancer) and breast examinations by a doctor; questions about these exams were asked for all females 17 years of age and over. Questions relating to prenatal and postnatal medical care associated with terminated pregnancies were asked for all women 17-44 years of age.

Routine physical examinations were limited to children under 17 years of age as examinations of this type are easier to identify for this particular age group than for other persons.

Wherever possible, a brief description of the medical procedure was included in the questions that were read to the respondent. An electrocardiogram was also referred to as an EKG and explained as involving the placing of wires on the chest and arms. The test for glaucoma was described as an eye pressure test.

Eye examinations were limited to those obtained for the purpose of determining the need either for glasses or for a change in prescription. Since a major portion of eye exams for school-age children are given through the school system and, therefore, possibly forgotten by respondents, a specific reminder was included about these exams, reducing the chance of their being underreported.

A routine physical examination was also described as a general checkup, not a checkup received for a particular illness.

Electrocardiogram

In 1973, there were approximately 74 million persons 40 years of age and over in the civilian, noninstitutionalized population; of that number, about 60 percent had received an electrocardiogram at some point during their lifetime (table 1). The percent of persons ever having an electrocardiogram increased in each succeeding age group—from 48 percent of persons 40-44 years old to about 67 percent of all persons 65 years of age and over.¹ Proportionately more males received EKG's than females, 64.6 and 56.8 percent, respectively. White people were more likely to report ever having an electrocardiogram (61.2 percent) than were people of all other colors (53.1 percent).

No well-defined pattern in the percent of persons ever having an electrocardiogram was found among most of the family income categories identified in table 1. Nevertheless, a slightly higher proportion of people with family incomes of \$15,000 or more received an electrocardiogram than did those whose income was less than \$15,000—64.1 and 59.7 percent, respectively. The likelihood of receiving an electrocardiogram was about 15 percent greater for persons completing 1 year or more of college than for other individuals—69.1 percent of college-educated persons compared to 58.7 percent of less educated persons.

Although slight differences for persons ever having an EKG were found among the four geographic regions, more pronounced variations occurred between persons living in standard metropolitan statistical areas (SMSA's) and those living outside metropolitan areas. Appreciably more persons from SMSA's had an electrocardiogram at some time (63.2 percent) than persons living elsewhere had (54.4 percent). Within SMSA's, a slightly higher proportion of persons from central city areas ever had an EKG

than those outside the central city had (about 2 percent). A similar comparison between persons from nonfarm and farm areas showed about a 14 percent higher rate for nonfarm residents than for farm residents.

The health status classification referred to in this report was determined by asking the respondent: "Compared to other persons his age, would you say that his health is excellent, good, fair, or poor?" Perceived health status is inversely related to the percent of persons ever having an electrocardiogram. With each health status category, the percent of persons reporting an EKG increased as perceived health declined—from 55.3 percent of persons considered in excellent health to 78.9 percent of persons considered in poor health.

Of the approximately 45 million persons 40 years of age and over ever receiving an electrocardiogram, 40.6 percent had at least one during the 12-month period preceding the interview (table 2). The percentages of persons reporting an EKG during this period for most of the demographic categories presented in table 2 varied only slightly from this overall figure. Highlighted below are some of these differences:

- A higher percent of persons 65 years of age and over reported an EKG within the year (43.0 percent) than did persons under 65 years of age (39.6 percent).
- Proportionately more males (42.0 percent) than females (39.3 percent) received an electrocardiogram during the year prior to interview.
- There were fewer white persons (40.3 percent) than persons of other colors (44.3 percent) with an electrocardiogram within the prior year.
- For the most part, there were no significant differences in the percents of persons receiving an EKG within the year among the various income categories shown in table 2; however, for persons with family incomes of \$15,000 or more, 43.5 percent had an EKG within this period compared to 39.2 percent of those with incomes below this amount.
- The proportion of persons with an electrocardiogram during the year was about 14 percent higher for those who had completed 1 year or more of college than for those with less education.

¹In this report, terms such as "similar" and "the same" mean that no statistical significance exists between the statistics being compared. Terms relating to difference, i.e., "greater," "less," etc., indicate that differences are statistically significant. The *t*-test with a critical value of 1.96 (0.05 level of significance) was used to test all comparisons which are discussed. Lack of comment regarding the difference between any two statistics does *not* mean the difference was tested and found to be not significant.

- The North Central Region had proportionately fewer persons with an electrocardiogram during the year (38.3 percent) than any other region had.
- A higher proportion of persons from SMSA's had EKG's within the prior year (41.8 percent) than persons from areas outside SMSA's had (37.6 percent).

The percentage of persons with an electrocardiogram during the 12-month period preceding the interview was about the same for those considered in excellent or good health

(36.8 and 37.7 percent, respectively) but increased dramatically as perceived health status declined, 45.5 percent of persons whose health was perceived as fair and 57.6 percent of those in poor health. These differences become more pronounced when the last exam was received 5 or more years ago. Almost one-fourth of all persons 40 years of age and over considered in excellent health had not had an EKG within the past 5 years compared to only about 10 percent of persons considered in poor health.

Table 1. Number and percent of persons 40 years and over having or never having an electrocardiogram, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number in thousands			Percent		
	Total ¹	Ever had electrocardiogram	Never had electrocardiogram	Total ¹	Ever had electrocardiogram	Never had electrocardiogram
All persons 40 years and over ² ---	73,949	44,647	26,567	100.0	60.4	35.9
<u>Age</u>						
40-44 years-----	11,162	5,363	5,263	100.0	48.0	47.2
45-64 years-----	42,534	25,670	15,303	100.0	60.4	36.0
65 years and over-----	20,253	13,614	6,002	100.0	67.2	29.6
<u>Sex</u>						
Male-----	33,917	21,897	10,536	100.0	64.6	31.1
Female-----	40,032	22,750	16,031	100.0	56.8	40.0
<u>Color</u>						
White-----	66,640	40,768	23,569	100.0	61.2	35.4
All other-----	7,309	3,879	2,998	100.0	53.1	41.0
<u>Family income</u>						
Less than \$3,000-----	8,235	4,908	3,094	100.0	59.6	37.6
\$3,000-\$4,999-----	8,708	5,345	3,169	100.0	61.4	36.4
\$5,000-\$6,999-----	8,023	4,973	2,825	100.0	62.0	35.2
\$7,000-\$9,999-----	9,344	5,421	3,600	100.0	58.0	38.5
\$10,000-\$14,999-----	14,746	8,639	5,641	100.0	58.6	38.3
\$15,000 or more-----	18,638	11,956	5,987	100.0	64.1	32.1
<u>Education of individual</u>						
Less than 12 years-----	35,678	20,806	13,826	100.0	58.3	38.8
12 years-----	22,743	13,460	8,455	100.0	59.2	37.2
13 years or more-----	14,461	9,994	3,969	100.0	69.1	27.4
<u>Geographic region</u>						
Northeast-----	18,617	11,449	6,492	100.0	61.5	34.9
North Central-----	20,135	12,039	7,396	100.0	59.8	36.7
South-----	22,839	13,337	8,567	100.0	58.4	37.5
West-----	12,359	7,823	4,112	100.0	63.3	33.3
<u>Place of residence</u>						
SMSA-----	50,320	31,793	16,521	100.0	63.2	32.8
Central city-----	22,685	14,526	7,234	100.0	64.0	31.9
Not central city-----	27,636	17,266	9,287	100.0	62.5	33.6
Outside SMSA-----	23,628	12,855	10,045	100.0	54.4	42.5
Nonfarm-----	20,254	11,222	8,381	100.0	55.4	41.4
Farm-----	3,375	1,632	1,665	100.0	48.4	49.3
<u>Health status</u>						
Excellent-----	25,874	14,299	10,543	100.0	55.3	40.7
Good-----	30,312	17,776	11,464	100.0	58.6	37.8
Fair-----	12,640	8,621	3,620	100.0	68.2	28.6
Poor-----	4,704	3,710	822	100.0	78.9	17.5

¹Includes unknown if examined.

²Includes unknown income, education, and health status.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Table 2. Number and percent distribution of persons 40 years and over having an electrocardiogram by interval since last electrocardiogram, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total with electrocardiogram	Interval since last electrocardiogram				Total with electrocardiogram	Interval since last electrocardiogram			
		Less than 1 year	1-2 years	3-4 years	5 years or more		Less than 1 year	1-2 years	3-4 years	5 years or more
	Number in thousands					Percent distribution				
All persons 40 years and over ¹ -----	44,647	18,135	11,815	5,518	9,181	100.0	40.6	26.5	12.4	20.6
<u>Age</u>										
40-44 years-----	5,363	2,062	1,546	701	1,054	100.0	38.4	28.8	13.1	19.7
45-64 years-----	25,670	10,221	6,995	3,171	5,283	100.0	39.8	27.2	12.4	20.6
65 years and over-----	13,614	5,852	3,273	1,646	2,843	100.0	43.0	24.0	12.1	20.9
<u>Sex</u>										
Male-----	21,897	9,201	5,787	2,637	4,272	100.0	42.0	26.4	12.0	19.5
Female-----	22,750	8,934	6,027	2,881	4,908	100.0	39.3	26.5	12.7	21.6
<u>Color</u>										
White-----	40,768	16,417	10,746	5,069	8,537	100.0	40.3	26.4	12.4	20.9
All other-----	3,879	1,718	1,069	448	644	100.0	44.3	27.6	11.5	16.6
<u>Family income</u>										
Less than \$3,000-----	4,908	2,018	1,228	602	1,060	100.0	41.1	25.0	12.3	21.6
\$3,000-\$4,999-----	5,345	2,067	1,352	655	1,271	100.0	38.7	25.3	12.3	23.8
\$5,000-\$6,999-----	4,973	1,931	1,239	702	1,100	100.0	38.8	24.9	14.1	22.1
\$7,000-\$9,999-----	5,421	2,114	1,456	703	1,147	100.0	39.0	26.9	13.0	21.2
\$10,000-\$14,999-----	8,639	3,345	2,336	1,107	1,851	100.0	38.7	27.0	12.8	21.4
\$15,000 or more-----	11,956	5,199	3,348	1,352	2,057	100.0	43.5	28.0	11.3	17.2
<u>Education of individual</u>										
Less than 12 years-----	20,806	8,205	5,388	2,708	4,505	100.0	39.4	25.9	13.0	21.7
12 years-----	13,460	5,275	3,658	1,733	2,794	100.0	39.2	27.2	12.9	20.8
13 years or more-----	9,994	4,463	2,661	1,059	1,811	100.0	44.7	26.6	10.6	18.1
<u>Geographic region</u>										
Northeast-----	11,449	4,801	3,025	1,371	2,251	100.0	41.9	26.4	12.0	19.7
North Central-----	12,039	4,612	3,184	1,521	2,721	100.0	38.3	26.4	12.6	22.6
South-----	13,337	5,446	3,585	1,667	2,640	100.0	40.8	26.9	12.5	19.8
West-----	7,823	3,276	2,020	958	1,568	100.0	41.9	25.8	12.2	20.0
<u>Place of residence</u>										
SMSA-----	31,793	13,304	8,462	3,804	6,224	100.0	41.8	26.6	12.0	19.6
Central city-----	14,526	6,218	3,845	1,715	2,748	100.0	42.8	26.5	11.8	18.9
Not central city-----	17,266	7,086	4,617	2,088	3,476	100.0	41.0	26.7	12.1	20.1
Outside SMSA-----	12,855	4,831	3,353	1,714	2,957	100.0	37.6	26.1	13.3	23.0
Nonfarm-----	11,222	4,235	2,937	1,487	2,563	100.0	37.7	26.2	13.3	22.8
Farm-----	1,632	595	416	227	394	100.0	36.5	25.5	13.9	24.1
<u>Health status</u>										
Excellent-----	14,299	5,262	3,756	1,841	3,440	100.0	36.8	26.3	12.9	24.1
Good-----	17,776	6,708	4,908	2,318	3,841	100.0	37.7	27.6	13.0	21.6
Fair-----	8,621	3,919	2,249	992	1,462	100.0	45.5	26.1	11.5	17.0
Poor-----	3,710	2,136	855	340	380	100.0	57.6	23.0	9.2	10.2

¹Includes unknown income, education, and health status.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Glaucoma Test

About one-half (53.7 percent) of the civilian, noninstitutionalized population 40 years of age or older were reported to have ever been tested for glaucoma (table 3). The percent of persons ever having a glaucoma test was higher for those 45 years and over (56.1 percent) than for persons 40-44 years of age (40.0 percent); for those 45-64 years and 65 years and over, however, percentages were similar. Women were more apt to have a test for glaucoma than men (56.7 and 50.1 percent, respectively). Proportionately, about one-third more of the white population reported ever having a glaucoma test than did all other individuals.

Data in table 3 show a direct relationship between family income and ever being tested for glaucoma. From a low of 44.7 percent of persons with incomes less than \$3,000, the percentages of persons ever having a glaucoma test showed a steady rise for the following three income categories: \$3,000-\$9,999 (50.5 percent), \$10,000-\$14,999 (54.9 percent), and \$15,000 or more (63.2 percent). As with family income, an increase in completed years of education is accompanied by a corresponding rise in the proportion of that population ever receiving a glaucoma test. Whereas about two-thirds of all persons with some completed years of college reported having a glaucoma test, less than one-half of those persons who were not high school graduates (46.5 percent) had ever received this test.

Proportionately fewer people from the South Region and more persons from the West Region reported ever having a glaucoma test (50.9 and 58.8 percent, respectively). Differences were also found between persons living within and outside of SMSA's. The percent of persons ever having a glaucoma test was about 20 percent higher in SMSA's than in other areas (56.7 compared to 47.3 percent). Persons from

farm areas had the lowest percent reporting a glaucoma test (39.1 percent) and areas surrounding central cities in SMSA's had the highest percent (59.0 percent).

The percent of persons having a glaucoma test increased as perceived health status improved—from 50.7 percent of persons considered in fair or poor health to 56.1 percent of persons considered in excellent health.

It is generally recognized that persons 40 years of age or older should be tested for glaucoma at regular intervals (i.e., about every 2 years). This is because the most common form of glaucoma which affects this age group—chronic simple or open (wide) angle glaucoma—seldom produces symptoms which are easily recognized by persons with the condition, and yet it can be readily diagnosed by the trained professional. Although damage occurring to the eye before diagnosis cannot be reversed, subsequent treatment can usually prevent further vision loss; left undiagnosed and untreated, however, blindness will result.

Of the approximately 40 million persons 40 years of age and over ever tested for glaucoma, over three-fifths (62.1 percent) received a test within 2 years of the interview (table 4). Differences noted among the age and color groups in table 4 are within sampling variation. For family income and education, however, some significant differences are found. The percent of persons having a recent glaucoma test increased somewhat in three income categories—from 59.4 percent (less than \$10,000) to 61.1 percent (\$10,000-\$14,999) to 66.5 percent (\$15,000 or more). Slight increases among the three education categories (under 12 years, 12 years, 13 years or more) also occurred, 59.5, 62.2, and 66.2 percent, respectively. The percent of persons with a glaucoma test within the past 2 years was slightly higher in SMSA's (63.2 percent) than in areas outside SMSA's (59.3 percent).

Table 3. Number and percent of persons 40 years and over having or never having a glaucoma test according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Number in thousands			Percent		
	Total ¹	Ever had glaucoma test	Never had glaucoma test	Total ¹	Ever had glaucoma test	Never had glaucoma test
All persons 40 years and over ² -----	73,949	39,711	30,302	100.0	53.7	41.0
<u>Age</u>						
40-44 years-----	11,162	4,470	5,968	100.0	40.0	53.5
45-64 years-----	42,534	23,969	16,310	100.0	56.4	38.3
65 years and over-----	20,253	11,272	8,024	100.0	55.7	39.6
<u>Sex</u>						
Male-----	33,917	17,000	14,675	100.0	50.1	43.3
Female-----	40,032	22,711	15,627	100.0	56.7	39.0
<u>Color</u>						
White-----	66,640	36,695	26,544	100.0	55.1	39.8
All other-----	7,309	3,017	3,757	100.0	41.3	51.4
<u>Family income</u>						
Less than \$3,000-----	8,235	3,682	4,186	100.0	44.7	50.8
\$3,000-\$4,999-----	8,708	4,305	4,060	100.0	49.4	46.6
\$5,000-\$6,999-----	8,023	4,061	3,620	100.0	50.6	45.1
\$7,000-\$9,999-----	9,344	4,795	4,057	100.0	51.3	43.4
\$10,000-\$14,999-----	14,746	8,096	5,983	100.0	54.9	40.6
\$15,000 or more-----	18,638	11,777	5,903	100.0	63.2	31.7
<u>Education of individual</u>						
Less than 12 years-----	35,678	16,580	17,412	100.0	46.5	48.8
12 years-----	22,743	13,065	8,498	100.0	57.4	37.4
13 years or more-----	14,461	9,762	3,993	100.0	67.5	27.6
<u>Geographic region</u>						
Northeast-----	18,617	10,130	7,479	100.0	54.4	40.2
North Central-----	20,135	10,691	8,337	100.0	53.1	41.4
South-----	22,839	11,624	9,964	100.0	50.9	43.6
West-----	12,359	7,267	4,521	100.0	58.8	36.6
<u>Place of residence</u>						
SMSA-----	50,320	28,535	18,954	100.0	56.7	37.7
Central city-----	22,685	12,233	9,127	100.0	53.9	40.2
Not central city-----	27,636	16,302	9,827	100.0	59.0	35.6
Outside SMSA-----	23,628	11,176	11,348	100.0	47.3	48.0
Nonfarm-----	20,254	9,855	9,453	100.0	48.7	46.7
Farm-----	3,375	1,321	1,894	100.0	39.1	56.1
<u>Health status</u>						
Excellent-----	25,874	14,503	10,033	100.0	56.1	38.8
Good-----	30,312	16,207	12,536	100.0	53.5	41.4
Fair-----	12,640	6,356	5,611	100.0	50.3	44.4
Poor-----	4,704	2,429	1,980	100.0	51.6	42.1

¹Includes unknown if examined.

²Includes unknown income, education, and health status.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Table 4. Number and percent distribution of persons 40 years and over having a glaucoma test by interval since last glaucoma test, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total with glaucoma test	Interval since last glaucoma test				Tested within past 2 years	Total with glaucoma test	Interval since last glaucoma test				Tested within past 2 years	
		Less than 1 year	1-2 years	3-4 years	5 years or more			Less than 1 year	1-2 years	3-4 years	5 years or more		
All persons 40 years and over ¹ ----		39,711	17,329	14,229	4,801	3,352	24,652	100.0	43.6	35.8	12.1	8.4	62.1
		Number in thousands					Percent distribution						
<u>Age</u>													
40-44 years-----	4,470	2,094	1,535	456	384	2,949	100.0	46.8	34.3	10.2	8.6	66.0	
45-64 years-----	23,969	10,169	9,066	2,959	1,774	14,823	100.0	42.4	37.8	12.3	7.4	61.8	
65 years and over-----	11,272	5,066	3,628	1,385	1,193	6,881	100.0	44.9	32.2	12.3	10.6	61.0	
<u>Sex</u>													
Male-----	17,000	7,417	6,072	2,011	1,499	10,555	100.0	43.6	35.7	11.8	8.8	62.1	
Female-----	22,711	9,912	8,157	2,789	1,853	14,097	100.0	43.6	35.9	12.3	8.2	62.1	
<u>Color</u>													
White-----	36,695	15,828	13,314	4,495	3,058	22,665	100.0	43.1	36.3	12.2	8.3	61.8	
All other-----	3,017	1,502	915	306	294	1,987	100.0	49.8	30.3	10.1	9.7	65.9	
<u>Family income</u>													
Less than \$3,000-----	3,682	1,561	1,130	503	489	2,120	100.0	42.4	30.7	13.7	13.3	57.6	
\$3,000-\$4,999-----	4,305	1,809	1,441	583	471	2,555	100.0	42.0	33.5	13.5	10.9	59.3	
\$5,000-\$6,999-----	4,061	1,747	1,417	516	381	2,427	100.0	43.0	34.9	12.7	9.4	59.8	
\$7,000-\$9,999-----	4,795	2,061	1,672	628	434	2,906	100.0	43.0	34.9	13.1	9.1	60.6	
\$10,000-\$14,999-----	8,096	3,401	3,122	996	578	4,950	100.0	42.0	38.6	12.3	7.1	61.1	
\$15,000 or more-----	11,777	5,443	4,370	1,227	737	7,827	100.0	46.2	37.1	10.4	6.3	66.5	
<u>Education of individual</u>													
Less than 12 years-----	16,580	6,943	5,775	2,194	1,667	9,859	100.0	41.9	34.8	13.2	10.1	59.5	
12 years-----	13,065	5,645	4,856	1,559	1,005	8,130	100.0	43.2	37.2	11.9	7.7	62.2	
13 years or more-----	9,762	4,585	3,500	1,019	658	6,467	100.0	47.0	35.9	10.4	6.7	66.2	
<u>Geographic region</u>													
Northeast-----	10,130	4,642	3,621	1,150	717	6,553	100.0	45.8	35.7	11.4	7.1	64.7	
North Central-----	10,691	4,394	3,923	1,394	980	6,352	100.0	41.1	36.7	13.0	9.2	59.4	
South-----	11,624	5,181	4,089	1,374	981	7,272	100.0	44.6	35.2	11.8	8.4	62.6	
West-----	7,267	3,113	2,597	883	674	4,476	100.0	42.8	35.7	12.2	9.3	61.6	
<u>Place of residence</u>													
SMSA-----	28,535	12,686	10,347	3,289	2,213	18,024	100.0	44.5	36.3	11.5	7.8	63.2	
Central city-----	12,233	5,594	4,267	1,369	1,002	7,792	100.0	45.7	34.9	11.2	8.2	63.7	
Not central city-----	16,302	7,091	6,080	1,919	1,212	10,232	100.0	43.5	37.3	11.8	7.4	62.8	
Outside SMSA-----	11,176	4,644	3,882	1,512	1,139	6,628	100.0	41.6	34.7	13.5	10.2	59.3	
Nonfarm-----	9,855	4,116	3,407	1,329	1,003	5,848	100.0	41.8	34.6	13.5	10.2	59.3	
Farm-----	1,321	527	476	183	136	780	100.0	39.9	36.0	13.9	10.3	59.0	
<u>Health status</u>													
Excellent-----	14,503	6,238	5,470	1,653	1,142	9,095	100.0	43.0	37.7	11.4	7.9	62.7	
Good-----	16,207	6,981	5,886	1,995	1,344	9,994	100.0	43.1	36.3	12.3	8.3	61.7	
Fair-----	6,356	2,861	2,094	815	587	3,895	100.0	45.0	32.9	12.8	9.2	61.3	
Poor-----	2,429	1,146	725	303	255	1,535	100.0	47.2	29.8	12.5	10.5	63.2	

¹Includes unknown income, education, and health status.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Chest X-ray

Four-fifths of the population 17 years and over (about 114 million persons) have had a chest X-ray (table 5). Persons 25-64 years of age had the highest proportion reporting a chest X-ray (85.0 percent). The percent with a chest X-ray was slightly lower for persons 65 years of age and over (78.9 percent) and appreciably lower for persons 17-24 years old (65.6 percent). There were no differences between the proportions of men and women or of white and all other color groups ever having a chest X-ray.

The percent of persons ever having a chest X-ray increased slightly among four broad family income categories: less than \$3,000 (76.4 percent), \$3,000-\$9,999 (80.2 percent), \$10,000-\$14,999 (81.6 percent), and \$15,000 or more (83.1 percent). The percent of persons with a chest X-ray also rose as education increased—from about 76 percent of those who did not finish high school to almost 87 percent of persons completing 1 year or more of college. A higher proportion of persons living in SMSA's than of those not living in SMSA's had a chest X-ray—about 82 compared to about 76 percent.

As perceived health status declines, there is a corresponding increase in the percent of the population having a chest X-ray. Specifically, about 79 percent of persons considered in

excellent or good health reported ever having a chest X-ray, while about 84 percent of those considered in fair health and about 88 percent considered in poor health received an X-ray of this kind.

Of the 114 million adults having chest X-rays, 39.0 percent were last X-rayed during the 12-month period preceding the interview (table 6). The percent of persons with a chest X-ray within the year was the same for all age groups (about 40 percent) except for persons 25-44 years old, for whom the percentage was slightly lower (36.6 percent). About one white person in three (37.7 percent) reported a chest X-ray within the year compared to about one-half (49.1 percent) of all other persons.

The percent of persons reporting a chest X-ray during the year increases substantially as perceived health declines. Whereas only slightly more than one-third (35.7 percent) of all persons reported in excellent health who had received a chest X-ray had one within the previous 12-month period, about 60 percent of those reported in poor health had an X-ray of this kind within this same period. Furthermore, proportionately about twice as many people reported in excellent health as in poor health indicated that their most recent chest X-ray was taken 5 or more years ago (20.0 and 9.7 percent, respectively).

Table 5. Number and percent of persons 17 years and over having or never having a chest X-ray according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total ¹	Ever had chest X-ray	Never had chest X-ray	Total ¹	Ever had chest X-ray	Never had chest X-ray
	Number in thousands			Percent		
All persons 17 years and over ² -----	141,802	113,630	18,669	100.0	80.1	13.2
<u>Age</u>						
17-24 years-----	29,063	19,071	7,595	100.0	65.6	26.1
25-44 years-----	49,953	42,271	4,359	100.0	84.6	8.7
45-64 years-----	42,534	36,300	3,600	100.0	85.3	8.5
65 years and over-----	20,253	15,987	3,116	100.0	78.9	15.4
<u>Sex</u>						
Male-----	66,641	53,530	7,583	100.0	80.3	11.4
Female-----	75,161	60,099	11,086	100.0	80.0	14.7
<u>Color</u>						
White-----	125,798	100,696	16,837	100.0	80.0	13.4
All other-----	16,004	12,933	1,833	100.0	80.8	11.5
<u>Family income</u>						
Less than \$3,000-----	12,973	9,906	2,433	100.0	76.4	18.8
\$3,000-\$4,999-----	13,582	10,848	2,029	100.0	79.9	14.9
\$5,000-\$6,999-----	15,080	12,040	2,268	100.0	79.8	15.0
\$7,000-\$9,999-----	20,231	16,332	2,722	100.0	80.7	13.5
\$10,000-\$14,999-----	33,132	27,040	3,963	100.0	81.6	12.0
\$15,000 or more-----	36,680	30,495	3,633	100.0	83.1	9.9
<u>Education of individual</u>						
Less than 12 years-----	53,471	40,778	9,501	100.0	76.3	17.8
12 years-----	50,759	40,936	6,323	100.0	80.6	12.5
13 years or more-----	35,953	31,212	2,610	100.0	86.8	7.3
<u>Geographic region</u>						
Northeast-----	34,180	27,066	4,766	100.0	79.2	13.9
North Central-----	38,661	31,511	4,809	100.0	81.5	12.4
South-----	44,449	34,855	6,280	100.0	78.4	14.1
West-----	24,513	20,198	2,814	100.0	82.4	11.5
<u>Place of residence</u>						
SMSA-----	98,160	80,409	11,159	100.0	81.9	11.4
Central city-----	43,761	36,369	4,750	100.0	83.1	10.9
Not central city-----	54,399	44,040	6,409	100.0	81.0	11.8
Outside SMSA-----	43,643	33,221	7,510	100.0	76.1	17.2
Nonfarm-----	38,481	29,496	6,370	100.0	78.7	16.6
Farm-----	5,162	3,725	1,141	100.0	72.2	22.1
<u>Health status</u>						
Excellent-----	62,061	49,070	8,688	100.0	79.1	14.0
Good-----	56,364	44,878	7,719	100.0	79.6	13.7
Fair-----	17,042	14,242	1,797	100.0	83.6	10.5
Poor-----	5,534	4,847	376	100.0	87.6	6.8

¹Includes unknown if examined.

²Includes unknown income, education, and health status.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Table 6. Number and percent distribution of persons 17 years and over having a chest X-ray by interval since last chest X-ray, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total with chest X-ray	Interval since last chest X-ray				Total with chest X-ray	Interval since last chest X-ray				
		Less than 1 year	1-2 years	3-4 years	5 years or more		Less than 1 year	1-2 years	3-4 years	5 years or more	
All persons 17 years and over ¹ ----		113,630	44,290	33,599	14,692	21,049	100.0	39.0	29.6	12.9	18.5
		Number in thousands				Percent distribution					
<u>Age</u>											
17-24 years-----	19,071	7,719	6,623	2,794	1,935	100.0	40.5	34.7	14.7	10.1	
25-44 years-----	42,271	15,484	12,744	5,786	8,257	100.0	36.6	30.1	13.7	19.5	
45-64 years-----	36,300	14,657	10,202	4,190	7,251	100.0	40.4	28.1	11.5	20.0	
65 years and over-----	15,987	6,429	4,030	1,923	3,606	100.0	40.2	25.2	12.0	22.6	
<u>Sex</u>											
Male-----	53,530	21,227	16,001	6,919	9,383	100.0	39.7	29.9	12.9	17.5	
Female-----	60,099	23,063	17,598	7,773	11,665	100.0	38.4	29.3	12.9	19.4	
<u>Color</u>											
White-----	100,696	37,945	29,694	13,390	19,667	100.0	37.7	29.5	13.3	19.5	
All other-----	12,933	6,344	3,904	1,302	1,382	100.0	49.1	30.2	10.1	10.7	
<u>Family income</u>											
Less than \$3,000-----	9,906	4,015	2,779	1,235	1,878	100.0	40.5	28.1	12.5	19.0	
\$3,000-\$4,999-----	10,848	4,238	3,012	1,393	2,206	100.0	39.1	27.8	12.8	20.3	
\$5,000-\$6,999-----	12,040	4,647	3,442	1,648	2,303	100.0	38.6	28.6	13.7	19.1	
\$7,000-\$9,999-----	16,332	6,075	4,829	2,253	3,175	100.0	37.2	29.6	13.8	19.4	
\$10,000-\$14,999-----	27,040	9,986	8,148	3,609	5,298	100.0	36.9	30.1	13.3	19.6	
\$15,000 or more-----	30,495	12,402	9,399	3,735	4,959	100.0	40.7	30.8	12.2	16.3	
<u>Education of individual</u>											
Less than 12 years-----	40,778	15,892	11,360	4,991	8,534	100.0	39.0	27.9	12.2	20.9	
12 years-----	40,936	15,344	12,190	5,506	7,896	100.0	37.5	29.8	13.5	19.3	
13 years or more-----	31,212	12,734	9,843	4,132	4,503	100.0	40.8	31.5	13.2	14.4	
<u>Geographic region</u>											
Northeast-----	27,066	10,207	7,932	3,512	5,414	100.0	37.7	29.3	13.0	20.0	
North Central-----	31,511	11,918	9,347	4,195	6,052	100.0	37.8	29.7	13.3	19.2	
South-----	34,855	14,259	10,233	4,455	5,907	100.0	40.9	29.4	12.8	16.9	
West-----	20,198	7,905	6,087	2,530	3,676	100.0	39.1	30.1	12.5	18.2	
<u>Place of residence</u>											
SMSA-----	80,409	32,403	24,365	10,069	13,572	100.0	40.3	30.3	12.5	16.9	
Central city-----	36,369	15,196	10,880	4,524	5,768	100.0	41.8	29.9	12.4	15.9	
Not central city-----	44,040	17,207	13,485	5,544	7,803	100.0	39.1	30.6	12.6	17.7	
Outside SMSA-----	33,221	11,887	9,234	4,623	7,477	100.0	35.8	27.8	13.9	22.5	
Nonfarm-----	29,496	10,667	8,332	4,079	6,417	100.0	36.2	28.2	13.8	21.8	
Farm-----	3,725	1,220	902	544	1,060	100.0	32.8	24.2	14.6	28.5	
<u>Health status</u>											
Excellent-----	49,070	17,497	14,915	6,851	9,807	100.0	35.7	30.4	14.0	20.0	
Good-----	44,878	17,107	13,558	5,816	8,398	100.0	38.1	30.2	13.0	18.7	
Fair-----	14,242	6,548	3,864	1,567	2,262	100.0	46.0	27.1	11.0	15.9	
Poor-----	4,847	2,876	1,115	385	472	100.0	59.3	23.0	7.9	9.7	

¹Includes unknown income, education, and health status.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Eye Examination

About 88 percent of the civilian, noninstitutionalized population 3 years and over have had their eyes examined to determine need for glasses at least once during their lives (table 7). Among three broad age groups, the percent of persons with an examination of this kind gradually rose—from 79.7 percent for children aged 3-16 to 88.4 percent for persons 17-44 years old, and finally to 93.7 percent for those 45 years of age and over. The percent of females having an eye examination was slightly higher than it was for males—about 90 compared to about 86 percent. Differences between white persons and persons of all other colors are more pronounced. While 89.1 percent of white persons reported an eye examination, only 77.9 percent of the all other color group ever received this kind of an exam.

Data in table 7 also show that the higher the income or education level of a person, the greater the likelihood of ever having an eye examination. Specifically, 86.2 percent of persons with incomes less than \$10,000 had an eye exam compared to 91.4 percent of those with incomes of \$15,000 or more. By education, these figures increased from 88.0 percent of persons who did not complete high school to almost 95 percent of all persons who completed 1 year or more of college.

Proportionately fewer persons living in the South Region (83.3 percent) reported ever having eye examination than persons in any of the other three geographic regions did. Differences, though small, were also found between persons from SMSA's and those not from SMSA's—88.6 compared to 85.7 percent—and within SMSA's, between those living in central cities and those in surrounding suburban areas—87.7 compared to 89.3 percent.

Data on perceived health status showed no relationship with the proportion of persons having an eye examination.

Among persons with an eye exam, proportionately more children 3-16 years of age received one within the year than in any other age group. Specifically, three out of four children of these ages (75.7 percent) had an exam during this period (table 8). This figure un-

doubtedly includes a large proportion of children who received an eye exam at school. In contrast, the next highest proportion of persons with an exam during the prior 12 months was for the age group 17-24 years (42.3 percent). This figure was somewhat higher than that for all remaining persons (those 25 years of age and over); only slightly over one-third of people these ages (36.4 percent) reported a recent exam to determine the need for glasses.

Although proportionately more women than men have ever received eye exams, the percent having their last exam within the year was slightly higher for men (48.3 compared to 46.1 percent). And whereas proportionately more white persons had an eye examination than persons of all other colors had, the latter group had a greater proportion of persons reporting an exam within the year (51.8 compared to 46.5 percent).

There is a direct relationship between both family income and education and the percent of the population having an eye exam during the 12 months prior to interview. Specifically, the percent of persons having an exam during this period rose among four income groups: less than \$5,000 (41.9 percent), \$5,000-\$9,999 (45.4 percent), \$10,000-\$14,999 (48.2 percent), and \$15,000 or more (50.4 percent). Of persons who were not high school graduates, 35.6 percent had an exam within the year compared to 40.7 percent of persons completing 1 year or more of college. The generally lower percentages found among all three education categories when compared with the other percentages in table 8 occur because the education categories include only data for persons 17 years of age and over. Since children 3-16 years old who were not represented have considerably more recent eye examinations than older persons do, the overall result is lower percentages for the education categories.

Among the geographic regions, the Northeast had the highest proportion of persons with an eye exam within the year (51.2 percent) and the North Central Region had the lowest proportion (44.9 percent). A slightly higher proportion of persons in SMSA's received an eye exam during the year (48.2 percent) than persons not in SMSA's did (44.6 percent).

Persons considered to be in better health were more likely to have had their eyes examined recently than persons whose perceived health was poor. About one-half of all examined persons said to be in excellent health had an exam of this type during the prior year. The percent dropped slightly, to 46.5 percent, for persons considered in good health, followed by a further reduction for persons whose health was considered only fair or poor (39.9 percent).

In table 9, data are further classified according to whether persons have corrective lenses. For this report corrective lenses include both eyeglasses and contact lenses.

A slightly higher proportion of persons with corrective lenses (63.8 percent) had an eye examination in the 2-year period preceding the

interview than other individuals had (61.0 percent). This pattern is apparent for most of the demographic variables included in this report. However, actual percent differences within some categories vary. Among people 45 years of age or older, 56.5 of those with lenses had an eye exam within this time interval—almost twice as many as those without lenses, 32.0 percent.

Family income is one variable for which some of the categories vary from the overall trend. For persons with family incomes of \$7,000 or more, proportionately more persons with lenses than without lenses had an eye exam within the prior 2 years. However, for persons whose family income was less than \$7,000, about the same percent of those with and without lenses had an eye exam during this period.

Table 7. Number and percent of persons 3 years and over having or never having an eye examination according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total ¹	Ever had eye examination	Never had eye examination	Total ¹	Ever had eye examination	Never had eye examination
	Number in thousands			Percent		
All persons 3 years and over ² -----	195,775	171,707	17,690	100.0	87.7	9.0
<u>Age</u>						
3-16 years-----	53,972	43,004	9,430	100.0	79.7	17.5
17-24 years-----	29,063	26,044	1,925	100.0	89.6	6.6
25-44 years-----	49,953	43,804	3,937	100.0	87.7	7.9
45-64 years-----	42,534	39,808	1,727	100.0	93.6	4.1
65 years and over-----	20,253	19,047	671	100.0	94.0	3.3
<u>Sex</u>						
Male-----	94,109	80,650	9,515	100.0	85.7	10.1
Female-----	101,666	91,056	8,175	100.0	89.6	8.0
<u>Color</u>						
White-----	171,444	152,753	13,624	100.0	89.1	7.9
All other-----	24,330	18,954	4,066	100.0	77.9	16.7
<u>Family income</u>						
Less than \$3,000-----	15,719	13,433	1,868	100.0	85.5	11.9
\$3,000-\$4,999-----	17,636	15,305	1,826	100.0	86.8	10.4
\$5,000-\$6,999-----	20,281	17,340	2,372	100.0	85.5	11.7
\$7,000-\$9,999-----	28,169	24,412	2,828	100.0	86.7	10.0
\$10,000-\$14,999-----	48,158	42,578	4,257	100.0	88.4	8.8
\$15,000 or more-----	51,833	47,394	3,062	100.0	91.4	5.9
<u>Education of individual³</u>						
Less than 12 years-----	53,471	47,032	4,759	100.0	88.0	8.9
12 years-----	50,759	46,602	2,398	100.0	91.8	4.7
13 years or more-----	35,953	34,023	953	100.0	94.6	2.7
<u>Geographic region</u>						
Northeast-----	46,512	42,159	3,039	100.0	90.6	6.5
North Central-----	53,511	48,228	3,730	100.0	90.1	7.0
South-----	61,752	51,432	7,928	100.0	83.3	12.8
West-----	33,999	29,888	2,994	100.0	87.9	8.8
<u>Place of residence</u>						
SMSA-----	134,866	119,495	10,814	100.0	88.6	8.0
Central city-----	59,043	51,768	5,236	100.0	87.7	8.9
Not central city-----	75,823	67,728	5,577	100.0	89.3	7.4
Not SMSA-----	60,908	52,211	6,877	100.0	85.7	11.3
Nonfarm-----	53,827	46,158	6,026	100.0	85.8	11.2
Farm-----	7,081	6,054	851	100.0	85.5	12.0
<u>Health status</u>						
Excellent-----	94,024	82,785	8,350	100.0	88.0	8.9
Good-----	75,724	65,938	7,268	100.0	87.1	9.6
Fair-----	19,084	16,947	1,508	100.0	88.8	7.9
Poor-----	5,741	5,068	445	100.0	88.3	7.8

¹ Includes unknown if examined.

² Includes unknown income, education, and health status.

³ Shown only for persons 17 years of age and over.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Table 8. Number and percent distribution of persons 3 years and over having an eye examination by interval since last eye examination, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total with eye examination	Interval since last eye examination				Total with eye examination	Interval since last eye examination			
		Less than 1 year	1-2 years	3-4 years	5 years or more		Less than 1 year	1-2 years	3-4 years	5 years or more
All persons 3 years and over¹	171,707	80,899	53,950	17,903	18,954	100.0	47.1	31.4	10.4	11.0
<u>Age</u>										
3-16 years-----	43,004	32,561	8,555	1,400	488	100.0	75.7	19.9	3.3	1.1
17-24 years-----	26,044	11,005	9,145	3,101	2,793	100.0	42.3	35.1	11.9	10.7
25-44 years-----	43,804	15,145	14,429	5,445	8,785	100.0	34.6	32.9	12.4	20.1
45-64 years-----	39,808	15,342	15,475	5,172	3,820	100.0	38.5	38.9	13.0	9.6
65 years and over-----	19,047	6,846	6,348	2,785	3,068	100.0	35.9	33.3	14.6	16.1
<u>Sex</u>										
Male-----	80,650	38,931	25,121	8,252	8,347	100.0	48.3	31.1	10.2	10.3
Female-----	91,056	41,968	28,829	9,651	10,608	100.0	46.1	31.7	10.6	11.6
<u>Color</u>										
White-----	152,753	71,082	48,329	16,181	17,160	100.0	46.5	31.6	10.6	11.2
All other-----	18,954	9,816	5,621	1,722	1,795	100.0	51.8	29.7	9.1	9.5
<u>Family income</u>										
Less than \$3,000-----	13,433	5,609	4,036	1,775	2,013	100.0	41.8	30.0	13.2	15.0
\$3,000-\$4,999-----	15,305	6,442	4,852	1,890	2,121	100.0	42.1	31.7	12.3	13.9
\$5,000-\$6,999-----	17,340	7,743	5,497	1,983	2,117	100.0	44.7	31.7	11.4	12.2
\$7,000-\$9,999-----	24,412	11,214	7,604	2,687	2,906	100.0	45.9	31.1	11.0	11.9
\$10,000-\$14,999-----	42,578	20,533	13,255	4,283	4,507	100.0	48.2	31.1	10.1	10.6
\$15,000 or more-----	47,394	23,901	15,168	4,207	4,118	100.0	50.4	32.0	8.9	8.7
<u>Education of individual²</u>										
Less than 12 years-----	47,032	16,750	16,124	6,556	7,602	100.0	35.6	34.3	13.9	16.2
12 years-----	46,602	17,305	16,616	5,820	6,861	100.0	37.1	35.7	12.5	14.7
13 years or more-----	34,023	13,843	12,294	4,007	3,879	100.0	40.7	36.1	11.8	11.4
<u>Geographic region</u>										
Northeast-----	42,159	21,577	12,980	3,730	3,872	100.0	51.2	30.8	8.8	9.2
North Central-----	48,228	21,665	16,065	5,194	5,305	100.0	44.9	33.3	10.8	11.0
South-----	51,432	23,683	15,796	5,725	6,228	100.0	46.0	30.7	11.1	12.1
West-----	29,888	13,974	9,110	3,254	3,550	100.0	46.8	30.5	10.9	11.9
<u>Place of residence</u>										
SMSA-----	119,495	57,615	37,600	11,968	12,313	100.0	48.2	31.5	10.0	10.3
Central city-----	51,768	24,723	16,389	5,318	5,337	100.0	47.8	31.7	10.3	10.3
Not central city-----	67,728	32,891	21,210	6,650	6,976	100.0	48.6	31.3	9.8	10.3
Outside SMSA-----	52,211	23,284	16,351	5,935	6,642	100.0	44.6	31.3	11.4	12.7
Nonfarm-----	46,158	20,718	14,462	5,148	5,830	100.0	44.9	31.3	11.2	12.6
Farm-----	6,054	2,567	1,889	786	812	100.0	42.4	31.2	13.0	13.4
<u>Health status</u>										
Excellent-----	82,785	41,005	25,527	7,883	8,370	100.0	49.5	30.8	9.5	10.1
Good-----	65,938	30,640	20,963	6,961	7,374	100.0	46.5	31.8	10.6	11.2
Fair-----	16,947	6,816	5,601	2,204	2,326	100.0	40.2	33.1	13.0	13.7
Poor-----	5,068	1,968	1,586	752	762	100.0	38.8	31.3	14.8	15.0

¹Includes unknown income, education, and health status.

²Shown only for persons 17 years of age and over.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Table 9. Number and percent distribution of persons 3 years and over having an eye examination by corrective lens status and interval since last eye examination, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Interval since last eye examination for persons with corrective lenses			Interval since last eye examination for persons without corrective lenses			Interval since last eye examination for persons with corrective lenses			Interval since last eye examination for persons without corrective lenses		
	Total ¹ with eye examination	Less than 2 years	2 years or more	Total ¹ with eye examination	Less than 2 years	2 years or more	Total ¹ with eye examination	Less than 2 years	2 years or more	Total ¹ with eye examination	Less than 2 years	2 years or more
All persons 3 years and over -----	101,092	64,465	35,302	75,795	46,227	25,458	100.0	63.8	34.9	100.0	61.0	33.6
Age	Number in thousands						Percent distribution					
3-16 years-----	9,382	8,552	779	34,617	29,858	3,748	100.0	91.2	8.3	100.0	86.3	10.8
17-24 years-----	12,632	9,514	3,001	14,369	6,732	6,773	100.0	75.3	23.8	100.0	46.9	47.1
25-44 years-----	22,905	14,687	7,964	22,926	8,396	12,706	100.0	64.1	34.8	100.0	36.6	55.4
45-64 years-----	37,444	22,129	14,777	3,143	1,031	1,796	100.0	59.1	39.5	100.0	32.8	57.1
65 years and over-----	18,729	9,583	8,782	740	211	436	100.0	51.2	46.9	100.0	28.5	58.9
Sex												
Male-----	43,164	27,672	14,787	40,857	25,259	12,860	100.0	64.1	34.3	100.0	61.8	31.5
Female-----	57,928	36,793	20,516	34,938	20,968	12,598	100.0	63.5	35.4	100.0	60.0	36.1
Color												
White-----	92,114	58,454	32,577	64,743	39,172	22,337	100.0	63.5	35.4	100.0	60.5	34.5
All other-----	8,979	6,011	2,726	11,052	7,055	3,121	100.0	66.9	30.4	100.0	63.8	28.2
Family income												
Less than \$3,000-----	9,249	5,102	4,002	4,549	2,613	1,699	100.0	55.2	43.3	100.0	57.4	37.3
\$3,000-\$4,999-----	10,132	5,699	4,293	5,573	3,307	1,972	100.0	56.2	42.4	100.0	59.3	35.4
\$5,000-\$6,999-----	10,216	6,152	3,957	7,597	4,488	2,713	100.0	60.2	38.7	100.0	59.1	35.7
\$7,000-\$9,999-----	13,669	8,575	4,955	11,526	6,831	4,010	100.0	62.7	36.2	100.0	59.3	34.8
\$10,000-\$14,999-----	23,134	15,285	7,650	20,532	12,641	6,954	100.0	66.1	33.1	100.0	61.6	33.9
\$15,000 or more-----	27,588	19,372	7,965	20,971	13,235	6,765	100.0	70.2	28.9	100.0	63.1	32.3
Education of individual³												
Less than 12 years-----	35,191	19,638	15,065	13,357	5,247	7,016	100.0	55.8	42.8	100.0	39.3	52.5
12 years-----	31,323	19,652	11,257	16,869	6,516	9,092	100.0	62.7	35.9	100.0	38.6	53.9
13 years or more-----	24,373	16,185	7,927	10,530	4,408	5,472	100.0	66.4	32.5	100.0	41.9	52.0
Geographic region												
Northeast-----	25,907	17,323	8,279	17,347	11,467	5,043	100.0	66.9	32.0	100.0	66.1	29.1
North Central-----	29,236	18,401	10,491	20,226	12,143	7,124	100.0	62.9	35.9	100.0	60.0	35.2
South-----	29,018	18,130	10,430	24,391	14,305	8,487	100.0	62.5	35.9	100.0	58.6	34.8
West-----	16,931	10,610	6,103	13,831	8,312	4,804	100.0	62.7	36.0	100.0	60.1	34.7
Place of residence												
MSMA-----	69,995	45,578	23,468	53,225	32,773	17,510	100.0	65.1	33.5	100.0	61.6	32.9
Central city-----	30,617	19,847	10,321	22,779	13,910	7,624	100.0	64.8	33.7	100.0	61.1	33.5
Not central city-----	39,378	25,731	13,147	30,447	18,863	9,885	100.0	65.3	33.4	100.0	62.0	32.5
Outside MSMA-----	31,097	18,887	11,834	22,570	13,454	7,948	100.0	60.7	38.1	100.0	59.6	35.2
Nonfarm-----	27,240	16,654	10,257	20,239	12,098	7,072	100.0	61.1	37.7	100.0	59.8	34.9
Farm-----	3,856	2,233	1,577	2,330	1,356	876	100.0	57.9	40.9	100.0	58.2	37.6

¹Includes unknown interval.

²Includes unknown income and education.

³Shown only for persons 17 years of age and over.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Pap Smear Test

Approximately three-fourths of all adult women (17 years and over) in the civilian, noninstitutionalized population have ever received a pap smear (Papanicolaou test for cervical cancer) (table 10). White women were somewhat more likely to have a pap smear than were other women—76.0 and 69.4 percent, respectively. Among specific age groups, the proportion of women with a pap smear varied appreciably—from a low of 53.7 percent of all women 65 years of age and over to 90.0 percent of women ages 25-44.

The considerably lower proportion of older women (65 and over) who reported never having a pap smear probably results from a number of factors. As this test came into widespread use during the late 1950's, most women now 65 years and over were already past childbearing age, the time when this test, according to some sources, is most frequently given. Another contributing factor may be that more older than younger women failed to report this event during the interview since a greater proportion of the older women had received their last pap smear at least 5 years earlier (21.2 percent compared to 7.2 percent of women ever receiving this test).

Family income has a direct bearing on the likelihood of a woman ever being tested for cervical cancer. The percent of women ever having a pap smear increased with each succeeding income category shown in table 10 up to \$15,000. Figures rose from about 63 percent of women in families with less than \$5,000 annual income to 81.6 percent when income reached \$10,000 or more.

Similarly, females who did not complete high school were less likely to have ever had a pap smear than were females who completed more years of education—65.2 and 82.2 percent, respectively.

The Northeast Region had the lowest percentage of women 17 years of age and over ever receiving a test for cervical cancer (69.8 percent) whereas the West Region had the highest percentage (81.6 percent). A slightly higher proportion of women from SMSA's (76.6 percent) than women living outside of SMSA's (72.2 percent) reported ever having a pap smear.

A positive relationship is found between

perceived state of health and the proportion of adult women ever tested for cancer of the cervix. Among the four health status categories, the percentages ranged from a low of 66.4 percent of women considered in poor health to 77.1 percent of women whose health was considered excellent.

Of the 57 million women having had a pap smear, 61.0 percent reported having this test as recently as during the year preceding the interview (table 11). Among the four age groups, however, variation from this overall figure is considerable. With each succeeding age group, proportionately fewer women reported having a pap smear within the year. Proportionately, about twice as many persons 17-24 years of age had a pap smear within the year as persons 65 years of age and over had. More specifically, whereas over four-fifths (81.6 percent) of the age group 17-24 years were tested for cervical cancer during this period, only 40.9 percent of women comprising the oldest age group had a pap smear this recently.

Although proportionately more white females than other females reported ever having an examination for cervical cancer, white females were not as likely to have had as recent an examination. Among white females, 60.5 percent had a pap smear in the prior year compared to 64.6 percent of other females.

Women with higher family income or education are not only more likely to have ever had a pap smear than women with less income or education, but also they are more likely to have had this test recently. The percent of women reporting a pap smear within the past 12 months increased for three broad income groups, less than \$5,000, \$5,000-\$9,999, and \$10,000 or more—from 53.2 to 59.5 to 64.8 percent. By education level, these figures also rose, from about 51 percent of women who did not finish high school to about 70 percent of all women with 1 year or more of college.

The percent of adult women with a recent pap smear was slightly higher for women from SMSA's (62.5 percent) than for those not from SMSA's (57.3 percent). For perceived health status, a higher proportion of women considered in excellent health (64.3 percent) or good health (60.2 percent) had received a recent test for cervical cancer than had those women whose health was rated as fair or poor (54.4 percent).

Table 10. Number and percent of females 17 years and over having or never having a pap smear according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total ¹	Ever had pap smear	Never had pap smear	Total ¹	Ever had pap smear	Never had pap smear
	Number in thousands			Percent		
All females 17 years and over ² -----	75,161	56,545	15,785	100.0	75.2	21.0
<u>Age</u>						
17-24 years-----	15,062	9,253	5,220	100.0	61.4	34.7
25-44 years-----	25,862	23,270	1,930	100.0	90.0	7.5
45-64 years-----	22,370	17,650	3,834	100.0	78.9	17.1
65 years and over-----	11,867	6,372	4,802	100.0	53.7	40.5
<u>Color</u>						
White-----	66,380	50,451	13,605	100.0	76.0	20.5
All other-----	8,781	6,094	2,181	100.0	69.4	24.8
<u>Family income</u>						
Less than \$3,000-----	8,481	4,925	3,306	100.0	58.1	39.0
\$3,000-\$4,999-----	7,816	5,325	2,198	100.0	68.1	28.1
\$5,000-\$6,999-----	8,220	6,171	1,785	100.0	75.1	21.7
\$7,000-\$9,999-----	10,518	8,302	1,857	100.0	78.9	17.7
\$10,000-\$14,999-----	16,608	13,513	2,582	100.0	81.4	15.5
\$15,000 or more-----	17,982	14,703	2,682	100.0	81.8	14.9
<u>Education of individual</u>						
Less than 12 years-----	28,348	18,496	8,801	100.0	65.2	31.0
12 years-----	29,402	23,933	4,536	100.0	81.4	15.4
13 years or more-----	16,599	13,866	2,248	100.0	83.5	13.5
<u>Geographic region</u>						
Northeast-----	18,372	12,824	4,820	100.0	69.8	26.2
North Central-----	20,311	15,575	3,974	100.0	76.7	19.6
South-----	23,735	17,754	5,080	100.0	74.8	21.4
West-----	12,743	10,393	1,911	100.0	81.6	15.0
<u>Place of residence</u>						
SMSA-----	52,091	39,886	10,174	100.0	76.6	19.5
Central city-----	23,530	17,742	4,831	100.0	75.4	20.5
Not central city-----	28,561	22,144	5,343	100.0	77.5	18.7
Outside SMSA-----	23,070	16,659	5,611	100.0	72.2	24.3
Nonfarm-----	20,537	14,939	4,891	100.0	72.7	23.8
Farm-----	2,534	1,721	719	100.0	67.9	28.4
<u>Health status</u>						
Excellent-----	30,068	23,168	5,919	100.0	77.1	19.7
Good-----	31,630	23,874	6,616	100.0	75.5	20.9
Fair-----	10,068	7,254	2,380	100.0	72.1	23.6
Poor-----	2,969	1,971	786	100.0	66.4	26.5

¹Includes unknown if examined.

²Includes unknown income, education, and health status.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Table 11. Number and percent distribution of females 17 years and over having a pap smear by interval since last pap smear, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total with pap smear	Interval since last pap smear				Total with pap smear	Interval since last pap smear			
		Less than 1 year	1-2 years	3-4 years	5 years or more		Less than 1 year	1-2 years	3-4 years	5 years or more
		Number in thousands					Percent distribution			
All females 17 years and over ¹	56,545	34,475	13,416	3,685	4,969	100.0	61.0	23.7	6.5	8.8
<u>Age</u>										
17-24 years-----	9,253	7,554	1,543	135	*(21)	100.0	81.6	16.7	1.5	*(.2)
25-44 years-----	23,270	15,519	5,513	1,254	985	100.0	66.7	23.7	5.4	4.2
45-64 years-----	17,650	8,796	4,678	1,562	2,614	100.0	49.8	26.5	8.8	14.8
65 years and over-----	6,372	2,606	1,682	734	1,349	100.0	40.9	26.4	11.5	21.2
<u>Color</u>										
White-----	50,451	30,538	11,957	3,330	4,626	100.0	60.5	23.7	6.6	9.2
All other-----	6,094	3,938	1,459	355	342	100.0	64.6	23.9	5.8	5.6
<u>Family income</u>										
Less than \$3,000-----	4,925	2,610	1,183	461	671	100.0	53.0	24.0	9.4	13.6
\$3,000-\$4,999-----	5,325	2,842	1,345	435	703	100.0	53.4	25.3	8.2	13.2
\$5,000-\$6,999-----	6,171	3,605	1,513	448	605	100.0	58.4	24.5	7.3	9.8
\$7,000-\$9,999-----	8,302	5,007	2,027	552	716	100.0	60.3	24.4	6.6	8.6
\$10,000-\$14,999-----	13,513	8,683	3,171	764	895	100.0	64.3	23.5	5.7	6.6
\$15,000 or more-----	14,703	9,594	3,340	769	1,000	100.0	65.3	22.7	5.2	6.8
<u>Education of individual</u>										
Less than 12 years-----	18,496	9,453	4,808	1,711	2,525	100.0	51.1	26.0	9.3	13.7
12 years-----	23,933	15,166	5,716	1,366	1,685	100.0	63.4	23.9	5.7	7.0
13 years or more-----	13,866	9,712	2,829	595	731	100.0	70.0	20.4	4.3	5.3
<u>Geographic region</u>										
Northeast-----	12,824	7,833	3,014	835	1,142	100.0	61.1	23.5	6.5	8.9
North Central-----	15,575	9,211	3,800	1,058	1,507	100.0	59.1	24.4	6.8	9.7
South-----	17,754	10,852	4,206	1,166	1,529	100.0	61.1	23.7	6.6	8.6
West-----	10,393	6,579	2,396	627	790	100.0	63.3	23.1	6.0	7.6
<u>Place of residence</u>										
SMSA-----	39,886	24,936	9,220	2,453	3,276	100.0	62.5	23.1	6.2	8.2
Central city-----	17,742	11,082	4,123	1,080	1,457	100.0	62.5	23.2	6.1	8.2
Not central city-----	22,144	13,854	5,098	1,374	1,819	100.0	62.6	23.0	6.2	8.2
Outside SMSA-----	16,659	9,540	4,196	1,232	1,692	100.0	57.3	25.2	7.4	10.2
Nonfarm-----	14,939	8,669	3,745	1,065	1,460	100.0	58.0	25.1	7.1	9.8
Farm-----	1,721	871	451	167	232	100.0	50.6	26.2	9.7	13.5
<u>Health status</u>										
Excellent-----	23,168	14,894	5,317	1,294	1,663	100.0	64.3	22.9	5.6	7.2
Good-----	23,874	14,384	5,788	1,606	2,098	100.0	60.2	24.2	6.7	8.8
Fair-----	7,254	3,920	1,816	609	909	100.0	54.0	25.0	8.4	12.5
Poor-----	1,971	1,103	437	161	270	100.0	56.0	22.2	8.2	13.7

¹Includes unknown income, education, and health status.

NOTES: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

*() indicates estimate has relative standard error of more than 30 percent. In general, the relative standard error will be less than 30 percent when the population estimate is greater than 35,000.

Breast Examination

The highest proportion of women ever receiving a breast examination by a doctor (88.8 percent) were 25-44 years of age (table 12). In contrast, only about 59 percent of women 65 years of age and over ever received an examination of this type. The proportion of women ever having a breast examination by a doctor was about 9 percent higher for the white population than for the all other color group (77.1 and 70.5 percent, respectively).

As family income increased, there was a gradual but steady rise in the percent of women reporting a breast examination—from 61.9 percent of all adult women with family incomes less than \$3,000 to 82.4 percent of women with family income of \$10,000 or more. There is also a direct relationship between increasing education and the percentage of women ever having a breast examination. Women not completing high school were less likely to ever have a breast examination than those women having completed more years of education, ranging from 66.3 percent of those who never finished high school to 85.5 percent of women with at least 1 year of college.

The West Region had the highest proportion of women ever receiving a breast examination by a doctor (81.5 percent); the lowest proportion was in the Northeast Region (73.9 percent). Proportionately more women 17 years of age and over living in SMSA's ever received a breast exam than similar individuals residing elsewhere did (78.3 and 71.9 percent, respectively).

The likelihood of a woman ever having a breast examination increased with improved perceived health status—from 69.2 percent of persons rated in poor health to 78.4 percent rated in excellent health.

Of the 57 million women ever having a breast examination by a doctor, almost two-thirds (62.9 percent) had one within the year (table 13). The proportion of women with a recent exam decreased as age increased. While over three-fourths (78.8 percent) of the examined women 17-24 years of age had an exam within the prior year, less than one-half (48.2 percent) of the women 65 years of age or older had the examination during this period. Slight

differences between color groups were also evident as proportionately fewer white women had a recent exam than women of all other colors had (62.5 and 66.3 percent, respectively).

As family income increases, so does the percent of women reporting a recent breast examination. Among four broad income categories, the figures rose accordingly—less than \$5,000 (56.1 percent), \$5,000-\$9,999 (61.2 percent), \$10,000-\$14,999 (65.1 percent), and \$15,000 or more (67.4 percent). There is also an increase with higher education in the percentage of women having recent breast examinations. Specifically, about 54 percent of examined women not completing high school had a recent exam, while about 71 percent of those completing 1 year or more of college had one during the year.

The North Central Region had proportionately the fewest women with a recent breast exam (60.2 percent). All other regions had about the same proportion of women with an exam of this type during this period. Proportionately more women from SMSA's (64.4 percent) had a recent exam than women living outside these areas had (59.0 percent).

Data regarding pap smears and breast examinations were also tabulated and analyzed to

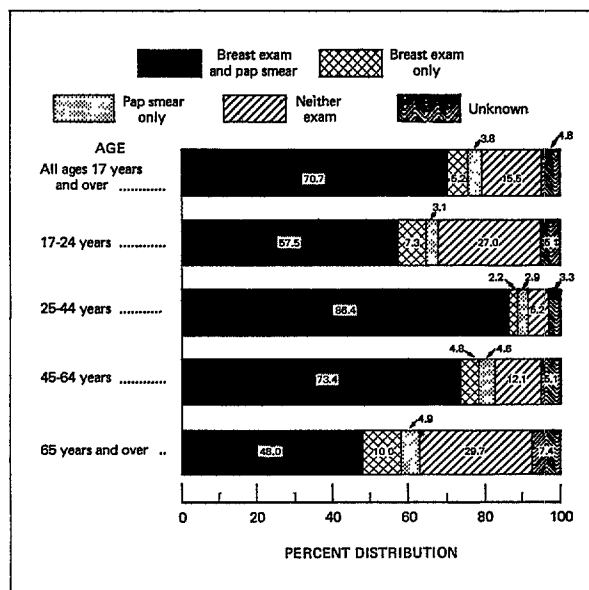


Figure 1. Percent distribution of women 17 years of age and over by breast exam and pap smear status.

Table A. Number and percent distribution of women 17 years and over by whether they had ever had a breast exam and/or pap smear, according to color and age: United States, based on data collected in health interviews in 1973

Color and age	All women 17 years and over in thousands	Total ¹	Breast exam only	Pap smear only	Breast exam and pap smear	Neither exam
<u>All colors</u>		Percent distribution				
All ages 17 years and over----	75,161	100.0	5.2	3.8	70.7	15.5
17-24 years-----	15,062	100.0	7.3	3.1	57.5	27.0
25-44 years-----	25,862	100.0	2.2	2.9	86.4	5.2
45-64 years-----	22,370	100.0	4.8	4.6	73.4	12.1
65 years and over-----	11,867	100.0	10.0	4.9	48.0	29.7
<u>White</u>						
All ages 17 years and over----	66,380	100.0	5.1	3.7	71.6	15.1
17-24 years-----	12,923	100.0	7.6	3.0	56.9	27.8
25-44 years-----	22,520	100.0	1.9	2.8	87.6	4.7
45-64 years-----	20,085	100.0	4.5	4.5	75.2	11.0
65 years and over-----	10,853	100.0	9.8	4.9	49.4	28.8
<u>All other</u>						
All ages 17 years and over----	8,781	100.0	5.9	4.4	64.0	18.6
17-24 years-----	2,140	100.0	5.3	3.7	61.6	21.9
25-44 years-----	3,343	100.0	3.9	3.7	78.8	8.3
45-64 years-----	2,285	100.0	6.8	5.7	58.2	21.3
65 years and over-----	1,014	100.0	11.4	5.7	33.9	39.4

¹Includes unknown examination status.

determine the proportion of women ever having one, both, or neither of these exams. The vast majority of women 17 years of age or older (over 70 percent) have had both a pap smear test and a breast examination by a doctor (figure 1 and table A). The percentage of women having both exams varied appreciably among specific age groups, from a low of 48.0 percent of women 65 years or older to about 86 percent of all

women 25-44 years old. Between color groups, a somewhat higher percent of white women received both exams than did women of all other colors (71.6 compared to 64.0 percent).

Furthermore, it was unlikely for a woman to ever have had only a pap smear test or a breast exam. The proportions of women ever receiving only a pap smear test or a breast examination by a doctor were 3.8 and 5.2 percent, respectively.

Table 12. Number and percent of females 17 years and over having or never having a breast examination according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total ¹	Ever had breast examination	Never had breast examination	Total ¹	Ever had breast examination	Never had breast examination
	Number in thousands			Percent		
All females 17 years and over ² -----	75,161	57,372	14,557	100.0	76.3	19.4
<u>Age</u>						
17-24 years-----	15,062	9,815	4,547	100.0	65.2	30.2
25-44 years-----	25,862	22,958	2,097	100.0	88.8	8.1
45-64 years-----	22,370	17,584	3,765	100.0	78.6	16.8
65 years and over-----	11,867	7,015	4,148	100.0	59.1	35.0
<u>Color</u>						
White-----	66,380	51,178	12,517	100.0	77.1	18.9
All other-----	8,781	6,194	2,040	100.0	70.5	23.2
<u>Family income</u>						
Less than \$3,000-----	8,481	5,253	2,952	100.0	61.9	34.8
\$3,000-\$4,999-----	7,816	5,490	2,009	100.0	70.2	25.7
\$5,000-\$6,999-----	8,220	6,173	1,747	100.0	75.1	21.3
\$7,000-\$9,999-----	10,518	8,340	1,753	100.0	79.3	16.7
\$10,000-\$14,999-----	16,608	13,611	2,399	100.0	82.0	14.4
\$15,000 or more-----	17,982	14,886	2,382	100.0	82.8	13.2
<u>Education of individual</u>						
Less than 12 years-----	28,348	18,796	8,334	100.0	66.3	29.4
12 years-----	29,402	24,115	4,186	100.0	82.0	14.2
13 years or more-----	16,599	14,197	1,855	100.0	85.5	11.2
<u>Geographic region</u>						
Northeast-----	18,372	13,580	3,983	100.0	73.9	21.7
North Central-----	20,311	15,429	4,001	100.0	76.0	19.7
South-----	23,735	17,976	4,715	100.0	75.7	19.9
West-----	12,743	10,387	1,857	100.0	81.5	14.6
<u>Place of residence</u>						
SMSA-----	52,091	40,779	9,051	100.0	78.3	17.4
Central city-----	23,530	18,250	4,250	100.0	77.6	18.1
Not central city-----	28,561	22,529	4,801	100.0	78.9	16.8
Outside SMSA-----	23,071	16,593	5,506	100.0	71.9	23.9
Nonfarm-----	20,537	14,886	4,790	100.0	72.5	23.3
Farm-----	2,534	1,707	716	100.0	67.4	28.3
<u>Health status</u>						
Excellent-----	30,068	23,564	5,396	100.0	78.4	17.9
Good-----	31,630	24,135	6,148	100.0	76.3	19.4
Fair-----	10,068	7,339	2,230	100.0	72.9	22.1
Poor-----	2,969	2,054	706	100.0	69.2	23.8

¹Includes unknown if examined.

²Includes unknown income, education, and health status.

NOTE: The approximate standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Table 13. Number and percent distribution of females 17 years and over having a breast examination by interval since last breast examination, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total with breast examination	Interval since last breast examination				Total with breast examination	Interval since last breast examination			
		Less than 1 year	1-2 years	3-4 years	5 years or more		Less than 1 year	1-2 years	3-4 years	5 years or more
		Number in thousands				Percent distribution				
All females 17 years and over ¹ ----	57,372	36,070	13,275	3,591	4,436	100.0	62.9	23.1	6.3	7.7
<u>Age</u>										
17-24 years-----	9,815	7,739	1,769	252	55	100.0	78.8	18.0	2.6	0.6
25-44 years-----	22,958	15,443	5,264	1,229	1,022	100.0	67.3	22.9	5.4	4.5
45-64 years-----	17,584	9,506	4,530	1,431	2,117	100.0	54.1	25.8	8.1	12.0
65 years and over-----	7,015	3,381	1,713	679	1,242	100.0	48.2	24.4	9.7	17.7
<u>Color</u>										
White-----	51,178	31,961	11,868	3,266	4,084	100.0	62.5	23.2	6.4	8.0
All other-----	6,194	4,109	1,407	325	352	100.0	66.3	22.7	5.2	5.7
<u>Family income</u>										
Less than \$3,000-----	5,253	2,956	1,243	422	633	100.0	56.3	23.7	8.0	12.1
\$3,000-\$4,999-----	5,490	3,073	1,328	433	657	100.0	56.0	24.2	7.9	12.0
\$5,000-\$6,999-----	6,173	3,664	1,478	481	551	100.0	59.4	23.9	7.8	8.9
\$7,000-\$9,999-----	8,340	5,215	1,974	522	629	100.0	62.5	23.7	6.3	7.5
\$10,000-\$14,999-----	13,611	8,854	3,121	794	842	100.0	65.1	22.9	5.8	6.2
\$15,000 or more-----	14,886	10,040	3,333	711	802	100.0	67.4	22.4	4.8	5.4
<u>Education of individual</u>										
Less than 12 years-----	18,796	10,230	4,769	1,581	2,215	100.0	54.4	25.4	8.4	11.8
12 years-----	24,115	15,594	5,594	1,379	1,548	100.0	64.7	23.2	5.7	6.4
13 years or more-----	14,197	10,076	2,845	618	658	100.0	71.0	20.0	4.4	4.6
<u>Geographic region</u>										
Northeast-----	13,580	8,649	3,070	842	1,019	100.0	63.7	22.6	6.2	7.5
North Central-----	15,429	9,289	3,799	1,011	1,331	100.0	60.2	24.6	6.6	8.6
South-----	17,976	11,405	4,071	1,111	1,389	100.0	63.4	22.6	6.2	7.7
West-----	10,387	6,727	2,335	627	698	100.0	64.8	22.5	6.0	6.7
<u>Place of residence</u>										
SMSA-----	40,779	26,281	9,232	2,388	2,878	100.0	64.4	22.6	5.9	7.1
Central city-----	18,250	11,747	4,135	1,035	1,333	100.0	64.4	22.7	5.7	7.3
Not central city-----	22,529	14,534	5,098	1,353	1,545	100.0	64.5	22.6	6.0	6.9
Outside SMSA-----	16,593	9,788	4,043	1,203	1,559	100.0	59.0	24.4	7.3	9.4
Nonfarm-----	14,886	8,883	3,607	1,046	1,349	100.0	59.7	24.2	7.0	9.1
Farm-----	1,707	905	436	156	210	100.0	53.0	25.5	9.1	12.3
<u>Health status</u>										
Excellent-----	23,564	15,278	5,370	1,347	1,569	100.0	64.8	22.8	5.7	6.7
Good-----	24,135	14,953	5,742	1,534	1,906	100.0	62.0	23.8	6.4	7.9
Fair-----	7,339	4,383	1,662	543	751	100.0	59.7	22.6	7.4	10.2
Poor-----	2,054	1,269	438	153	194	100.0	61.8	21.3	7.4	9.4

¹Includes unknown income, education, and health status.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Routine Physical Examination

Of the approximately 64 million children under 17 years of age in this country during 1973, about 55 million (86.2 percent) have had at least one routine physical examination during their lifetimes (table 14). Proportionately about the same number of boys and girls received physical examinations. By age group, a slightly higher percent of children under 6 years of age (88.6 percent) had had a routine physical than older children (85.1 percent). White children were somewhat more likely ever to have had a physical exam (87.4 percent) than were other children (79.5 percent).

There is a strong relationship between family income and whether or not a child has ever had a routine physical examination. An increase in the percent of children having examinations occurred in each higher family income category—from 73.4 percent when income was less than \$3,000 to 92.2 percent when income reached \$15,000 or more.

The proportion of children ever having a routine physical exam was about 20 percent higher when the head of the family had completed 1 year or more of college than when the family head had not graduated from high school (93.4 and 77.9 percent). The category education of head of family is used in tables 14 and 15 instead of education of individual since in this survey the highest year completed in school is not obtained for persons under 17 years of age.

Proportionately more children from the Northeast Region (92.1 percent) than from the South Region (79.1 percent) received a routine physical exam. SMSA's had a higher proportion of youths with a routine examination (88.4 percent) than other areas had (81.4 percent).

Proportionately more children perceived to be in excellent health (88.8 percent) than other children had ever had a routine physical examination; among children comprising the three remaining health status categories, the percentage differences are within sampling variation.

Of the approximately 55 million children ever having a routine physical exam, about 58

percent had one during the 12 months prior to interview (table 15). By age group, differences between the percent of children with a recent exam are considerable. Whereas about three-fourths of examined children under 6 years of age were given a physical within the year, only about one-half of the school-age population were examined during this period. A slightly higher proportion of boys had a routine exam during the past 12 months (60.5 percent) than did girls (55.6 percent). Between the two color groups shown in table 15, proportionately fewer white children had a recent exam than children of other colors had (57.5 and 61.6 percent).

The percentages of children receiving a recent routine physical examination were similar in all family income categories except the highest, \$15,000 or more. A slightly higher proportion of children from families with incomes of this amount had an examination within the year (62.4 percent).

As education of the head of the family increases, so does the proportion of children having a recent physical exam. For children whose family head was not a high school graduate, 52.4 percent received a checkup during the year. This proportion increased to 66.8 percent when the head of the family had completed 1 year or more of college.

The Northeast Region had proportionately more children with a recent physical exam (66.1 percent) than any other region had. Among the three other regions, the percentages were about the same. The proportion of children with a routine physical was about 21 percent higher for children from SMSA's than for those not living in SMSA's—61.3 percent and 50.7 percent, respectively. Less than one-half of the children in farm areas ever receiving a physical examination were examined during the prior year (44.2 percent).

Proportionately more children whose overall health condition was reported as fair or poor received a routine physical exam during the year than did children reported in good or excellent health (66.4 compared to 57.7 percent).

Table 14. Number and percent of persons under 17 years having or never having a routine physical examination according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total ¹	Ever had	Never had	Total ¹	Ever had	Never had	
		routine physical examination	routine physical examination		routine physical examination	routine physical examination	
		Number in thousands			Percent		
All persons under 17 years ² -----	63,997	55,168	6,265	100.0	86.2	9.8	
<u>Age</u>							
Under 6 years-----	20,391	18,057	1,753	100.0	88.6	8.6	
6-16 years-----	43,605	37,110	4,512	100.0	85.1	10.3	
<u>Sex</u>							
Male-----	32,599	28,209	3,145	100.0	86.5	9.6	
Female-----	31,397	26,959	3,120	100.0	85.9	9.9	
<u>Color</u>							
White-----	54,010	47,227	4,791	100.0	87.4	8.9	
All other-----	9,987	7,941	1,474	100.0	79.5	14.8	
<u>Family income</u>							
Less than \$3,000-----	3,396	2,492	691	100.0	73.4	20.3	
\$3,000-\$4,999-----	4,958	3,864	908	100.0	77.9	18.3	
\$5,000-\$6,999-----	6,461	5,237	991	100.0	81.1	15.3	
\$7,000-\$9,999-----	9,850	8,389	1,013	100.0	85.2	10.3	
\$10,000-\$14,999-----	17,795	15,940	1,266	100.0	89.6	7.1	
\$15,000 or more-----	16,861	15,546	750	100.0	92.2	4.4	
<u>Education of head of family</u>							
Less than 12 years-----	23,278	18,141	3,920	100.0	77.9	16.8	
12 years-----	22,596	20,277	1,553	100.0	89.7	6.9	
13 years or more-----	17,479	16,324	687	100.0	93.4	3.9	
<u>Geographic region</u>							
Northeast-----	14,565	13,414	732	100.0	92.1	5.0	
North Central-----	17,674	15,885	1,104	100.0	89.9	6.2	
South-----	20,649	16,332	3,229	100.0	79.1	15.6	
West-----	11,108	9,537	1,199	100.0	85.9	10.8	
<u>Place of residence</u>							
SMSA-----	43,576	38,539	3,405	100.0	88.4	7.8	
Central city-----	18,373	15,987	1,626	100.0	87.0	8.8	
Not central city-----	25,203	22,552	1,779	100.0	89.5	7.1	
Outside SMSA-----	20,420	16,629	2,860	100.0	81.4	14.0	
Nonfarm-----	18,234	14,893	2,518	100.0	81.7	13.8	
Farm-----	2,187	1,736	342	100.0	79.4	15.6	
<u>Health status</u>							
Excellent-----	38,112	33,855	2,888	100.0	88.8	7.6	
Good-----	22,738	18,741	2,957	100.0	82.4	13.0	
Fair-----	2,397	1,958	330	100.0	81.7	13.8	
Poor-----	269	216	36	100.0	80.3	13.4	

¹Includes unknown if examined.

²Includes unknown income, education, and health status.

NOTE: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

Table 15. Number and percent distribution of persons under 17 years having a routine physical examination by interval since last routine physical examination, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix III]

Characteristic	Total with routine physical examination	Interval since last routine physical examination				Total with routine physical examination	Interval since last routine physical examination			
		Less than 1 year	1-2 years	3-4 years	5 years or more		Less than 1 year	1-2 years	3-4 years	5 years or more
	Number in thousands					Percent distribution				
All persons under 17 years ¹ ----	55,168	32,053	14,609	4,415	4,091	100.0	58.1	26.5	8.0	7.4
<u>Age</u>										
Under 6 years-----	18,057	13,728	3,644	646	39	100.0	76.0	20.2	3.6	0.2
6-16 years-----	37,110	18,325	10,965	3,769	4,052	100.0	49.4	29.5	10.2	10.9
<u>Sex</u>										
Male-----	28,209	17,059	7,228	2,105	1,817	100.0	60.5	25.6	7.5	6.4
Female-----	26,959	14,994	7,381	2,309	2,274	100.0	55.6	27.4	8.6	8.4
<u>Color</u>										
White-----	47,227	27,161	12,520	3,904	3,642	100.0	57.5	26.5	8.3	7.7
All other-----	7,941	4,892	2,089	511	449	100.0	61.6	26.3	6.4	5.7
<u>Family income</u>										
Less than \$3,000-----	2,492	1,438	613	234	207	100.0	57.7	24.6	9.4	8.3
\$3,000-\$4,999-----	3,864	2,252	1,018	284	310	100.0	58.3	26.3	7.3	8.0
\$5,000-\$6,999-----	5,237	2,798	1,572	443	423	100.0	53.4	30.0	8.5	8.1
\$7,000-\$9,999-----	8,389	4,603	2,450	689	647	100.0	54.9	29.2	8.2	7.7
\$10,000-\$14,999-----	15,940	9,023	4,321	1,391	1,206	100.0	56.6	27.1	8.7	7.6
\$15,000 or more-----	15,546	9,708	3,711	1,101	1,026	100.0	62.4	23.9	7.1	6.6
<u>Education of head of family</u>										
Less than 12 years-----	18,141	9,500	5,158	1,751	1,731	100.0	52.4	28.4	9.7	9.5
12 years-----	20,277	11,380	5,731	1,629	1,537	100.0	56.1	28.3	8.0	7.6
13 years or more-----	16,324	10,912	3,619	1,009	784	100.0	66.8	22.2	6.2	4.8
<u>Geographic region</u>										
Northeast-----	13,414	8,867	2,970	817	760	100.0	66.1	22.1	6.1	5.7
North Central-----	15,885	8,821	4,379	1,462	1,223	100.0	55.5	27.6	9.2	7.7
South-----	16,332	9,086	4,598	1,358	1,290	100.0	55.6	28.2	8.3	7.9
West-----	9,537	5,279	2,662	778	818	100.0	55.4	27.9	8.2	8.6
<u>Place of residence</u>										
SMSA-----	38,539	23,617	9,906	2,668	2,349	100.0	61.3	25.7	6.9	6.1
Central city-----	15,987	9,885	4,156	1,022	924	100.0	61.8	26.0	6.4	5.8
Not central city-----	22,552	13,732	5,750	1,645	1,425	100.0	60.9	25.5	7.3	6.3
Outside SMSA-----	16,629	8,436	4,703	1,747	1,742	100.0	50.7	28.3	10.5	10.5
Nonfarm-----	14,893	7,668	4,257	1,513	1,454	100.0	51.5	28.6	10.2	9.8
Farm-----	1,736	768	446	234	288	100.0	44.2	25.7	13.5	16.6
<u>Health status</u>										
Excellent-----	33,855	19,909	8,803	2,670	2,473	100.0	58.8	26.0	7.9	7.3
Good-----	18,741	10,458	5,213	1,588	1,482	100.0	55.8	27.8	8.5	7.9
Fair-----	1,958	1,286	456	108	107	100.0	65.7	23.3	5.5	5.5
Poor-----	216	157	36	*(15)	*(8)	100.0	72.7	16.7	*(6.9)	*(3.7)

¹Includes unknown income, education, and health status.

NOTES: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the relative standard errors of the percents shown in this table are found on page 44.

*() indicates estimate has a relative standard error of more than 30 percent. In general, the relative standard error will be less than 30 percent when the population estimate is greater than 35,000.

Pregnancy Care

The final section of this report contains information on prenatal and postnatal medical care received by women 17-44 years of age for each reported live birth occurring in the 12-month period prior to interview. The pregnancy items presented in the remaining tables (tables 16-19) are: the month of pregnancy in which a doctor was first seen, the average number of prenatal visits, whether a doctor recommended confinement to bed for 2 weeks or more during the pregnancy, and whether a postnatal checkup was received.

Although this information was collected for all reported terminated pregnancies, including both full-term and premature births, miscarriages, still births, and abortions, only data for live births have been included in this report. Furthermore, data for full-term and premature births have been combined since premature births did not constitute a sufficiently large group to present separately. Data pertaining to all other pregnancy outcomes have been excluded either because they were poorly reported in the interview or because they constituted too small a group to provide reliable estimates when further cross-classified by relevant demographic and health variables.

During the development of the pregnancy section of the 1973 Health Interview Survey questionnaire, concern was expressed about the feasibility of collecting accurate and complete information on this possibly sensitive topic using the standard interviewing and respondent rule procedures then utilized by the survey. Unwanted pregnancies and pregnancies occurring out of wedlock were the two main types of pregnancies about which underreporting was anticipated. In fact, final results revealed gross undercounts of pregnancies ending in induced abortions. Live births were considerably better reported. However, here too, underreporting was substantial.

In table B estimates of live births based on Health Interview Survey data are compared with natality statistics from the Division of Vital Statistics. Overall, about 90 percent of all live births which occurred between 1972 and 1973 were reflected in the estimates produced by the

Health Interview Survey. However, the amount of variation from this figure differs substantially among specific population groups.

By age group, for example, live births were most poorly reported for women 17-19 years old. Only about three out of four live births to teenagers 17-19 years old were reported in the Health Interview Survey. The proportion of reported live births increased for each succeeding age group. In fact, for women 30 years of age and over, Health Interview Survey estimates of live births actually exceeded natality figures. No apparent explanation can be provided for this phenomenon. By color status, live births were better reported for white women (91.0 percent of Division of Vital Statistics natality figures) than for women of all other colors (83.7 percent of Division of Vital Statistics natality figures).

Since the greatest underreporting occurred for young mothers and for women of all colors other than white and it is among these two groups that a proportionately higher number of illegitimate births occurs, live birth estimates are displayed by legitimacy status to show what effect this variable may have had on reporting. For this report, "legitimate" births are defined as births occurring to ever-married women. In general, Health Interview Survey estimates of live births are closer to natality statistics when data are limited to ever-married women. About 94 percent of legitimate live births were reported in the household interviews (compared to about 90 percent of all live births). Furthermore, while only about 84 percent of all live births to women comprising the "all other" color group were reported in the Health Interview Survey, this percentage increased to about 95 percent when only legitimate live births were included. Other comparisons among specific age and color groups also showed legitimate births to be generally better reported.

Consequently, in this report data on prenatal and postnatal medical care received for live births are shown by legitimacy status. The following discussion, however, is limited to data pertaining to legitimate births since differences in prenatal and postnatal medical care patterns among specific population groups for legitimate births are less likely to reflect the effects of the

Table B. Average annual number and ratio of all live births, legitimate births, and illegitimate births from the Division of Vital Statistics and the Health Interview Survey, by color and age: United States, 1972-73

Color and age	All live births			Legitimate births			Illegitimate births		
	Average annual number of births for 1972-73		Ratio of HIS number to DVS number	Average annual number of births for 1972-73		Ratio of HIS number to DVS number	Average annual number of births for 1972-73		Ratio of HIS number to DVS number
	Division of Vital Statistics	Health Interview Survey		Division of Vital Statistics	Health Interview Survey		Division of Vital Statistics	Health Interview Survey	
<u>All colors</u>	Number in thousands		Percent	Number in thousands		Percent	Number in thousands		Percent
All ages 17-44 years-----	3,072	2,754	89.6	2,739	2,567	93.7	333	187	56.2
17-19 years-----	499	370	74.1	357	278	77.9	142	92	64.8
20-24 years-----	1,138	957	84.1	1,018	890	87.4	119	67	56.3
25-29 years ¹ -----	894	859	96.1	852	843	98.9	72	*(28)	*(38.9)
30-34 years-----	372	379	101.9	354	372	105.1	---	---	---
35-44 years-----	168	189	112.5	157	183	116.6	---	---	---
<u>White</u>	Number in thousands		Percent	Number in thousands		Percent	Number in thousands		Percent
All ages 17-44 years-----	2,531	2,302	91.0	2,395	2,241	93.6	136	61	44.9
17-19 years-----	364	276	75.8	306	249	81.4	58	*(27)	*(46.6)
20-24 years-----	937	784	83.7	888	760	85.6	49	*(24)	*(49.0)
25-29 years ¹ -----	780	767	98.3	762	761	99.9	30	*(9)	*(30.0)
30-34 years-----	315	324	102.9	307	322	104.9	---	---	---
35-44 years-----	136	150	110.3	132	149	112.9	---	---	---
<u>All other</u>	Number in thousands		Percent	Number in thousands		Percent	Number in thousands		Percent
All ages 17-44 years-----	540	452	83.7	344	326	94.8	197	126	64.0
17-19 years-----	135	94	69.6	51	*(29)	*(56.9)	84	64	76.2
20-24 years-----	201	172	85.6	130	130	100.0	70	43	61.4
25-29 years ¹ -----	115	92	80.0	91	82	90.1	42	*(19)	*(45.2)
30-34 years-----	58	56	96.6	47	50	106.4	---	---	---
35-44 years-----	32	39	121.9	26	35	134.6	---	---	---

¹For illegitimate births, category includes women 25-44 years.

disproportionate underreporting just described. When referring to any of the figures in the following tables, the possible influence of the reporting errors should be considered.

According to data collected by the Health Interview Survey, 99.1 percent of all pregnancies ending in live births to ever-married women received some prenatal medical care (table 17). The proportion of these pregnancies among ever-married women having prenatal medical care was about the same for every population group presented in table 17. Education level is the only variable for which a significant difference is found. Specifically, the percentage of pregnancies with prenatal care was slightly lower for women without a high school diploma than for

the better educated (97.4 compared to 99.8 percent).

Similarly, for specific population groups, few differences are found in the proportion of pregnancies ending in a live birth that have a postnatal checkup. Overall, about 84 percent of all legitimate births were followed by a postnatal checkup. Education was the one variable for which differences did occur. While about 78 percent of live births to women without a high school diploma had a postnatal checkup, the proportion increased to about 86 percent for those with additional schooling.

Some clarification is needed regarding the actual procedure used to determine the proportion of pregnancies ending in live birth that had

a postnatal checkup. During the interview, a question first determined whether or not a postnatal checkup was received. Whenever a respondent reported no postnatal checkup, an additional question established the time interval since the pregnancy ended. Since postnatal checkups routinely occur between 1 and 2 months after delivery, it can be assumed that many of the "recently" completed pregnancies received a postnatal checkup sometime after the interview was conducted. Pregnancies without a postnatal checkup, therefore, were tabulated according to whether they ended within 2 months of the date of interview.

The month in which the first prenatal visit occurs is one means to assess the adequacy of medical care received during pregnancy. According to Health Interview Survey estimates, medical attention was initially received during the first 2 months of pregnancy in over one-half (59.1 percent) of all live births to ever-married women 17-44 years of age (table 18). For about four out of every five pregnancies ending in a live birth (84.2 percent), medical care was obtained during the first trimester.

By age group, a higher proportion of women 20-34 years of age than of younger or older women are seen by a medical doctor in the first 2 months of pregnancy. While about 62 percent of pregnancies ending in live births among ever-married women 20-34 years old were first seen by a doctor during the first 2 months, only about 45 percent of pregnancies for women 17-19 years old and 44 percent of women 35-44 years of age were first seen during this period.

Observed differences between the percentages of live births with medical attention during the first 2 or 3 months of pregnancy among white women and women of all other colors are

not significant. Proportionately fewer completed pregnancies had medical care in the first 3 months when annual family income was less than \$5,000 than when it exceeded that amount (75.8 compared to 86.7 percent). Education also has some effect on when the initial contact is made with a physician. While about 74 percent of all completed pregnancies to ever-married women with less than a high school degree had the first doctor visit during the first 3 months, for those with more years of education this proportion increased to about 89 percent.

The average number of prenatal doctor visits for all pregnancies ending in live births among ever-married women was 11.3. This average did not vary appreciably among any of the population groups shown in table 18.

Table 19 shows data from one final question included in the pregnancy care section of the 1973 Health Interview Survey questionnaire—whether bed rest of 2 weeks or more was recommended by a medical doctor during the pregnancy. This item provides one measure of complications during pregnancy. Bed rest of 2 weeks or more during the pregnancy was recommended by a medical doctor in about 8 percent of all pregnancies ending in a live birth among ever-married women. Because of the way in which this question was asked, however, this figure represents only the percent of completed pregnancies where bed rest was recommended; this figure is not necessarily the same as the percent *actually having* bed rest of 2 weeks or more before the delivery. Observed differences in the percent of pregnancies where bed rest was recommended for the demographic and health variables presented in table 19 are within sampling variation.

Table 16. Total number of live births, percent seen by doctor, and number with prenatal visits by number of months pregnant when doctor first seen, average number of prenatal visits, and percent with postnatal checkup, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Total number of live births in thousands	Percent seen by doctor before delivery	Number of live births with prenatal visits in thousands	Months pregnant when doctor first seen				Average number of prenatal visits per live birth	Received postnatal checkup			
				Total ¹	Less than 3 months	3 months	4 months or more		Total ²	Yes	No	
											Pregnancy ended at less than 2 months	Pregnancy ended at 2 months or more
All live births ³ -----	2,754	98.9	2,725	100.0	57.1	25.5	16.8	11.3	100.0	83.6	10.3	4.5
<u>Age</u>				Percent distribution					Percent distribution			
17-19 years-----	370	98.6	365	100.0	40.8	30.1	27.7	10.7	100.0	81.9	12.4	*(4.6)
20-24 years-----	957	98.4	942	100.0	57.4	26.5	15.1	11.3	100.0	82.4	10.2	5.2
25-29 years-----	859	99.4	854	100.0	63.5	23.4	13.0	11.4	100.0	86.0	9.8	*(3.1)
30-34 years-----	379	99.2	376	100.0	65.2	22.9	11.4	11.7	100.0	83.1	11.1	*(4.0)
35-44 years-----	189	98.9	187	100.0	42.8	25.1	31.6	10.6	100.0	83.1	*(7.9)	*(7.9)
<u>Color</u>				Percent distribution					Percent distribution			
White-----	2,302	99.2	2,284	100.0	59.4	25.4	14.7	11.4	100.0	84.1	10.6	4.0
All other-----	452	97.6	441	100.0	45.1	25.9	27.4	10.7	100.0	81.6	9.3	*(7.1)
<u>Family income</u>				Percent distribution					Percent distribution			
Less than \$5,000-----	519	97.1	504	100.0	47.2	27.0	25.2	10.3	100.0	81.1	10.0	7.5
\$5,000-\$9,999-----	952	99.7	949	100.0	53.8	27.8	17.6	11.3	100.0	85.5	9.5	4.0
\$10,000-\$14,999-----	690	99.7	688	100.0	62.4	25.0	12.2	11.7	100.0	82.2	12.6	*(3.5)
\$15,000 or more-----	432	98.8	427	100.0	71.2	19.7	8.7	11.9	100.0	88.0	8.6	*(2.3)
<u>Education of individual</u>				Percent distribution					Percent distribution			
Less than 12 years---	848	97.1	823	100.0	43.7	28.1	27.2	10.5	100.0	78.9	11.7	8.1
12 years-----	1,288	99.8	1,285	100.0	59.2	27.0	13.2	11.5	100.0	85.3	10.2	3.1
13 years or more-----	603	99.8	602	100.0	71.3	18.8	9.3	11.9	100.0	87.2	9.1	*(2.2)
<u>Geographic region</u>				Percent distribution					Percent distribution			
Northeast-----	629	98.7	621	100.0	60.9	25.6	13.2	11.4	100.0	82.4	10.8	*(4.8)
North Central-----	735	99.7	733	100.0	57.0	24.6	18.1	11.1	100.0	85.7	11.3	*(2.0)
South-----	960	98.5	946	100.0	56.8	25.1	16.9	11.2	100.0	81.5	11.4	6.3
West-----	430	98.6	424	100.0	52.4	27.6	19.3	11.4	100.0	86.7	*(6.3)	*(4.4)
<u>Place of residence</u>				Percent distribution					Percent distribution			
SMSA-----	1,883	98.9	1,863	100.0	58.6	25.4	15.3	11.5	100.0	83.6	10.0	4.7
Central city-----	902	99.0	893	100.0	56.0	24.9	18.5	11.2	100.0	82.7	10.0	6.0
Not central city---	981	98.9	970	100.0	60.9	26.0	12.4	11.7	100.0	84.5	10.1	*(3.5)
Outside SMSA-----	871	99.0	862	100.0	53.8	25.4	20.0	10.8	100.0	83.7	11.0	4.1
<u>Health status</u>				Percent distribution					Percent distribution			
Excellent-----	1,377	98.8	1,361	100.0	61.5	24.0	14.0	11.4	100.0	83.8	11.6	3.3
Good-----	1,079	99.1	1,069	100.0	53.4	28.1	18.1	11.1	100.0	84.2	9.5	5.3
Fair, poor-----	279	98.9	276	100.0	48.6	23.2	25.7	11.0	100.0	81.4	*(7.2)	*(7.5)
<u>Times pregnant</u>				Percent distribution					Percent distribution			
1 time-----	969	99.4	963	100.0	58.7	25.1	15.3	10.9	100.0	86.1	8.6	*(3.5)
2 times or more-----	1,718	98.7	1,696	100.0	56.2	25.9	17.4	11.4	100.0	82.7	11.1	4.9

¹Includes unknown when doctor first seen.

²Includes unknown whether received a postnatal checkup.

³Includes births to women 17-44 years of age.

NOTES: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

* () indicates estimate has a relative standard error of more than 30 percent. In general, the relative standard error will be less than 30 percent when the population estimate is greater than 35,000.

Table 17. Number of legitimate and illegitimate births and percent with prenatal and postnatal medical care by selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Legitimate births						Illegitimate births					
	Total number in thousands	Percent with prenatal care	Received postnatal checkup				Total number in thousands	Percent with prenatal care	Received postnatal checkup			
			Total ¹	Yes	No				Total ¹	Yes	No	
					Pregnancy ended at less than 2 months	Pregnancy ended at 2 months or more					Pregnancy ended at less than 2 months	Pregnancy ended at 2 months or more
All live births ² ----	2,567	99.1	100.0	83.5	10.5	4.4	187	97.3	100.0	85.0	*(8.0)	*(5.3)
Age												
17-19 years-----	278	99.6	100.0	81.3	12.6	*(5.0)	92	96.7	100.0	83.7	*(13.0)	*(3.3)
20-24 years-----	890	98.5	100.0	82.4	10.7	5.1	67	97.0	100.0	83.6	*(6.0)	*(7.5)
25-29 years-----	843	99.5	100.0	86.0	10.0	*(3.1)	*(16)	*(100.0)	100.0	*(93.8)	*(-)	*(6.3)
30-34 years-----	372	99.2	100.0	82.8	11.3	*(4.0)	*(7)	*(100.0)	100.0	*(100.0)	*(-)	*(-)
35-44 years-----	183	99.5	100.0	83.1	*(8.2)	*(8.2)	*(6)	*(100.0)	100.0	*(100.0)	*(-)	*(-)
Color												
White-----	2,241	99.3	100.0	84.0	10.7	4.0	61	96.7	100.0	85.2	*(6.6)	*(4.9)
All other-----	326	97.2	100.0	80.1	*(9.5)	*(7.7)	126	97.6	100.0	85.7	*(8.7)	*(5.6)
Family income												
Less than \$5,000--	410	97.6	100.0	81.5	9.8	*(7.3)	109	95.4	100.0	79.8	*(10.1)	*(8.3)
\$5,000-\$9,999----	917	99.7	100.0	85.2	9.6	4.1	35	100.0	100.0	*(94.3)	*(5.7)	*(-)
\$10,000-\$14,999--	677	99.9	100.0	82.3	12.9	*(3.2)	*(12)	*(100.0)	100.0	*(91.7)	*(-)	*(16.7)
\$15,000 or more---	417	98.8	100.0	88.0	8.4	*(2.4)	*(15)	*(100.0)	100.0	*(86.7)	*(13.3)	*(-)
Education of individual												
Less than 12 years-----	737	97.4	100.0	78.3	12.1	8.4	110	96.4	100.0	83.6	*(8.2)	*(6.4)
12 years-----	1,227	99.8	100.0	85.1	10.3	3.3	61	100.0	100.0	90.2	*(9.8)	*(-)
13 years or more--	591	99.8	100.0	87.3	9.3	*(2.0)	*(12)	*(100.0)	100.0	*(83.3)	*(-)	*(8.3)
Geographic region												
Northeast-----	586	99.0	100.0	82.8	10.6	*(4.4)	43	95.3	100.0	*(76.7)	*(11.6)	*(11.6)
North Central-----	681	100.0	100.0	85.0	12.2	*(2.1)	54	96.3	100.0	94.4	*(-)	*(1.9)
South-----	895	98.4	100.0	81.2	11.3	6.5	65	100.0	100.0	84.6	*(12.3)	*(3.1)
West-----	406	98.5	100.0	86.9	*(5.9)	*(4.4)	*(24)	*(100.0)	100.0	*(83.3)	*(8.3)	*(8.3)
Place of residence												
SMSA-----	1,747	99.1	100.0	83.5	10.2	4.6	136	96.3	100.0	85.3	*(7.4)	*(6.6)
Central city-----	802	99.3	100.0	81.7	10.7	6.2	100	97.0	100.0	91.0	*(4.0)	*(4.0)
Not central city-----	945	99.0	100.0	85.1	9.9	*(3.2)	36	97.2	100.0	*(69.4)	*(16.7)	*(11.1)
Outside SMSA-----	820	98.9	100.0	83.5	11.1	*(4.1)	51	100.0	100.0	84.3	*(11.8)	*(3.9)
Health status												
Excellent-----	1,309	98.9	100.0	84.0	11.5	3.1	68	97.1	100.0	80.9	*(14.7)	*(4.4)
Good-----	986	99.1	100.0	83.7	9.7	5.5	93	97.8	100.0	89.2	*(6.5)	*(3.2)
Fair, poor-----	254	98.8	100.0	80.7	*(7.9)	*(6.7)	*(25)	100.0	100.0	*(84.0)	*(-)	*(16.0)
Times pregnant												
1 time-----	856	99.5	100.0	85.7	8.5	*(3.6)	113	98.2	100.0	88.5	*(8.8)	*(2.7)
2 times or more---	1,654	98.7	100.0	82.9	11.2	4.7	64	98.4	100.0	78.1	*(7.8)	*(10.9)

¹Includes unknown whether received a postnatal checkup.

²Includes births to women 17-44 years of age.

NOTES: The approximate relative standard errors of the estimates shown in this table are found on page 42 and the approximate relative standard errors of the percents shown in this table are found on page 44.

*() indicates estimate has a relative standard error of more than 30 percent. In general, the relative standard error will be less than 30 percent when the population estimate is greater than 35,000.

Table 18. Number, percent distribution of legitimate and illegitimate births with prenatal doctor visits by number of months pregnant when doctor first seen, and average number of prenatal visits for legitimate and illegitimate births, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	Legitimate births					Illegitimate births					Average number of prenatal visits			
	Number with prenatal visits in thousands	Total ¹ with visits	Months pregnant when doctor first seen			Number with prenatal visits in thousands	Total ¹ with visits	Months pregnant when doctor first seen						
			Less than 3 months	3 months	4 months or more			Less than 3 months	3 months	4 months or more	Legitimate births	Illegitimate births		
All live births ² -----	2,543	100.0	59.1	25.1	15.2	182	100.0	28.6	29.7	38.5	11.3	10.3		
		Percent distribution						Percent distribution						
<u>Age</u>														
17-19 years-----	277	100.0	45.1	30.7	23.5	89	100.0	*(27.0)	*(28.1)	40.4	10.5	11.1		
20-24 years-----	877	100.0	59.5	25.9	13.7	65	100.0	*(27.7)	*(35.4)	*(33.8)	11.4	9.7		
25-29 years-----	839	100.0	63.8	23.5	12.5	*(16)	100.0	*(37.5)	*(18.8)	*(43.8)	11.5	*(9.8)		
30-34 years-----	369	100.0	65.3	22.2	11.7	*(7)	100.0	*(57.1)	*(42.9)	*(-)	11.8	*(10.6)		
35-44 years-----	182	100.0	44.0	25.8	29.1	*(6)	100.0	*(-)	*(-)	*(100.0)	10.8	*(5.0)		
<u>Color</u>														
White-----	2,225	100.0	60.5	24.9	14.2	59	100.0	*(18.6)	*(42.4)	*(35.6)	11.4	10.7		
All other-----	317	100.0	49.5	26.8	22.7	123	100.0	34.1	*(23.6)	39.8	10.9	10.1		
<u>Family income</u>														
Less than \$5,000-----	400	100.0	49.3	26.5	23.8	104	100.0	39.4	*(28.8)	*(31.7)	10.3	9.9		
\$5,000-\$9,999-----	914	100.0	55.6	27.7	16.2	35	100.0	*(8.6)	*(31.4)	*(54.3)	11.3	11.9		
\$10,000-\$14,999-----	676	100.0	63.5	24.7	11.4	*(12)	100.0	*(-)	*(41.7)	*(58.3)	11.8	*(10.1)		
\$15,000 or more-----	412	100.0	73.1	18.9	*(7.8)	*(15)	100.0	*(26.7)	*(40.0)	*(40.0)	12.0	*(9.7)		
<u>Education of individual</u>														
Less than 12 years-----	718	100.0	46.2	27.4	25.5	106	100.0	*(26.4)	*(32.1)	38.7	10.4	10.9		
12 years-----	1,224	100.0	60.7	27.0	11.9	61	100.0	*(29.5)	*(27.9)	*(39.3)	11.6	9.5		
13 years or more-----	590	100.0	72.0	18.6	8.8	*(12)	100.0	*(33.3)	*(25.0)	*(33.3)	11.9	*(9.6)		
<u>Geographic region</u>														
Northeast-----	580	100.0	62.1	25.9	12.2	41	100.0	*(46.3)	*(22.0)	*(26.8)	11.4	11.4		
North Central-----	681	100.0	59.5	23.8	16.4	52	100.0	*(25.0)	*(34.6)	*(40.4)	11.2	9.6		
South-----	881	100.0	59.4	25.1	14.5	65	100.0	*(21.5)	*(24.6)	*(49.2)	11.4	9.4		
West-----	400	100.0	53.8	26.5	18.8	*(24)	100.0	*(29.2)	*(45.8)	*(29.2)	11.3	*(12.3)		
<u>Place of residence</u>														
SMSA-----	1,732	100.0	60.5	25.6	13.5	131	100.0	34.4	*(23.7)	39.7	11.6	10.4		
Central city-----	796	100.0	58.7	24.7	16.3	97	100.0	*(34.0)	*(25.8)	36.1	11.3	10.5		
Not central city-----	936	100.0	62.0	26.3	11.0	35	100.0	*(34.3)	*(17.1)	*(48.6)	11.8	*(9.9)		
Outside SMSA-----	811	100.0	56.4	24.2	18.9	51	100.0	*(13.7)	*(45.1)	*(37.3)	10.8	10.1		
<u>Health status</u>														
Excellent-----	1,295	100.0	63.2	23.9	12.6	66	100.0	*(27.3)	*(28.8)	*(40.9)	11.5	10.1		
Good-----	977	100.0	55.3	27.3	17.1	91	100.0	*(33.0)	*(35.2)	*(29.7)	11.1	11.2		
Fair, poor-----	251	100.0	52.2	23.9	21.5	*(25)	100.0	*(16.0)	*(16.0)	*(64.0)	11.4	*(7.6)		
<u>Times pregnant</u>														
1 time-----	852	100.0	62.8	24.3	12.4	111	100.0	*(27.0)	*(30.6)	36.9	11.1	9.6		
2 times or more-----	1,633	100.0	57.1	25.8	16.6	63	100.0	*(31.7)	*(28.6)	*(38.1)	11.5	10.5		

¹Includes unknown when doctor first seen.

²Includes births to women 17-44 years of age.

NOTES: The approximate relative standard errors of the estimates shown in this table are found on pages 42-43 and the approximate relative standard errors of the percents shown in this table are found on page 44.

*() indicates estimate has a relative standard error of more than 30 percent. In general, the relative standard error will be less than 30 percent when the population estimate is greater than 35,000.

Table 19. Percent distribution of all live births, legitimate births, and illegitimate births where doctor was seen before delivery by whether bed rest for 2 weeks or more during pregnancy was advised, according to selected characteristics: United States, based on data collected in health interviews in 1973

[Data are based on household interviews of the civilian, noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Characteristic	All live births			Legitimate births			Illegitimate births		
	Total ¹	Advised to remain in bed during pregnancy		Total ¹	Advised to remain in bed during pregnancy		Total ¹	Advised to remain in bed during pregnancy	
		Yes	No		Yes	No		Yes	No
	Percent distribution			Percent distribution			Percent distribution		
All live births ² --	100.0	8.3	91.5	100.0	8.3	91.5	100.0	*(8.2)	91.8
<u>Age</u>									
17-19 years-----	100.0	*(9.0)	91.0	100.0	*(9.0)	91.0	100.0	*(9.0)	89.9
20-24 years-----	100.0	10.0	89.8	100.0	10.0	89.7	100.0	*(7.7)	90.8
25-29 years-----	100.0	7.1	92.9	100.0	7.2	92.8	100.0	*(6.3)	*(93.8)
30-34 years-----	100.0	*(7.7)	91.8	100.0	*(7.9)	91.6	100.0	*(-)	*(100.0)
35-44 years-----	100.0	*(5.3)	95.2	100.0	*(5.5)	94.5	100.0	*(-)	*(100.0)
<u>Color</u>									
White-----	100.0	8.1	91.7	100.0	8.2	91.6	100.0	*(5.1)	93.2
All other-----	100.0	9.3	90.5	100.0	*(9.1)	90.9	100.0	*(9.8)	90.2
<u>Health status</u>									
Excellent-----	100.0	7.1	92.9	100.0	7.3	92.7	100.0	*(3.0)	97.0
Good-----	100.0	8.3	91.4	100.0	8.3	91.4	100.0	*(8.8)	92.3
Fair, poor-----	100.0	14.9	85.1	100.0	13.9	86.1	100.0	*(24.0)	*(76.0)
<u>Times pregnant</u>									
1 time-----	100.0	6.5	93.3	100.0	6.5	93.4	100.0	*(7.2)	91.9
2 times or more-----	100.0	9.7	90.3	100.0	9.6	90.4	100.0	*(11.1)	88.9

¹Includes unknown whether advised to remain in bed.

²Includes only births to women 17-44 years of age where doctor was seen before delivery.

NOTE: The appropriate relative standard errors of the percents shown in this table are found on page 44.

*() indicates estimate has a relative standard error of more than 30 percent. In general, the relative standard error will be less than 30 percent when the population estimate is greater than 35,000.

APPENDIX I

TECHNICAL NOTES ON METHODS

Background of This Report

This report is one of a series of statistical reports prepared by the National Center for Health Statistics (NCHS). It is based on information collected in a continuing nationwide sample of households in the Health Interview Survey (HIS).

The Health Interview Survey utilizes a questionnaire which obtains information on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, and other health topics. As data relating to each of these various broad topics are tabulated and analyzed, separate reports are issued which cover one or more of the specific topics. The present report is based on data collected in household interviews during 1973.

The population covered by the sample for the Health Interview Survey is the civilian, non-institutionalized population of the United States living at the time of the interview. The sample does not include members of the Armed Forces or U.S. nationals living in foreign countries. It should also be noted that the estimates shown do not represent a complete measure of any given topic during the specified calendar period since data are not collected in the interview for persons who died during the reference period. For many types of statistics collected in the survey, the reference period covers the 2 weeks prior to the interview week. For such a short period, the contribution by decedents to a total inventory of conditions or services should be very small. However, the contribution by decedents during a long reference period (e.g., 1 year) might be sizable, especially for older persons.

Statistical Design of the Health Interview Survey

General plan.—The sampling plan of the survey follows a multistage probability design which permits a continuous sampling of the civilian, noninstitutionalized population of the United States. The sample is designed in such a way that the sample of households interviewed each week is representative of the target population and that weekly samples are additive over time. This feature of the design permits both continuous measurement of characteristics of samples and more detailed analysis of less common characteristics and smaller categories of health-related items. The continuous collection has administrative and operational advantages as well as technical assets since it permits fieldwork to be handled with an experienced, stable staff.

The overall sample was designed so that tabulations can be provided for each of the four major geographic regions and for urban and rural sectors of the United States.

The first stage of the sample design consists of drawing a sample of 376 primary sampling units (PSU's) from approximately 1,900 geographically defined PSU's. A PSU consists of a county, a small group of contiguous counties, or a standard metropolitan statistical area. The PSU's collectively cover the 50 States and the District of Columbia.

With no loss in general understanding, the remaining stages can be combined and treated in this discussion as an ultimate stage. Within PSU's, then, ultimate stage units called segments are defined in such a manner that each segment contains an expected four households. Three general types of segments are used.

Area segments which are defined geographically.

List segments, using 1970 census registers as the frame.

Permit segments, using updated lists of building permits issued in sample PSU's since 1970.

Census address listings were used for all areas of the country where addresses were well defined and could be used to locate housing units. In general the list frame included the larger urban areas of the United States from which about two-thirds of the HIS sample was selected.

The usual HIS sample consists of approximately 12,000 segments containing 51,000 assigned households, of which 9,000 were vacant, demolished, or occupied by persons not in the scope of the survey. The 42,000 eligible occupied households yield a probability sample of about 120,000 persons in 41,000 interviewed households in a year.

Descriptive material on data collection, field procedures, and questionnaire development in the HIS has been published² as well as a detailed description of the sample design³ and a report on the estimation procedure and the method used to calculate sampling errors of estimates derived from the survey.⁴

Collection of data.—Field operations for the survey are performed by the U.S. Bureau of the Census under specifications established by the National Center for Health Statistics. In accordance with these specifications the Bureau of the Census participates in survey planning, selects the sample, and conducts the field interviewing as an agent of NCHS. The data are coded, edited, and tabulated by NCHS.

²National Center for Health Statistics: Health survey procedure: concepts, questionnaire development, and definitions in the Health Interview Survey. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 1-No. 2. Public Health Service. Washington. U.S. Government Printing Office, May 1964.

³U.S. National Health Survey: The statistical design of the health household interview survey. *Health Statistics*. PHS Pub. No. 584-A2. Public Health Service. Washington, D.C., July 1958.

⁴National Center for Health Statistics: Estimation and sampling variance in the Health Interview Survey. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 38. Public Health Service. Washington. U.S. Government Printing Office, June 1970.

Estimating procedures.—Since the design of the HIS is a complex multistage probability sample, it is necessary to use complex procedures in the derivation of estimates. Four basic operations are involved:

1. *Inflation by the reciprocal of the probability of selection.*—The probability of selection is the product of the probabilities of selection from each step of selection in the design (PSU, segment, and household).
2. *Nonresponse adjustment.*—The estimates are inflated by a multiplication factor which has as its numerator the number of sample households in a given segment and as its denominator the number of households interviewed in that segment.
3. *First-stage ratio adjustment.*—Sampling theory indicates that the use of auxiliary information which is highly correlated with the variables being estimated improves the reliability of the estimates. To reduce the variability between PSU's within a region, the estimates are ratio adjusted to the 1970 populations within 12 color-residence classes.
4. *Poststratification by age-sex-color.*—The estimates are ratio adjusted within each of 60 age-sex-color cells to an independent estimate of the population of each cell for the survey period. These independent estimates are prepared by the Bureau of the Census. Both the first-stage and poststratified ratio adjustments take the form of multiplication factors applied to the weight of each elementary unit (person, household, condition, and hospitalization).

The effect of the ratio-estimating process is to make the sample more closely representative of the civilian, noninstitutionalized population by age, sex, color, and residence, which thereby reduces sampling variance.

As noted, each week's sample represents the population living during that week and characteristics of the population. Consolidation of samples over a time period, e.g., a calendar quarter, produces estimates of average characteristics of the U.S. population for the calendar quarter. Similarly, population data for a year are averages of the four quarterly figures.

For prevalence statistics, such as number of persons with speech impairments or number of persons classified by time interval since last physician visit, figures are first calculated for each calendar quarter by averaging estimates for all weeks of interviewing in the quarter. Prevalence data for a year are then obtained by averaging the four quarterly figures.

For other types of statistics—namely those measuring the number of occurrences during a specified time period—such as incidence of acute conditions, number of disability days, or number of visits to a doctor or dentist, a similar computational procedure is used, but the statistics are interpreted differently. For these items, the questionnaire asks for the respondent's experience over the 2 calendar weeks prior to the week of interview. In such instances the estimated quarterly total for the statistic is 6.5 times the average 2-week estimate produced by the 13 successive samples taken during the period. The annual total is the sum of the four quarters. Thus the experience of persons *interviewed during a year*—experience which actually occurred for each person in a 2-calendar-week interval prior to week of interview—is treated as though it measured the total of such experience *during the year*. Such interpretation leads to no significant bias.

General Qualifications

Nonresponse.—Data were adjusted for nonresponse by a procedure which imputes to persons in a household which was not interviewed the characteristics of persons in households in the same segment which were interviewed. The total noninterview rate was about 3.5 percent—1.4 percent was refusal, and the remainder was primarily due to the failure to find an eligible respondent at home after repeated calls.

The interview process.—The statistics presented in this report are based on replies obtained in interviews with persons in the sample households. Each person 19 years of age and over present at the time of interview was interviewed individually. For children and for adults not present in the home at the time of the interview, the information was obtained from a related household member such as a spouse or the mother of a child.

There are limitations to the accuracy of diagnostic and other information collected in household interviews. For diagnostic information, the household respondent can usually pass on to the interviewer only the information the physician has given to the family. For conditions not medically attended, diagnostic information is often no more than a description of symptoms. However, other facts, such as the number of disability days caused by the condition, can be obtained more accurately from household members than from any other source since only the persons concerned are in a position to report this information.

Rounding of numbers.—The original tabulations on which the data in this report are based show all estimates to the nearest whole unit. All consolidations were made from the original tabulations using the estimates to the nearest unit. In the final published tables, the figures are rounded to the nearest thousand, although these are not necessarily accurate to that detail. Devised statistics such as rates and percent distributions are computed after the estimates on which these are based have been rounded to the nearest thousand.

Population figures.—Some of the published tables include population figures for specified categories. Except for certain overall totals by age, sex, and color, which are adjusted to independent estimates, these figures are based on the sample of households in the HIS. These are given primarily to provide denominators for rate computation, and for this purpose are more appropriate for use with the accompanying measures of health characteristics than other population data that may be available. With the exception of the overall totals by age, sex, and color mentioned above, the population figures differ from figures (which are derived from different sources) published in reports of the Bureau of the Census. Official population estimates are presented in Bureau of the Census reports in Series P-20, P-25, and P-60.

Reliability of Estimates

Since the statistics presented in this report are based on a sample, they will differ somewhat from the figures that would have been obtained if a complete census had been taken using the

same schedules, instructions, and interviewing personnel and procedures.

As in any survey, the results are also subject to reporting and processing errors and errors due to nonresponse. To the extent possible, these types of errors were kept to a minimum by methods built into survey procedures. Although it is very difficult to measure the extent of bias in the Health Interview Survey, a number of studies have been conducted to study this problem. The results have been published in several reports.⁵⁻⁹

The standard error is primarily a measure of sampling variability, that is, the variation that occurs by chance because only a sample of the population is surveyed. As calculated for this report, the standard error also reflects part of the variation which arises in the measurement process. However, it does not include systematic biases which might be in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference would

be less than twice the standard error and about 99 out of 100 that it would be less than 2½ times as large.

The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate. For this report, asterisks are shown for any cell with more than a 30-percent relative standard error. Included in this appendix are charts from which the relative standard errors can be determined for estimates shown in the report. In order to derive relative errors which would be applicable to a wide variety of health statistics and which could be prepared at a moderate cost, a number of approximations were required. As a result, the charts provide an estimate of the approximate relative standard error rather than the precise error for any specific aggregate or percentage.

Three classes of statistics for the health survey are identified for purposes of estimating variances.

Narrow range.—This class consists of (1) statistics which estimate a population attribute, e.g., the number of persons in a particular income group, and (2) statistics for which the measure for a single individual during the reference period used in data collection is usually either 0 or 1 or on occasion may take on the value 2 or very rarely 3.

Medium range.—This class consists of other statistics for which the measure for a single individual during the reference period used in data collection will rarely lie outside the range 0 to 5.

Wide range.—This class consists of statistics for which the measure for a single individual during the reference period used in data collection can range from 0 to a number in excess of 5, e.g., the number of days of bed disability.

In addition to classifying variables according to whether they are narrow-, medium-, or wide-range, statistics in the survey are further classified as to whether they are based on a reference period of 2 weeks, 6 months, or 12 months.

General rules for determining relative sampling errors.—The following rules will enable the reader to determine approximate relative stand-

⁵National Center for Health Statistics: Quality control and measurement of nonsampling error in the Health Interview Survey. *Vital and Health Statistics*. Series 2-No. 54. DHEW Pub. No. (HSM) 73-1328. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Mar. 1973.

⁶National Center for Health Statistics: Health interview responses compared with medical records. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 7. Public Health Service. Washington. U.S. Government Printing Office, July 1965.

⁷National Center for Health Statistics: Comparison of hospitalization reporting in three survey procedures. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 8. Public Health Service. Washington. U.S. Government Printing Office, July 1965.

⁸National Center for Health Statistics: Interview data on chronic conditions compared with information derived from medical records. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 23. Public Health Service. Washington. U.S. Government Printing Office, May 1967.

⁹National Center for Health Statistics: The influence of interviewer and respondent psychological and behavioral variables on the reporting in household interviews. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 26. Public Health Service. Washington. U.S. Government Printing Office, Mar. 1968.

ard errors from the charts for estimates presented in this report.

Rule 1. *Estimates of aggregates*: Approximate relative standard errors for estimates of aggregates such as the number of persons with a given characteristic are obtained from appropriate curves on pages 42 and 43. The number of persons in the total U.S. population or in an age-sex-color class of the total population is adjusted to official Bureau of the Census figures and is not subject to sampling error.

Rule 2. *Estimates of percentages in a percent distribution*: Relative standard errors for percentages in a percent distribution of a total are obtained from appropriate curves on page 44. For values which do not fall on one of the curves presented in the chart, visual interpolation will provide a satisfactory approximation.

Rule 3. *Estimates of rates where the numerator is a subclass of the denominator*: This rule applies for prevalence rates or where a unit of the numerator occurs, with few exceptions, only once in the year for any one unit in the denominator. For example, in computing the rate of visual impairments per 1,000 population, the numerator consisting of persons with the impairment is a subclass of the denominator, which includes all persons in the population. Such rates if converted to rates per 100 may be treated as though they were percentages and the relative standard errors obtained from the percentage chart for population estimates. Rates per 1,000, or on any other base, must first be converted to rates per 100; then the percentage chart will provide the relative standard error per 100.

Rule 4. *Estimates of rates where the numerator is not a subclass of the denominator*: This rule applies where a unit of the numerator often occurs more than once for any one unit in the denominator. For example, in the computation of the

number of persons injured per 100 currently employed persons per year, it is possible that a person in the denominator could have sustained more than one of the injuries included in the numerator. Approximate relative standard errors for rates of this kind may be computed as follows:

(a) Where the denominator is the total U.S. population or includes all persons in one or more of the age-sex-color groups of the total population, the relative error of the rate is equivalent to the relative error of the numerator, which can be obtained directly from the appropriate chart.

(b) In other cases the relative standard error of the numerator and of the denominator can be obtained from the appropriate curve. Square each of these relative errors, add the resulting values, and extract the square root of the sum. This procedure will result in an upper bound on the standard error and often will overstate the error.

Rule 5. *Estimates of difference between two statistics (mean, rate, total, etc.)*: The standard error of a difference is approximately the square root of the sum of the squares of each standard error considered separately. A formula for the standard error of a difference,

$$d = X_1 - X_2$$

is

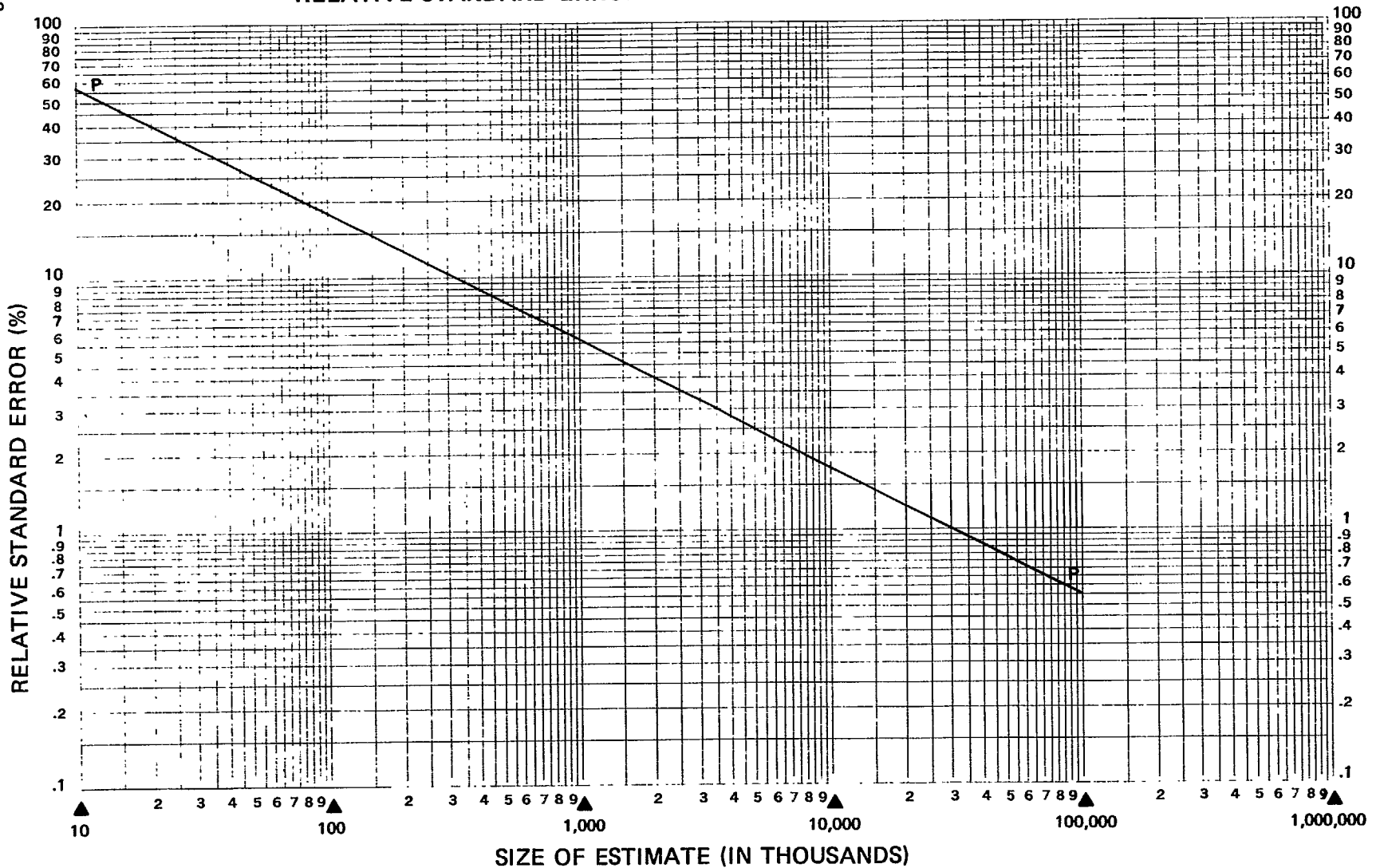
$$\sigma_d = \sqrt{(X_1 V_{x_1})^2 + (X_2 V_{x_2})^2}$$

where X_1 is the estimate for class 1, X_2 is the estimate for class 2, and V_{x_1} and V_{x_2} are the relative errors of X_1 and X_2 respectively. This formula will

represent the actual standard error quite accurately for the difference between separate and uncorrelated characteristics although it is only a rough approximation in most other cases. The rela-

tive standard error of each estimate involved in such a difference can be determined by one of the four rules above, whichever is appropriate.

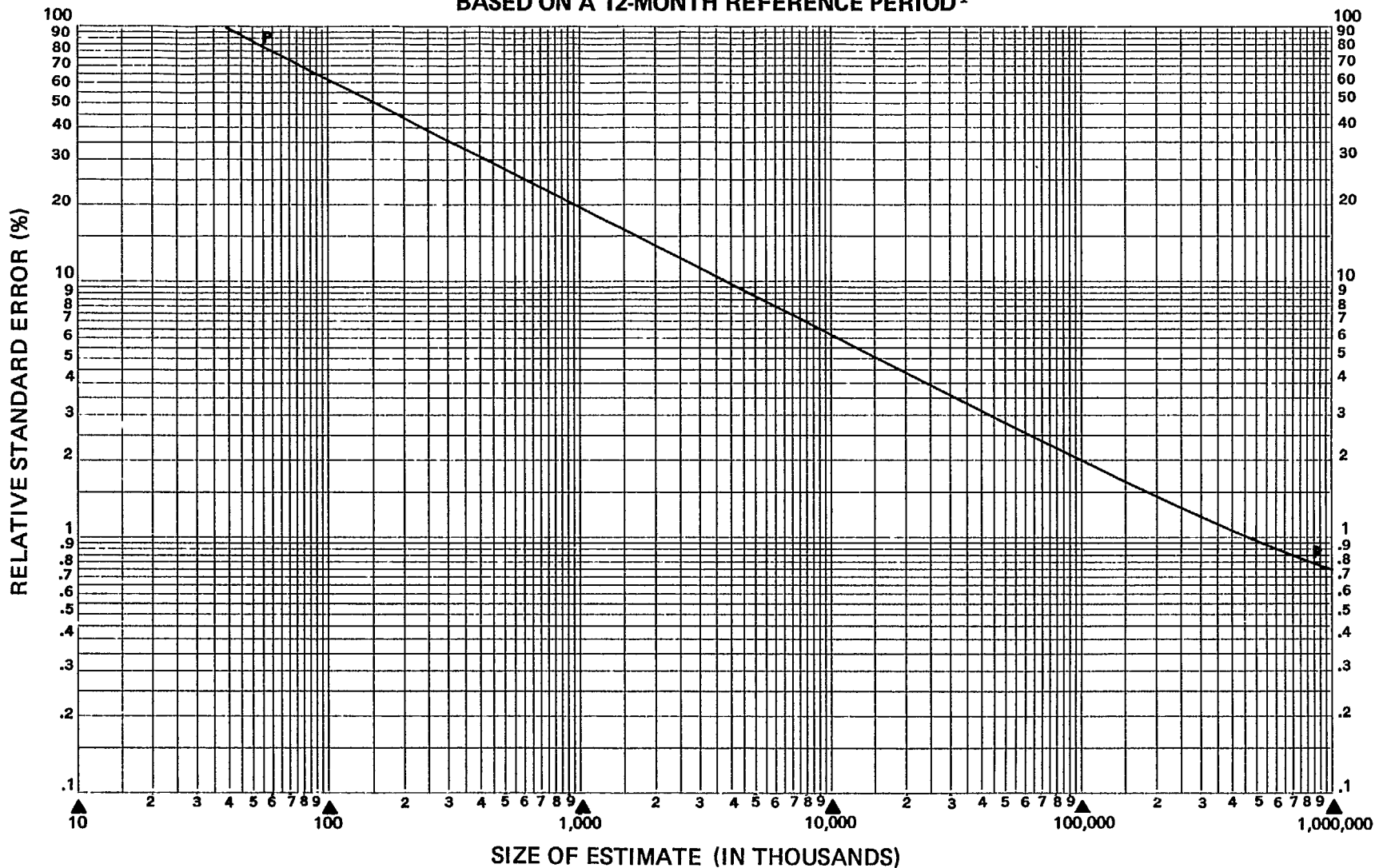
RELATIVE STANDARD ERRORS FOR POPULATION CHARACTERISTICS¹



¹This curve represents estimates of relative standard errors based on 4 quarters of data collection for narrow range estimates of population characteristics or narrow range estimates of aggregates using a 12-month reference period

Example of use of chart: An estimate of 10,000,000 persons with annual family income of \$15,000 or more, or 10,000,000 persons who were hospitalized one or more times in the past year (on scale at bottom of chart) has a relative standard error of 1. percent (read from scale at left side of chart), or a standard error of 170,000 (1.7 percent of 10,000,000).

RELATIVE STANDARDS ERRORS FOR NUMBER OF PHYSICIAN VISITS OR DENTAL VISITS BASED ON A 12-MONTH REFERENCE PERIOD¹

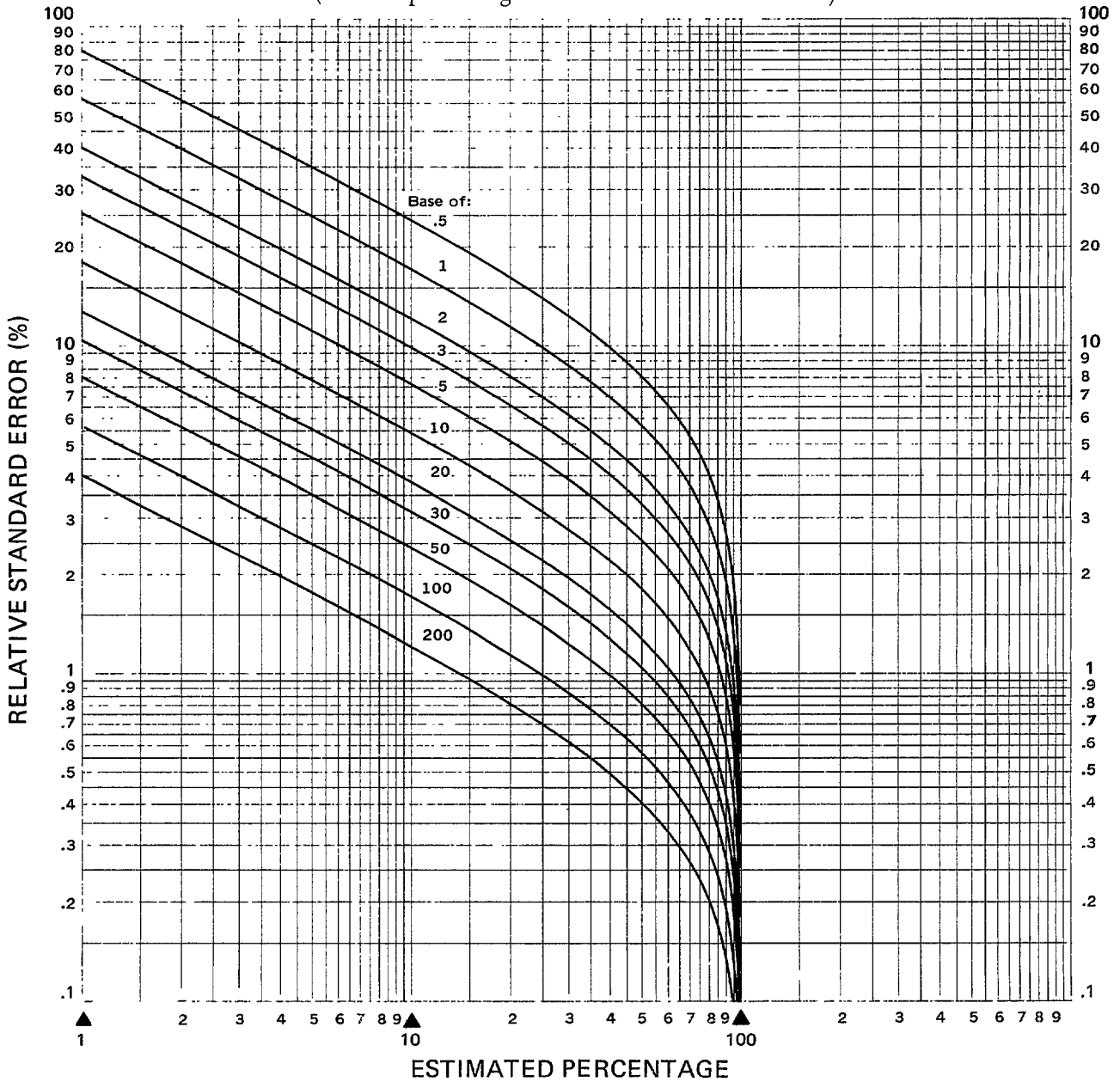


¹The curve is based on 4 quarters of data collection for wide range estimates of aggregates using a 12-month reference period.

Example of use of chart: An estimate of 1,000,000 physician visits in the past year (on scale at bottom of chart) has a relative standard error of 19.5 percent (read from scale at left side of chart), or a standard error of 195,000 (19.5 percent of 1,000,000):

RELATIVE STANDARD ERRORS OF PERCENTAGES OF POPULATION CHARACTERISTICS¹

(Base of percentage shown on curves in millions)



¹These curves represent estimates of relative standard errors of percentages of population characteristics based on 4 quarters of data collection for narrow range estimates.

Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of 10,000,000 has a relative standard error of 3.6 percent (read from the scale at the left side of chart), the point at which the curve for a base of 10,000,000 intersects the vertical line for 20 percent. The standard error in percentage points is equal to 20 percent \times 3.6 percent or 0.72 percentage points.

APPENDIX II

DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

Terms Relating to Selected Medical Procedures Associated With Preventive Care:

Electrocardiogram.—An electrocardiogram or EKG is a test which involves placing wires on the chest and arms.

Glaucoma test.—A glaucoma test is an eye pressure test.

Eye examination.—Includes all eye examinations to see if glasses (or new glasses) are needed. Eye examinations given in connection with driver's licenses and any eye exams given in school for school-age children are also included.

Routine physical examination.—A routine physical examination is defined as a visit to the doctor for the purpose of determining the general state of the person's health. This category includes checkups for specific purposes, such as periodic (yearly) checkups, visits to the well-baby clinic, and examinations at school for athletics and for other related purposes. Not included are visits to a doctor for a checkup or examination for a specific condition or visits solely for the purpose of receiving immunizations.

Terms Relating to Pregnancy Care

Live birth.—Includes full-term (child is born alive and weighs 5½ pounds or more) and premature (child is born alive but weighs less than 5½ pounds).

Miscarriage.—A pregnancy which ends by the spontaneous expulsion of a fetus from the uterus before the woman has been pregnant 20 weeks. Spontaneous abortion is included in this category.

Stillbirth.—A pregnancy which ends in the birth of a dead child after the woman has been pregnant 20 weeks.

Abortion.—The induced expulsion of a fetus from the uterus before the completion of 20 weeks of the pregnancy.

Doctor seen during pregnancy.—Refers to the time preceding the actual time of delivery; not included is when a doctor was first seen during the delivery or afterwards.

Doctor visits during pregnancy.—Includes only visits that were made in connection with the pregnancy; not included are visits made for illnesses not related to the pregnancy or visits at delivery or afterwards.

Bed rest during pregnancy recommended by a doctor.—Refers to the period of time before the pregnancy ended and includes pregnancies which involved complications. Includes only pregnancies in which bed rest of 2 weeks or more was recommended, not necessarily those pregnancies during which bed rest actually occurred. Not included are pregnancies where periods of bed confinement were recommended after the delivery.

Checkup following delivery (postnatal checkup).—Refers to the examination usually made by a medical doctor 1 or 2 months after a delivery to make sure the woman's recovery is satisfactory.

Demographic Terms

Age.—The age recorded for each person is the age at last birthday. Age is recorded in single years and grouped in a variety of distributions depending on the purpose of the table.

Color.—The population is divided into two color groups, “white” and “all other.” “All other” includes Negro, American Indian, Chinese, Japanese, and any other race. Mexican persons are included with “white” unless definitely known to be Indian or of another race.

Income of family or of unrelated individuals.—Each member of a family is classified according to the total income of the family of which he is a member. Within the household all persons related to each other by blood, marriage, or adoption constitute a family. Unrelated individuals are classified according to their own income.

The income recorded is the total of all income received by members of the family (or by an unrelated individual) in the 12-month period preceding the week of interview. Income from all sources is included, e.g., wages, salaries, rents from property, pensions, and help from relatives.

Education.—The categories of education status show the years of school completed. Only years completed in regular schools, where persons are given a formal education, are included. A “regular” school is one which advances a person toward an elementary or high school diploma or a college, university, or professional school degree. Thus education in vocational, trade, or business schools outside the regular school system is not counted in determining the highest grade of school completed.

Education of head of family or of unrelated individuals.—Each member of a family is classified according to the education of the head of the family of which he is a member. Within the household all persons related to each other by blood, marriage, or adoption constitute a family. Unrelated individuals are classified according to their own education.

Education of individual.—Each person aged 17 years or older is classified by education in terms of the highest grade of school completed.

Marital status.—Marital status is recorded only for persons 17 years of age or older. The two marital status categories in this report are as follows:

Ever married.—Includes all persons who are married, separated, widowed, or divorced.

Married.—Includes all married persons not separated from their spouses. Persons with common-law marriage are considered as married.

Separated.—Includes married persons who have a legal separation or who have parted because of other reasons. This does not include persons separated from their spouses because of the circumstances of their employment or service in the Armed Forces; these persons are considered married.

Widowed and divorced.—Includes, respectively, all persons who said they were either widowed or legally divorced.

Never married.—Includes persons who were never married and persons whose only marriage was annulled.

Geographic region.—For the purpose of classifying the population by geographic area, the States are grouped into four regions. These regions, which correspond to those used by the U.S. Bureau of the Census, are shown in figure I.

Place of residence.—The place of residence of a member of the civilian, noninstitutionalized population is classified as inside a standard metropolitan statistical area (SMSA) or outside an SMSA and either farm or nonfarm.

Standard metropolitan statistical areas.—The definitions and titles of SMSA’s are established by the U.S. Office of Management and Budget with the advice of the Federal Committee on Standard Metropolitan Statistical Areas.

The definition of an individual SMSA involves two considerations: first, a city or cities of specified population which constitute the central city and identify the county in which it is located as the central county; second, economic and social relationships with contiguous counties (except in New England) which are metropolitan in character so that the periphery of the specific metropolitan area may be determined. SMSA’s are not limited by State boundaries. In New England SMSA’s consist of towns and cities, rather than counties. The

<i>Region</i>	<i>States Included</i>
Northeast	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania
North Central . .	Michigan, Ohio, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Kansas, Nebraska
South	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Texas, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma
West	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Alaska, Oregon, California, Hawaii

Figure 1.

metropolitan population in this report is based on SMSA's as defined in the 1970 census and does not include any subsequent additions or changes.

Central cities.—Each SMSA must include at least one central city. The complete title of an SMSA

identifies the central city or cities. If only one central city is designated, then it must have 50,000 inhabitants or more. The area title may include, in addition to the largest city, up to two city names on the basis and in the order of the following criteria: (1) the additional city has at least 250,000 inhabitants or (2) the additional city has a population of one-third or more of that of the largest city and a minimum population of 25,000. An exception occurs where two cities have contiguous boundaries and constitute, for economic and social purposes, a single community of at least 50,000, the smaller of which must have a population of at least 15,000.

Farm and nonfarm residence.—The population residing outside SMSA's is subdivided into the farm population, which comprises all non-SMSA residents living on farms, and the nonfarm population, which comprises the remaining outside SMSA population. The farm population includes persons living on places of 10 acres or more from which sales of farm products amounted to \$50 or more during the previous 12 months or on places of less than 10 acres from which sales of farm products amounted to \$250 or more during the preceding 12 months. Other persons living outside an SMSA were classified as non-farm if their household paid rent for the house but their rent did not include any land used for farming.

Sales of farm products refer to the gross receipts from the sale of field crops, vegetables, fruits, nuts, livestock and livestock products (milk, wool, etc.), poultry and poultry products, and nursery and forest products produced on the place and sold at any time during the preceding 12 months.



APPENDIX III

QUESTIONNAIRE ITEMS DEALING WITH SELECTED MEDICAL PROCEDURES AND PREGNANCY CARE

PREVENTIVE CARE	SI	
1. About how long has it been since -- had an electrocardiogram, or EKG, which involves placing wires on the chest and arms?	1.	<input type="checkbox"/> 40+ years (1) <input type="checkbox"/> 17-39 years (3) <input type="checkbox"/> 3-16 years (7) <input type="checkbox"/> Under 3 years (8)
2. About how long has it been since -- had a test for glaucoma - this is sometimes referred to as an eye pressure test?	2.	98 <input type="checkbox"/> Never 00 <input type="checkbox"/> Less than 1 year ____ Years
3. About how long has it been since -- had a chest X-ray?	3.	98 <input type="checkbox"/> Never 00 <input type="checkbox"/> Less than 1 year ____ Years
4a. Does -- have eyeglasses or contact lenses?	4a.	1 Y 2 N
b. About how long has it been since -- had his eyes examined to see if he needed (new) glasses?	b.	98 <input type="checkbox"/> Never 00 <input type="checkbox"/> Less than 1 year ____ Years
Ask only of FEMALES 17+ years of age; otherwise, go to next person. 5. About how long has it been since -- had a Pap smear test for cancer?	5.	98 <input type="checkbox"/> Never 00 <input type="checkbox"/> Less than 1 year ____ Years
6. About how long has it been since -- had a breast examination by a doctor?	6.	98 <input type="checkbox"/> Never 00 <input type="checkbox"/> Less than 1 year ____ Years } (NP)
7a. Does -- have eyeglasses or contact lenses?	7a.	1 Y 2 N
b. About how long has it been since -- had his eyes examined to see if he needed (new) glasses? (Include any eye exams given in school.)	b.	98 <input type="checkbox"/> Never 00 <input type="checkbox"/> Less than 1 year ____ Years
8a. During the past 12 months, was -- taken to a doctor for a ROUTINE physical examination, that is, not for a particular illness but for a general checkup?	8a.	1 Y (9) 2 N
b. About how long has it been since -- was taken to a doctor for a routine physical examination or general checkup?	b.	98 <input type="checkbox"/> Never ____ Years
9. About how old was -- when you FIRST took him to a dentist?	9.	98 <input type="checkbox"/> Never ____ Years old

PREGNANCY

INTERVIEWER CHECK ITEM: No Females 17-44 yrs. old (Next page)
 1+ Females 17-44 yrs. old (I)

1a. During the past 12 months, has anyone in the family been pregnant or had a miscarriage? Y N (Next page)

b. Who is this? Mark "Was pregnant" box in person's column.

c. During the past 12 months, has anyone else in the family been pregnant or had a miscarriage? Y (Reask 1b and c) N

1b. Was pregnant

If "Was pregnant," ask:

2a. Is -- now pregnant? (Not counting --'s current pregnancy) Y N

b. During the past 12 months, how many times has -- been pregnant, including miscarriages? (Not counting --'s current pregnancy) None (NP) Pregnancies

c. How many times has -- EVER been pregnant, including miscarriages? 01 Once (NP) Pregnancies

d. How many of these -- pregnancies resulted in live births? 00 None (NP) Live births (NP)

2a. Y N

b. None (NP) Pregnancies

c. 01 Once (NP) Pregnancies

d. 00 None (NP) Live births (NP)

TABLE P: Complete a line of Table P for each terminated pregnancy reported in Q. 2b. If no terminated pregnancies reported, go to next page.

Person Number (a)	Did --'s (last pregnancy/pregnancy before that) end in a full-term live birth, a premature live birth, a miscarriage, or what? (b)	Did she see a doctor at any time during that pregnancy? (c)	How many months pregnant was -- when she first saw a doctor? (d)	About how many visits did -- make to a doctor BEFORE that pregnancy ended? (e)	Did a doctor ever tell -- to remain in bed for two weeks or more during that pregnancy? (f)
	1 <input type="checkbox"/> Full term 2 <input type="checkbox"/> Premature 3 <input type="checkbox"/> Miscarriage 4 <input type="checkbox"/> Stillbirth 5 <input type="checkbox"/> Abortion 6 <input type="checkbox"/> Other - Specify _____	1 Y 2 N (g)	____Months	____Visits	1 Y 2 N
	1 <input type="checkbox"/> Full term 2 <input type="checkbox"/> Premature 3 <input type="checkbox"/> Miscarriage 4 <input type="checkbox"/> Stillbirth 5 <input type="checkbox"/> Abortion 6 <input type="checkbox"/> Other - Specify _____	1 Y 2 N (g)	____Months	____Visits	1 Y 2 N
	1 <input type="checkbox"/> Full term 2 <input type="checkbox"/> Premature 3 <input type="checkbox"/> Miscarriage 4 <input type="checkbox"/> Stillbirth 5 <input type="checkbox"/> Abortion 6 <input type="checkbox"/> Other - Specify _____	1 Y 2 N (g)	____Months	____Visits	1 Y 2 N
	1 <input type="checkbox"/> Full term 2 <input type="checkbox"/> Premature 3 <input type="checkbox"/> Miscarriage 4 <input type="checkbox"/> Stillbirth 5 <input type="checkbox"/> Abortion 6 <input type="checkbox"/> Other - Specify _____	1 Y 2 N (g)	____Months	____Visits	1 Y 2 N

<input type="checkbox"/> Was pregnant	1b.	<input type="checkbox"/> Was pregnant	<input type="checkbox"/> Was pregnant	1b.	<input type="checkbox"/> Was pregnant	<input type="checkbox"/> Was pregnant
Y N	2a.	Y N	Y N	2a.	Y N	Y N
<input type="checkbox"/> None (NP) ____Pregnancies	b.	<input type="checkbox"/> None (NP) ____Pregnancies	<input type="checkbox"/> None (NP) ____Pregnancies	b.	<input type="checkbox"/> None (NP) ____Pregnancies	<input type="checkbox"/> None (NP) ____Pregnancies
01 <input type="checkbox"/> Once (NP) ____Pregnancies	c.	01 <input type="checkbox"/> Once (NP) ____Pregnancies	01 <input type="checkbox"/> Once (NP) ____Pregnancies	c.	01 <input type="checkbox"/> Once (NP) ____Pregnancies	01 <input type="checkbox"/> Once (NP) ____Pregnancies
00 <input type="checkbox"/> None (NP) ____Live births (NP)	d.	00 <input type="checkbox"/> None (NP) ____Live births (NP)	00 <input type="checkbox"/> None (NP) ____Live births (NP)	d.	00 <input type="checkbox"/> None (NP) ____Live births (NP)	00 <input type="checkbox"/> None (NP) ____Live births (NP)

TABLE P - Continued

How many months pregnant was -- when that pregnancy ended? (g)	Did -- have a check-up a month or two after that pregnancy ended? (h)	How long has it been since that pregnancy ended? (i)	Does -- intend to have a check-up for that pregnancy? (j)	FOOTNOTES
____ Months	1 Y (NP) 2 N	1 <input type="checkbox"/> Less than 2 months 2 <input type="checkbox"/> 2+ months (NP)	1 Y 2 N	
____ Months	1 Y (NP) 2 N	1 <input type="checkbox"/> Less than 2 months 2 <input type="checkbox"/> 2+ months (NP)	1 Y 2 N	
____ Months	1 Y (NP) 2 N	1 <input type="checkbox"/> Less than 2 months 2 <input type="checkbox"/> 2+ months (NP)	1 Y 2 N	
____ Months	1 Y (NP) 2 N	1 <input type="checkbox"/> Less than 2 months 2 <input type="checkbox"/> 2+ months (NP)	1 Y 2 N	

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