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VITAL STATISTICS REPORT

Health Interview Survey-Provisional Data

FROM THE
NATIONAL CENTER FOR HEALTH STATISTICS

Characteristics of Females Ever Having a Pap Smear and Interval Since Last Pap Smear, United States, 1973

During 1973, data were collected in the Health Interview Survey on the most recent examinations obtained by the civilian, noninstitutionalized population to provide early detection of disease. Included among these examinations were electrocardiograms (EKG), glaucoma tests, chest x-rays, eye examinations, routine physicals for children under 17 years of age, and pap smears (Papanicolaou test for cervical cancer). These questions obtained information on the interval since the most recent examination and they were asked only of respondents to whom the examination type was applicable. For example, glaucoma tests and EKG's are usually given to persons 40 years of age and over. This is the first time such data have been collected in the Health Interview Survey. A more detailed report on all types of preventive care services collected in the survey is planned for release within the year. This report presents data on the proportion of females 17 years and over who had ever had a pap smear and the interval since the most recent one by age, family income, education of the individual, and color.

In 1973 approximately three-fourths of all civilian, noninstitutionalized females 17 years and over had had at least one pap smear prior to the interview (table 1). Approximately 61.0 percent of the 57 million females who had ever had a pap smear had the examination during the year preceding the interview (table 2). Less than 10 percent (8.8 percent) of the females with pap smears had had the examination 5 or more years before the interview period. Although a higher proportion of females 25-44 years of age than of other ages had ever had a pap smear (90.0 percent), females in the 17-24 age group were more likely

to have had the examination in the past year (81.6 percent). Proportionately fewer females 65 years and over had ever had a pap smear compared to other age groups and these women were also less likely to have had a recent examination.

There was a direct relationship between family income and the percent of females ever having had a pap smear. As the income level of the females increased so did the percentage of females with pap smear examinations, ranging from 62.9 percent of females in family groups with less than \$5,000 annual income to 81.6 percent of females with incomes of \$10,000 or more. Although there appears to be an increase in the percentage of females with recent pap smears (within the past year) for increased family income, the observed increase may be due to sampling variability.

Education of the individual rather than the education of the head of the family is more indicative of awareness of the need for preventive examination. Table 3 shows that females who had not completed high school were less likely to have ever had a pap smear than those females who had completed more years of education. Increased education of the individual seems to have had a direct bearing on whether or not the individual had had a recent pap smear. Table 4 shows that for each succeeding level of education, proportionately more females had had a pap smear in the past year, ranging from 51.1 percent for those with less than 12 years of education to 70.0 percent for those completing some college.

Table 5 shows data comparing the proportion of white females 17 years and over who had ever had a pap smear with the proportion of other females in the

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same age groups who had had a pap smear. Approximately 76.0 percent of the white female population had had a pap smear compared to 69.4 percent of other females. Although slightly more white females had had this examination for cervical cancer than

had other females, white females were not as likely to have had a recent examination as were other females (table 6). Among white females, 60.5 percent had had a cervix examination in the past year compared to 64.6 percent of other females.

Table 1. Number and percent of females 17 years and over ever having or never having a pap smear, according to family income and age: United States, 1973

Family income and age	Total ¹	Ever had pap smear	Never had pap smear	Total ¹	Ever had pap smear	Never had pap smear
<u>All family incomes²</u>	Number in thousands			Percent		
All females, 17 years and over-	75,161	56,545	15,785	100.0	75.2	21.0
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>Less than \$5,000</u>						
All females, 17 years and over-	16,297	10,250	5,504	100.0	62.9	33.8
17-24 years-----	3,260	2,118	1,056	100.0	65.0	32.4
25-44 years-----	2,793	2,278	443	100.0	81.6	15.9
45-64 years-----	4,172	2,816	1,242	100.0	67.5	29.8
65 years and over-----	6,072	3,038	2,764	100.0	50.0	45.5
<u>\$5,000-\$9,999</u>						
All females, 17 years and over-	18,739	14,473	3,642	100.0	77.2	19.4
17-24 years-----	4,365	3,128	1,086	100.0	71.7	24.9
25-44 years-----	6,223	5,504	575	100.0	88.4	9.2
45-64 years-----	5,472	4,238	1,043	100.0	77.4	19.1
65 years and over-----	2,679	1,603	937	100.0	59.8	35.0
<u>\$10,000 or more</u>						
All females, 17 years and over-	34,590	28,216	5,265	100.0	81.6	15.2
17-24 years-----	6,565	3,567	2,736	100.0	54.3	41.7
25-44 years-----	15,330	14,289	713	100.0	93.2	4.7
45-64 years-----	10,771	9,211	1,186	100.0	85.5	11.0
65 years and over-----	1,924	1,149	629	100.0	59.7	32.7

¹Includes unknown if examined.

²Includes unknown income.

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Table 2. Number and percent distribution of females 17 years and over having a papsmear by interval since last pap smear, according to family income and age: United States, 1973

Family income and age	Total with pap smear	Interval since last pap smear			
		Less than 1 year	1-2 years	3-4 years	5 years or more
<u>All family incomes¹</u>		Number in thousands			
All females, 17 years and over-----	56,545	34,475	13,416	3,685	4,969
17-24 years-----	9,253	7,554	1,543	135	*
25-44 years-----	23,270	15,519	5,513	1,254	985
45-64 years-----	17,650	8,796	4,678	1,562	2,614
65 years and over-----	6,372	2,606	1,682	734	1,349
<u>Less than \$5,000</u>					
All females, 17 years and over-----	10,250	5,452	2,529	896	1,374
17-24 years-----	2,118	1,703	366	44	*
25-44 years-----	2,278	1,427	579	149	123
45-64 years-----	2,816	1,147	815	299	556
65 years and over-----	3,038	1,176	769	404	690
<u>\$5,000-\$9,999</u>					
All females, 17 years and over-----	14,473	8,612	3,540	1,000	1,321
17-24 years-----	3,128	2,523	558	38	*
25-44 years-----	5,504	3,474	1,410	333	287
45-64 years-----	4,238	1,956	1,130	452	699
65 years and over-----	1,603	658	442	117	326
<u>\$10,000 or more</u>					
All females, 17 years and over-----	28,216	18,276	6,511	1,533	1,896
17-24 years-----	3,567	2,952	563	45	*
25-44 years-----	14,289	9,833	3,250	695	511
45-64 years-----	9,211	4,956	2,383	708	1,163
65 years and over-----	1,149	535	315	85	214
<u>All family incomes¹</u>		Percent distribution			
All females, 17 years and over-----	100.0	61.0	23.7	6.5	8.8
17-24 years-----	100.0	81.6	16.7	1.5	*
25-44 years-----	100.0	66.7	23.7	5.4	4.2
45-64 years-----	100.0	49.8	26.5	8.8	14.8
65 years and over-----	100.0	40.9	26.4	11.5	21.2
<u>Less than \$5,000</u>					
All females, 17 years and over-----	100.0	53.2	24.7	8.7	13.4
17-24 years-----	100.0	80.4	17.3	2.1	*
25-44 years-----	100.0	62.6	25.4	6.5	5.4
45-64 years-----	100.0	40.7	28.9	10.6	19.7
65 years and over-----	100.0	38.7	25.3	13.3	22.7
<u>\$5,000-\$9,999</u>					
All females, 17 years and over-----	100.0	59.5	24.5	6.9	9.1
17-24 years-----	100.0	80.7	17.8	1.2	*
25-44 years-----	100.0	63.1	25.6	6.1	5.2
45-64 years-----	100.0	46.2	26.7	10.7	16.5
65 years and over-----	100.0	41.0	27.6	11.0	20.3
<u>\$10,000 or more</u>					
All females, 17 years and over-----	100.0	64.8	23.1	5.4	6.7
17-24 years-----	100.0	82.8	15.8	1.3	*
25-44 years-----	100.0	68.8	22.7	4.9	3.6
45-64 years-----	100.0	53.8	25.9	7.7	12.6
65 years and over-----	100.0	46.6	27.4	7.4	18.6

¹Includes unknown income.

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Table 3. Number and percent of females 17 years and over ever having or never having a pap smear, according to education level of individual and age: United States, 1973

Education level of individual and age	Total ¹	Ever had pap smear	Never had pap smear	Total ¹	Ever had pap smear	Never had pap smear
All education levels ²	Number in thousands			Percent		
All females, 17 years and over-----	75,161	56,545	15,785	100.0	75.2	21.0
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>Less than 12 years</u>						
All females, 17 years and over-----	28,348	18,496	8,801	100.0	65.2	31.0
17-24 years-----	4,394	2,180	2,055	100.0	49.6	46.8
25-44 years-----	6,739	5,657	888	100.0	83.9	13.2
45-64 years-----	9,536	6,844	2,367	100.0	71.8	24.8
65 years and over-----	7,680	3,815	3,491	100.0	49.7	45.5
<u>12 years</u>						
All females, 17 years and over-----	29,402	23,933	4,536	100.0	81.4	15.4
17-24 years-----	6,461	4,291	1,963	100.0	66.4	30.4
25-44 years-----	11,991	11,037	698	100.0	92.0	5.8
45-64 years-----	8,625	7,180	1,103	100.0	83.2	12.8
65 years and over-----	2,325	1,425	772	100.0	61.3	33.2
<u>13 years or more</u>						
All females, 17 years and over-----	16,599	13,866	2,248	100.0	83.5	13.5
17-24 years-----	4,044	2,744	1,159	100.0	67.9	28.7
25-44 years-----	6,983	6,511	321	100.0	93.2	4.6
45-64 years-----	4,001	3,553	328	100.0	88.8	8.2
65 years and over-----	1,571	1,059	440	100.0	67.4	28.0

¹Includes unknown if examined.²Includes unknown education.

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Table 4. Number and percent distribution of females 17 years and over having a pap smear by interval since last pap smear, according to education level of individual and age: United States, 1973

Education level of individual and age	Total with pap smear	Interval since last pap smear			
		Less than 1 year	1-2 years	3-4 years	5 years or more
<u>All education levels¹</u>		Number in thousands			
All females, 17 years and over-----	56,545	34,475	13,416	3,685	4,969
17-24 years-----	9,253	7,554	1,543	135	*
25-44 years-----	23,270	15,519	5,513	1,254	985
45-64 years-----	17,650	8,796	4,678	1,562	2,614
65 years and over-----	6,372	2,606	1,682	734	1,349
<u>Less than 12 years</u>					
All females, 17 years and over-----	18,496	9,453	4,808	1,711	2,525
17-24 years-----	2,180	1,695	435	44	*
25-44 years-----	5,657	3,313	1,477	451	415
45-64 years-----	6,844	2,983	1,893	739	1,230
65 years and over-----	3,815	1,462	1,003	476	874
<u>12 years</u>					
All females, 17 years and over-----	23,933	15,166	5,716	1,366	1,685
17-24 years-----	4,291	3,572	657	50	*
25-44 years-----	11,037	7,283	2,770	569	416
45-64 years-----	7,180	3,706	1,922	591	961
65 years and over-----	1,425	606	368	157	294
<u>13 years or more</u>					
All females, 17 years and over-----	13,866	9,712	2,829	595	731
17-24 years-----	2,744	2,256	446	40	*
25-44 years-----	6,511	4,885	1,249	230	147
45-64 years-----	3,553	2,065	843	229	415
65 years and over-----	1,059	505	291	97	166
<u>All education levels¹</u>		Percent distribution			
All females, 17 years and over-----	100.0	61.0	23.7	6.5	8.8
17-24 years-----	100.0	81.6	16.7	1.5	*
25-44 years-----	100.0	66.7	23.7	5.4	4.2
45-64 years-----	100.0	49.8	26.5	8.8	14.8
65 years and over-----	100.0	40.9	26.4	11.5	21.2
<u>Less than 12 years</u>					
All females, 17 years and over-----	100.0	51.1	26.0	9.3	13.7
17-24 years-----	100.0	77.8	20.0	2.0	*
25-44 years-----	100.0	58.6	26.1	8.0	7.3
45-64 years-----	100.0	43.6	27.7	10.8	18.0
65 years and over-----	100.0	38.3	26.3	12.5	22.9
<u>12 years</u>					
All females, 17 years and over-----	100.0	63.4	23.9	5.7	7.0
17-24 years-----	100.0	83.2	15.3	1.2	*
25-44 years-----	100.0	66.0	25.1	5.2	3.8
45-64 years-----	100.0	51.6	26.8	8.2	13.4
65 years and over-----	100.0	42.5	25.8	11.0	20.6
<u>13 years or more</u>					
All females, 17 years and over-----	100.0	70.0	20.4	4.3	5.3
17-24 years-----	100.0	82.2	16.3	1.5	*
25-44 years-----	100.0	75.0	19.2	3.5	2.3
45-64 years-----	100.0	58.1	23.7	6.4	11.7
65 years and over-----	100.0	47.7	27.5	9.2	15.7

¹Includes unknown education.

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Table 5. Number and percent of females 17 years and over ever having or never having a pap smear according to color and age: United States, 1973

Color and age	Total ¹	Ever had pap smear	Never had pap smear	Total ¹	Ever had pap smear	Never had pap smear
<u>All colors</u>	Number in thousands			Percent		
All females, 17 years and over-----	75,161	56,545	15,785	100.0	75.2	21.0
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>White</u>						
All females, 17 years and over-----	66,380	50,451	13,605	100.0	76.0	20.5
17-24 years-----	12,923	7,829	4,628	100.0	60.6	35.8
25-44 years-----	22,520	20,479	1,518	100.0	90.9	6.7
45-64 years-----	20,085	16,175	3,182	100.0	80.5	15.8
65 years and over-----	10,853	5,968	4,277	100.0	55.0	39.4
<u>All other</u>						
All females, 17 years and over-----	8,781	6,094	2,181	100.0	69.4	24.8
17-24 years-----	2,140	1,424	592	100.0	66.5	27.7
25-44 years-----	3,343	2,791	411	100.0	83.5	12.3
45-64 years-----	2,285	1,475	652	100.0	64.6	28.5
65 years and over-----	1,014	403	526	100.0	39.7	51.9

¹Includes unknown if examined.

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Table 6. Number and percent distribution of females 17 years and over having a pap smear by interval since last pap smear, according to color and age: United States, 1973

Color and age	Total with pap smear	Interval since last pap smear			
		Less than 1 year	1-2 years	3-4 years	5 years or more
<u>All colors</u>		Number in thousands			
All females, 17 years and over-----	56,545	34,475	13,416	3,685	4,969
17-24 years-----	9,253	7,554	1,543	135	*
25-44 years-----	23,270	15,519	5,513	1,254	985
45-64 years-----	17,650	8,796	4,678	1,562	2,614
65 years and over-----	6,372	2,606	1,682	734	1,349
<u>White</u>					
All females, 17 years and over-----	50,451	30,538	11,957	3,330	4,626
17-24 years-----	7,829	6,379	1,310	119	*
25-44 years-----	20,479	13,687	4,808	1,109	875
45-64 years-----	16,175	8,031	4,276	1,415	2,453
65 years and over-----	5,968	2,441	1,563	688	1,277
<u>All other</u>					
All females, 17 years and over-----	6,094	3,938	1,459	355	342
17-24 years-----	1,424	1,176	233	*	*
25-44 years-----	2,791	1,832	705	145	110
45-64 years-----	1,475	765	402	147	161
65 years and over-----	403	166	120	47	71
<u>All colors</u>		Percent distribution			
All females, 17 years and over-----	100.0	61.0	23.7	6.5	8.8
17-24 years-----	100.0	81.6	16.7	1.5	*
25-44 years-----	100.0	66.7	23.7	5.4	4.2
45-64 years-----	100.0	49.8	26.5	8.8	14.8
65 years and over-----	100.0	40.9	26.4	11.5	21.2
<u>White</u>					
All females, 17 years and over-----	100.0	60.5	23.7	6.6	9.2
17-24 years-----	100.0	81.5	16.7	1.5	*
25-44 years-----	100.0	66.8	23.5	5.4	4.3
45-64 years-----	100.0	49.7	26.4	8.7	15.2
65 years and over-----	100.0	40.9	26.2	11.5	21.4
<u>All other</u>					
All females, 17 years and over-----	100.0	64.6	23.9	5.8	5.6
17-24 years-----	100.0	82.6	16.4	*	*
25-44 years-----	100.0	65.6	25.3	5.2	3.9
45-64 years-----	100.0	51.9	27.3	10.0	10.9
65 years and over-----	100.0	41.2	29.8	11.7	17.6

TECHNICAL NOTES

SOURCE OF DATA: The data presented in this report were obtained from household interviews of the Health Interview Survey. These interviews were conducted throughout calendar year 1973 in a probability sample of the civilian, noninstitutionalized population of the United States. During that year, approximately 120,000 persons living in about 41,000 households were included in the sample.

The question "About how long has it been since you had a pap smear test for cancer?" was asked of each female household member 17 years and over and was the only item on pap smear tests asked in the interview.

SAMPLING: Since the estimates shown are based on a sample of the population rather than on the entire population, they are subject to sampling error. The standard errors appropriate for the percent of females with pap smears and the interval since the last pap smear are shown in tables I and II.

Table I. Standard errors of estimates of aggregates

Size of estimates in thousands	Standard error in thousands
100-----	18
200-----	26
300-----	31
500-----	40
1,000-----	57
2,000-----	80
3,000-----	98
5,000-----	125
10,000-----	174
20,000-----	237
30,000-----	278
50,000-----	325

Table II. Standard errors, expressed in percentage points, of estimated percentages

Based of percentage in thousands	Estimated percentage				
	2 or 98	5 or 95	10 or 90	20 or 80	50
100-----	2.5	3.9	5.4	7.2	9.0
200-----	1.8	2.8	3.8	5.1	6.4
300-----	1.5	2.3	3.1	4.2	5.2
500-----	1.1	1.8	2.4	3.2	4.0
1,000-----	0.8	1.2	1.7	2.3	2.9
2,000-----	0.6	0.9	1.2	1.6	2.0
3,000-----	0.5	0.7	1.0	1.3	1.6
5,000-----	0.4	0.6	0.8	1.0	1.3
10,000-----	0.3	0.4	0.5	0.7	0.9
20,000-----	0.2	0.3	0.4	0.5	0.6
30,000-----	0.1	0.2	0.3	0.4	0.5
50,000-----	0.1	0.2	0.2	0.3	0.4

The selected differences stated in the text of this report have been tested and have been found to be significant at the .05 significance level. The reader should be cautioned that differences observed in the tables of this report are not necessarily statistically significant and may only be due to sampling error.

For a more detailed discussion of the limitations and qualifications of data collected in the Health Interview Survey, see Series 10, No. 95 entitled: Current Estimates from the Health Interview Survey, U.S. 1973.

SYMBOLS

Data not available-----	...
Category not applicable-----	...
Quantity zero-----	-
Quantity more than 0 but less than 0.05----	0.0
Figure does not meet standards of reliability or precision-----	*

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