

FIGURE 11.-Changes in the prevalence of cigarette smoking among successive birth cohorts of U.S. women employed in blue-collar occupations, 1900-1978
SOURCE: Data from National Center for Health Statistics, National Health Interview Surveys, 1978-1980 (combined).
and for men and women. Among white women and black men, bluecollar workers are somewhat more likely than others to be heavy smokers. The consumption differences between white workers and black workers are even more pronounced when the percentage of smokers smoking 40 or more cigarettes daily is examined. White men are about four times more likely than black men to smoke 40 or more cigarettes daily, regardless of occupation. Similarly, white women are about three times more likely than black women to smoke more than 40 cigarettes daily, regardless of occupational group.


FIGURE 12.-Changes in the prevalence of cigarette smoking among successive birth cohorts of U.S. women employed in service occupations, 1900-1978
SOURCE: Data from National Center for Health Statistics, National Health Interview Surveys, 1978-1980 (combined).

Among women, there are minimal racial or occupational differences in the proportion of current smokers who have attempted to quit smoking. However, blue-collar, service, and not employed black men are somewhat less likely than all other groups to have attempted to quit. Among those who have ever smoked, white-collar male workers are the most likely to have quit smoking. Blue-collar and service workers generally have lower quit rates than whitecollar workers, and this pattern holds true for white men and black men and white women. Black women have low quit rates regardless of occupational category. Additionally, black male blue-collar work-

TABLE 16.-Estimates of occupational distribution by sex and race, aged 20 to 64 years, United States, 1978-1980

|  | Men (percentage) |  |  | Women (percentage) |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Classification | White | Black |  | White | Black |
| White-collar | 40.8 | 23.0 |  | 41.8 | 31.1 |
| Blue-collar | 40.6 | 45.2 |  | 9.0 | 11.0 |
| Service | 5.5 | 11.5 |  | 9.4 | 22.8 |
| Homemaking | - | - |  | 42.6 | 34.7 |
| Not employed | 10.0 | 18.8 |  |  |  |

SOURCE: National Center for Health Statistics, National Health Interview Surveys, 1970 and 1978-1980 (combined). (See Technical Addendum.)
ers have a considerably lower quit rate ( 24.9 percent) than white male blue-collar workers ( 36.0 percent).
In summary, black workers are more likely than white workers to be cigarette smokers, with black male blue-collar workers having the highest smoking rate. In contrast, white workers are much more likely than black workers to be heavy smokers, regardless of occupational category. White workers are more likely to have quit smoking, with the exception of white female blue-collar workers. Black male blue-collar workers and all black female workers have low quit rates. Among black men and white men and white women, white-collar workers have both lower rates of current smoking and higher proportions of former smokers than blue-collar or service workers. The one group that deviates from this pattern is black women; white-collar workers have a higher rate of current smoking and a somewhat lower proportion of former smokers than blue-collar or service workers, and homemakers have a relatively high rate of current smoking.

## Summary and Conclusions

1. Among men, a substantially higher percentage of blue-collar workers than white-collar workers currently smoke cigarettes. Operatives and kindred workers have the highest rate of current smoking (approaching 50 percent), with professional, technical, and kindred workers having the lowest rates of current smoking (approximately 26 percent).
2. Among women, blue-collar versus white-collar differences are less pronounced, but still show a higher percentage of current smokers among blue-collar workers. Occupational categories

TABLE 17.-Estimates (percentages) of smoking prevalence, heavy smoking, and quitting behavior by race, sex, and occupation, aged 20 to 64 years, United States 1978-1980

| Occupation | White |  | Black |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women |
| Current smokers |  |  |  |  |
| Total | 40.1 | 33.3 | 47.7 | 34.6 |
| Whitecollar | 32.8 | 32.0 | 38.4 | 35.2 |
| Blue-collar | 46.5 | 39.6 | 52.1 | 33.4 |
| Service | 47.0 | 38.7 | 48.8 | 33.5 |
| Homemaking | - | 32.9 | - | 37.1 |
| Not employed | 43.6 | - | 47.6 | - |
| Smoke $\geq 20$ daily |  |  |  |  |
| Total | 74.5 | 62.8 | 43.7 | 27.6 |
| White-collar | 74.9 | 62.5 | 40.0 | 29.5 |
| Blue-collar | 75.4 | 66.0 | 45.9 | 31.8* |
| Service | 72.1 | 60.9 | 42.5* | 31.4 |
| Homemaking | - | 63.2 | - | 23.5 |
| Not employed | 73.4 | - | 42.1 | - |
| Smoke $\geq 40$ daily |  |  |  |  |
| Total | 20.7 | 12.4 | 5.4 | 4.0 |
| Whitecollar | 22.5 | 12.6 | 3.3 | 4.2 |
| Blue-collar | 20.0 | 12.0 | 6.0 | 5.2** |
| Service | 19.0 | 13.9 | 2.3 - | 3.5 |
| Homemaking | - | 12.2 | - | 4.0 |
| Not employed | 19.9 | - | 8.4 | - |
| Current smokers who have made a serious attempt to quit |  |  |  |  |
| Total | 61.2 | 59.4 | 53.6 | 60.0 |
| White-collar | 63.6 | 59.7 | 62.1 | 60.0 |
| Blue-collar | 59.1 | 58.5 | 53.3 | 59.9* |
| Service | 57.2 | 57.5 | $50.0{ }^{\text {* }}$ | 58.1 |
| Homemaking | - | 60.5 | - | 64.2 |
| Not employed | 64.6 | - | 49.5 | - |
| Ever smoked who are former smokers |  |  |  |  |
| Total | 41.4 | 33.1 | 28.6 | 24.6 |
| White-collar | 48.8 | 34.6 | 34.4 | 23.6 |
| Blue-collar | 36.0 | 24.6 | 24.9 | 24.8 |
| Service | 32.6 | 26.6 | 30.8 | 25.3 |
| Homemaking | - | 34.3 | - | 24.4 |
| Not employed | 35.2 | - | 29.7 | - |

- < 100 cases in the denominator (unweighted sample).

SOURCE: National Center for Health Statistics, National Health Interview Surveys, 1978-1980 (combined). (See Technical Addendum.)
with the highest rates of current smoking include craftsmen and kindred workers (approximately 45 percent current smokers) and managers and administrators ( 38 percent), with the
lowest rate of current smoking occurring among women employed in professional, technical, and kindred occupations ( 26 percent).
3. Occupational differences in daily cigarette consumption are generally modest. For both men and women, the highest daily consumption of cigarettes occurs among managers and administrators and craftsmen and kindred workers.
4. Blue-collar workers (both men and women) report an earlier onset of smoking than white-collar workers. A substantial fraction of smokers report initiation of smoking at ages coincident with their entry into the workforce.
5. Blue-collar occupations have a lower percentage of former smokers than white-collar occupations; this difference is most pronounced among men. Among women, the pattern for homemakers closely parallels that of white-collar women.
6. Black workers have higher smoking rates than white workers, with black male blue-collar workers exhibiting the highest smoking rate. Black workers also have lower quit rates than white workers. In contrast, white workers of both sexes are more likely to be heavy smokers regardless of occupational category.

## Technical Addendum: National Health Interview Survey Estimates

Estimates of current smoking reported in this chapter were obtained from the 1978, 1979, and 1980 National Health Interview Surveys (NHIS). A special data tape was prepared by the National Center for Health Statistics to allow linkages across surveys, thereby permitting analyses of the combined 1978-1980 NHIS. This increase in sample size provides greater statistical reliability in the estimates of population subgroups of interest to this Report.
The smoking items were completed by 12,105 respondents in 1978, 24,727 in 1979, and 10,649 in 1980, resulting in a combined sample of 47,481. Standard NHIS protocols were followed in each survey, including a random probability sample design of the noninstitutionalized adult U.S. population, and face-to-face interviews using U.S. Bureau of the Census interviewers. Response rates routinely exceeded 95 percent.
Given the large samples and exceptionally high response rates, the NHIS estimates are generally regarded as the best available estimates of national smoking patterns. Because the focus of this Report is on occupational differences in smoking, analysis of the 1978-1980 NHIS was restricted to respondents 20 to 64 years of age ( $\mathrm{n}=36,745$ ).
The definition of a current smoker was obtained from the following question asked in the surveys: "Do you smoke cigarettes now?" This includes both regular and occasional smokers who are currently smoking. For estimates of average age of initiation and quitting behavior, the denominator includes both current and former smokers who describe themselves as having ever smoked "fairly regularly."
The 1978-1980 National Health Interview Surveys utilized the occupational coding scheme used in the 1970 U.S. Census. The occupational subgroups examined in this Report, along with their respective code numbers, are listed in Table 18.
Accompanying each NHIS public use data tape is an algorithm that weights the sample to the 1970 U.S. population. All estimates of smoking behavior reported here use this algorithm.
Data from the 1970 NHIS (reported in Tables 1, 11-15) were obtained from the 1970 NHIS public use tape, which contains data from 76,239 respondents who completed questions on their smoking behavior. Of these, 59,557 respondents were between the ages of 20 and 64 . Because the occupational classifications were revised between the 1970 and the 1978-1980 NHIS, changes in smoking behavior could be reported only for the specific occupations whose classification did not change.
As a preliminary step in the analysis of the 1978-1980 NHIS, the equivalency of the three NHIS samples within occupational groups

TABLE 18.-Occupational codes and categories used in the 1978-1980 National Health Interview Surveys

| Occupation category | Occupations included | U.S. Census Bureau occupation codes ${ }^{1}$ |
| :---: | :---: | :---: |
| Professional, technical, and kindred | Engineers and architects <br> Scientists <br> Health workers <br> Teachers, including college <br> Engineering, science technicians <br> All other professional, <br> technical, kindred workers | $\begin{aligned} & 002,006-023 \\ & 034-054,091-096 \\ & 061-085 \\ & 102-145 \\ & 150-162 \\ & 001,003-005,024-033,055-060,086- \\ & 090,097-101,146-149,163-199 \end{aligned}$ |
| Managers, admin., except farm |  | 201-245 |
| Sales workers |  | 260-280 |
| Clerical and kindred workers | Bookkeepers <br> Office machine operators Mail handlers, postal clerks, telegraph messengers Secretaries, stenographers, typists, receptionists <br> All other clerical workers | $\begin{aligned} & 305 \\ & 341-355 \\ & 331,332,361,383 \\ & 364-372,276,391 \\ & 301-304,306-330,333-340,356-360, \\ & 362,363,373-375,377-382,384-390, \\ & 392-399 \end{aligned}$ |
| Craftsmen and kindred workers | Carpenters <br> Other construction craftsmen <br> Mechanics and repairmen <br> Metal craftsmen, except mechanics <br> All other craftsmen | 415-416 <br> 410-412, 421, 430, 431, 436, 440, $510-512,520-523,534,550,560$ 470-495 <br> 403, 404, 442, 446, 454, 461, 462, 502-504, 514, 533, 535-540, 561, 562 401-402. 405-409, 413, 414, 417-421, 422-429, 432-435, 437-439, 441, 443445, 447-453, 455-460, 463-469, 496501, 505-509, 513, 515-519, 524-532, 541-549, 551-559, 563-580 |
| Operatives and kindred workers | Operatives, except transport Transport equipment operatives | $\begin{aligned} & 601-695 \\ & 701-715 \end{aligned}$ |
| Laborers, except farm |  | 740-785 |
| Service workers | Cleaning service <br> Food service <br> Health and personal service <br> Protective service <br> Private household workers | $\begin{aligned} & 901-903 \\ & 910-916 \\ & 921-954 \\ & 960-965 \\ & 980-984 \end{aligned}$ |
| Farm | Farmers and farm managers Farm laborers and foremen | $\begin{aligned} & 801,802 \\ & 821-824 \end{aligned}$ |

[^0]was examined in regard to smoking prevalence and heavy smoking. These results showed a high degree of statistical equivalency across

TABLE 19.-Estimates of the percentage of current smokers by sex, occupation, and NHIS sample (1978, 1979, 1980), aged 20 to 64 years

| Occupation | Men |  |  |  | Women |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1978 | 1979 | 1980 | $\begin{gathered} \mathrm{P} \\ \text { value } \end{gathered}$ | 1978 | 1979 | 1980 | $\begin{gathered} \mathrm{P} \\ \text { value } \end{gathered}$ |
| White-collar total | 32.5 | 33.4 | 33.1 | NS ${ }^{1}$ | 32.9 | 32.4 | 30.8 | NS |
| Professional, technical and kindred workers | 28.1 | 24.6 | 24.3 | NS | 26.3 | 26.8 | 26.6 | NS |
| Managers and administrators, except farm | 36.1 | 37.9 | 34.6 | NS | 44.8 | 36.3 | 34.1 | . 03 |
| Sales workers | 36.8 | 39.0 | 45.9 | NS | 35.1 | 34.4 | 31.2 | NS |
| Clerical and kindred workers | 37.6 | 38.5 | 37.4 | NS | 33.1 | 34.3 | 32.3 | NS |
| Blue-collar total | 46.8 | 46.8 | 47.6 | NS | 41.9 | 36.2 | 36.2 | NS |
| Craftsmen and kindred workers | 45.7 | 45.3 | 47.2 | NS | 49.2 | 39.0 | 45.6 | NS |
| Operatives and kindred workers | 48.6 | 48.8 | 48.6 | NS | 41.1 | 35.5 | 33.9 | NS |
| Laborers, except farm | 46.4 | 47.0 | 46.4 | NS | 36.0 | 39.4 | 33.3 | NS |
| Service | 45.1 | 41.9 | 54.8 | . 005 | 39.9 | 36.0 | 36.2 | NS |
| Farm | 33.1 | 32.0 | 28.7 | NS | * 2 | * | - | * |
| Usual activity, homemaking | - | - | - | - | 33.9 | 33.4 | 31.6 | NS |

${ }^{1}$ Not statistically significant ( $p>0.05$ ).
${ }^{2}$ Not enough cases for valid chi-square test (the expected cell frequency for one or more cells was less than five).
samples. As is reported in Table 19, among men one difference was detected for smoking prevalence, but this difference showed an inconsistent pattern across samples. Among women employed as managers or administrators, there was a remarkable 10.7 percentage point decline in smoking prevalence between 1978 and 1980 , which is over twice as large as the 10-year net decline between 1970 and 1980 (see Table 11).
One possible explanation for this large 3 -year decline in smoking prevalence is random fluctuation in the survey estimate. However, if this short-term time trend for female managers and administrators is valid, it would be of considerable interest. Given that the 19701978 comparisons already show female managers and administrators to be quitting at a relatively high rate (when compared with other

TABLE 20.-Estimates of the percentage of current smokers who smoke 40 or more cigarettes daily by sex, occupation, and NHIS sample (1978, 1979, 1980), aged 20 to 64 years

| Occupation | Men |  |  |  | Women |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1978 | 1979 | 1980 | $\begin{gathered} \mathrm{P} \\ \text { value } \end{gathered}$ | 1978 | 1979 | 1980 | $\begin{gathered} P \\ \text { value } \end{gathered}$ |
| White-collar total | 23.6 | 21.0 | 19.3 | NS ${ }^{1}$ | 10.1 | 11.4 | 14.0 | NS |
| Professional, technical and kindred workers | 20.9 | 17.0 | 14.2 | NS | 9.0 | 8.6 | 14.1 | NS |
| Managers and administrators, except farm | 25.8 | 23.9 | 24.6 | NS | 15.7 | 16.0 | 15.2 | NS |
| Sales workers | 31.0 | 21.2 | 20.5 | NS | 3.4 | 9.4 | 17.3 | . 05 |
| Clerical and kindred workers | 16.0 | 20.5 | 15.4 | NS | 9.8 | 11.8 | 13.1 | NS |
| Blue-collar total | 19.4 | 17.4 | 18.7 | NS | 11.3 | 11.7 | 10.5 | NS |
| Craftsmen and kindred workers | 22.7 | 19.1 | 22.2 | NS | 16.1 | 13.0 | 22.9 | NS |
| Operatives and kindred workers | 16.9 | 16.6 | 13.8 | NS | 11.0 | 11.1 | 7.1 | NS |
| Laborers, except farm | 13.9 | 13.6 | 18.9 | NS | * 2 | - | - | * |
| Service | 13.4 | 15.9 | 18.9 | NS | 11.1 | 10.5 | 11.4 | NS |
| Farm | 20.5 | 11.5 | 17.2 | NS | - | * | + | * |
| Usual activity, homemaking | - | - | - | - | 10.4 | 10.6 | 12.9 | NS |

' Not statistically significant ( $\mathbf{p}>0.05$ ).
${ }^{2}$ Not enough cases for valid chi-square test (the expected cell frequency for one or more cells was less than five).
female occupational groups), it would seem prudent to closely monitor the smoking patterns of this occupational cohort of women.

In regard to heavy smoking (see Table 20), no sample differences were found for men. Among female salesworkers, there was a striking 500 percent proportionate increase between 1978 and 1980 in the percentage of smokers of 40 -plus cigarettes a day, which again must be interpreted with caution. Overall, 50 separate chi-square tests were examined, and 3 were statistically significant at $p \leq 0.05-$ which would be expected solely on the basis of chance.

Detailed presentations of NHIS estimates of smoking prevalence are provided in Table 21 (1978-1980) and Table 22 (1970-1980 net change) for all occupational codes with 100 or more cases in the
combined 1978-1980 NHIS (unweighted sample). In Table 23 are provided a comprehensive list of all occupational codes with 100 or more cases in the 1978-1980 NHIS and the estimated percentage of men and women, aged 20 to 64 years, who are employed in each occupation. Figures 13 through 18 depict results from birth cohort analyses that were briefly summarized in the text, including male professional, technical, and kindred workers (Figure 13), managers and administrators (Figure 14), craftsman and kindred workers (Figure 15), and operatives and kindred workers (Figure 16), and female professional, technical, and kindred workers (Figure 17), and clerical and kindred workers (Figure 18).

TABLE 21.-Estimates of the percentage of current smokers by selected occupations, aged 20 to 64 years, United States, 1978-1980

| Occupation | Men | Women | Total |
| :---: | :---: | :---: | :---: |
| WHITE-COLLAR |  |  |  |
| Professional, technical, and kindred workers |  |  |  |
| Accountants (001) | 26.8 | 30.4 | 28.2 |
| Electrical and electronic engineers (012) | 16.2 | $33.0{ }^{1}$ | 16.4 |
| Lawyers (031) | 21.9 | $21.4{ }^{1}$ | 21.8 |
| Personnel and labor relations workers (066) | 30.91 | $37.9{ }^{\text { }}$ | 34.1 |
| Physicians, medical and osteopathic (065) | $18.1{ }^{1}$ | 18.2 ${ }^{\text {2 }}$ | 18.1 |
| Registered nurses (075) | 46.4 ' | 27.2 | 28.0 |
| Social workers (100) | $42.6{ }^{1}$ | $37.3{ }^{1}$ | 39.0 |
| Elementary school teachers (142) | $18.8{ }^{1}$ | 19.8 | 19.6 |
| Secondary school teachers (144) | 24.9 | 24.8 | 24.9 |
| Managers and administrators, except farm |  |  |  |
| Bank officers and financial managers (202) | 35.9 | $28.1{ }^{1}$ | 32.9 |
| Office managers n.e.c. ${ }^{2}$ (220) | $43.9{ }^{\text {1 }}$ | $25.4{ }^{1}$ | 45.0 |
| Officials and administrators, public administrators n.e.c. ${ }^{2}$ (222) | $22.2{ }^{1}$ | $20.3{ }^{1}$ | 21.6 |
| Restaurant, cafeteria, and bar managers (230) | $53.9{ }^{1}$ | $52.4{ }^{1}$ | 53.3 |
| Sales managers and department heads, retail trade (231) | $28.7{ }^{1}$ | $33.8{ }^{1}$ | 30.5 |
| Managers and administrators n.e.c. (245) | 36.2 | 38.0 | 36.6 |
| Sales workers |  |  |  |
| Insurance agents, brokers, and underwriters (265) | $41.1^{1}$ | $41.0{ }^{1}$ | 41.1 |
| Real estate agents and brokers (270) | 27.8 | $48.1{ }^{1}$ | 36.4 |
| Sales representatives, manufacturing industries (281) | 43.2 | $32.9{ }^{\text {1 }}$ | 41.2 |
| Sales representatives, wholesale trade (282) | 48.1 | $45.8{ }^{1}$ | 47.9 |
| Sales clerks, retail trade (283) | 39.6 | 30.5 | 33.7 |
| Salesmen, retail trade (284) | $42.8{ }^{1}$ | $39.3{ }^{1}$ | 42.4 |
| Clerical and kindred workers |  |  |  |
| Bank tellers (301) | $0.0{ }^{1}$ | 25.7 | 24.7 |
| Bookkeepers (305) | $42.9{ }^{\text {a }}$ | 36.5 | 37.1 |
| Cashiers (310) | $43.4{ }^{\text {, }}$ | 44.2 | 44.1 |
| Estimators and investigatore n.e.c. (321) | $28.4{ }^{1}$ | $35.9{ }^{\text {1 }}$ | 33.1 |
| Expediters and production controllers (323) | $44.9{ }^{1}$ | $43.1{ }^{1}$ | 44.3 |
| Computer and peripheral equipment operators (343) | $31.3{ }^{\text {a }}$ | $44.7{ }^{\text {2 }}$ | 38.5 |
| Postal clerks (361) | $38.2{ }^{\text {t }}$ | $24.9{ }^{1}$ | 33.9 |
| Receptionists (364) | $56.5{ }^{\text {1 }}$ | 31.0 | 31.8 |
| Secretaries n.e.c. (372) | $61.7{ }^{1}$ | 30.9 | 31.2 |
| Stock clerks and storekeepers (381) | 38.1 | $31.2{ }^{\prime}$ | 35.3 |
| Typists (391) | $10.3{ }^{1}$ | 33.0 | 31.7 |
| Clerical workers, miscellaneous (394) | $34.9{ }^{1}$ | 33.3 | 33.6 |
| Clerical workers, not specified (395) | $33.5{ }^{1}$ | $28.4{ }^{1}$ | 29.1 |

TABLE 21.-Continued

| Occupation | Men | Women | Total |
| :---: | :---: | :---: | :---: |
| BLUE-COLLAR |  |  |  |
| Craftsmen and kindred workers |  |  |  |
| Carpenters (415) | 50.8 | $70.4{ }^{1}$ | 50.9 |
| Electricians (430) | 48.3 | $100.0^{1}$ | 48.5 |
| Foremen n.e.c. (441) | 42.7 |  | 44.2 |
| Machinists (461) | 43.4 | $53.0{ }^{1}$ | 43.7 |
| Automobile mechanics (473) | 50.5 | $54.7{ }^{1}$ | 50.5 |
| Heavy equipment mechanics, incl. diesel (481) | 47.4 | $49.5{ }^{1}$ | 47.7 |
| Painters, construction and maintenance (510) | 55.1 | $61.4{ }^{1}$ | 54.0 |
| Plumbers and pipe fitters (522) | 47.1 | $39.1{ }^{1}$ | 47.1 |
| Operatives, except transport |  |  |  |
| Assemblers (602) | 48.7 | 42.9 | 45.3 |
| Checkers, examiners, and inspectors; manufacturing (610) | 45.8 | 39.3 | 42.3 |
| Packers and wrappers, except meat and produce (643)$\begin{array}{ll} 47.2^{2} & 40.0 \end{array}$ |  |  |  |
| Sewers and stitchers (663) | $26.9{ }^{1}$ | 25.8 | 25.9 |
| Welders and flame-cutters (680) | 47.8 | $28.9{ }^{1}$ | 46.8 |
| Machine operatives, miscellaneous, specified (690) |  |  |  |
| Machine operatives, not specified (692) | $42.9{ }^{1}$ | $50.3{ }^{1}$ | 44.7 |
| Miscellaneous operatives (694) | 43.3 | $40.1{ }^{1}$ | 42.4 |
| Transport operatives |  |  |  |
| Bus drivers (703) | $50.3{ }^{1}$ | $35.2{ }^{\text {2 }}$ | 42.7 |
| Deliverymen and routemen (705) | 42.4 | $46.1{ }^{1}$ | 42.7 |
| Fork lift and tow motor operatives (706) | $49.3{ }^{1}$ | $35.4{ }^{1}$ | 48.7 |
| Truck drivers (715) | 53.6 | $62.7{ }^{1}$ | 53.7 |
| Workers, except farm |  |  |  |
| Construction laborers, except carpenters' helpers (751) | 53.0 | $52.8{ }^{1}$ | 53.0 |
| Freight and material handlers (753) | 42.5 | $34.6{ }^{1}$ | 41.6 |
| Gardeners and groundskeepers, except farm (755) | 46.1 | $43.7{ }^{\text {t }}$ | 45.9 |
| Stock handlers (762) | $37.4{ }^{\text {4 }}$ | $34.5{ }^{1}$ | 36.6 |
| Laborers, not specified (785) | 38.0 | $46.3^{1}$ | 39.0 |
| Farm workers |  |  |  |
| Farmers (801) | 28.1 | $29.9{ }^{1}$ | 28.3 |
| Farm laborers, wage workers (822) | 39.0 | $25.6{ }^{2}$ | 34.9 |

## TABLE 21.-Continued

| Occupation | Men | Women | Total |
| :--- | :---: | :---: | :---: |
| Service workers |  |  |  |
| Cleaners and charwomen (902) | $49.8^{1}$ | 30.5 | 38.0 |
| Janitors and sextons (903) | 49.8 | $39.0^{1}$ | 47.1 |
| Cooks, except private household (912) | $45.0^{1}$ | 31.1 | 35.9 |
| Waiters (915) | $44.7^{1}$ | 51.1 | 50.4 |
| Food service workers n.e.c. ${ }^{2}$, except private |  |  |  |
| household (916) | $42.1^{1}$ | 24.6 | 27.0 |
| Nursing aides, orderlies, and attendants (925) | $48.2^{1}$ | 41.0 | 42.0 |
| Practical nurses (926) | $55.3^{1}$ | 40.3 | 41.2 |
| Child care workers, except private |  |  |  |
| household (942) | $0.0^{1}$ | 28.9 | 28.4 |
| Hairdressers and cosmetologists (944) | $50.2^{1}$ | 37.5 | 39.0 |
| Guards and watchmen (962) | 44.5 | $35.7^{1}$ | 47.3 |
| Policemen and detectives (964) | $55.0^{2}$ | $51.5^{1}$ | 45.1 |
| Maids and servants, private household (984) |  | 32.1 | 33.1 |

[^1]TABLE 22.-Estimates of the net change in smoking prevalence by sex and selected occupations, age 20 to 64 years, United States, 1970-1980
Occupation $\quad$ Men $\quad$ Women

WHITE-COLLAR
Professional, technical, and kindred workers

| Accountants (001)/(000) | -6.8 | -0.4 | -4.6 |
| :---: | :---: | :---: | :---: |
| Electrical and electronic engineers (012)/(083) | -4.0 | $-18.0{ }^{1}$ | -4.1 |
| Personnel and labor relations workers $(056) /(154)$ | -8.9 | -8.2 | -2.0 |
| Physicians, medical and osteopathic $(065) /(153,162)$ | -8.5 ${ }^{1}$ | $-29.3{ }^{1}$ | -10.0 |
| Registered nurses (075)/(150) | $+10.2{ }^{1}$ | -12.3 | -11.4 |
| Social workers (100)/(171) | +3.8 ${ }^{1}$ | $+11.0^{1}$ | +7.7 |
| Elementary school teachers (142)/(182) | $-10.5{ }^{1}$ | -1.2 | -2.6 |
| Secondary school teachers (144)/(183) | -3.5 | -1.3 | -2.4 |

Managers and administrators, except farm
Officials and administrators, public

| administrators n.e.c. | (222)/(270) | $16.3^{1}$ | $7.3^{1}$ |
| :---: | :---: | :---: | ---: |
| Manarers and administrators n.e.c. $(245) /(290)$ | -8.1 | -15.4 |  |

Sales workers
Insurance agents, brokers, and underwriters (265)/(385)

| $-9.8^{1}$ | $-22.6^{1}$ | -11.3 |
| :--- | :--- | :--- |

Real estate agents and brokers (270)/(393)
$14.6+3.8$

Clerical and kindred workers

| Bank teilers $(301) /(305)$ | $-45.7^{1}$ | -9.0 | -11.3 |
| :--- | :---: | :---: | :---: |
| Bookkeepers $(305) /(310)$ | $-1.3^{1}$ | -4.2 | -3.9 |
| Cashiers $(310) /(312)$ | $+2.6^{1}$ | +3.7 | +3.5 |
| Postal clerks $(361) /(340)$ | $-1.0^{1}$ | $-15.7^{1}$ | -5.7 |
| Receptionists $(364) /(341)$ | - | -10.6 | -9.8 |
| Secretaries n.e.c. $(372) /(342)$ | $-0.8^{1}$ | -8.1 | -8.0 |
| Stock clerks and storekeepers $(381) /(350)$ | 12.0 | $8.2^{1}$ | -12.2 |
| Typists $(391) /(360)$ | $-52.8^{1}$ | 4.9 | -7.1 |

## BLUE-COLLAR

Craftsmen and kindred workers
Carpenters (415)/(411)

| -4.1 | $+50.3^{1}$ | -3.7 |
| ---: | :---: | ---: |
| +3.9 | $+33.4^{1}$ | -3.9 |
| -8.9 | - | -8.9 |
| -8.7 | $-7.3^{1}$ | -6.5 |
| -4.5 | $+223^{1}$ | -4.3 |
| -17.1 | $+17.7^{1}$ | -17.3 |
| -4.1 | - | -4.1 |

TABLE 22.-Continued

| Occupation | Men | Women | Total |
| :---: | :---: | :---: | :---: |
| Operatives, except transport |  |  |  |
| Assemblers (602)/(631) | -7.0 | -2.0 | $-4.6$ |
| Checkers, examiners, and inspectors, manufacturing ( 610 )/(643) | -8.7 | -0.3 | -4.4 |
| Packers and wrappers, except meat and produce (643)/(693) | -8.0 ${ }^{1}$ | +2.6 | -0.7 |
| Sewers and stitchers (663)/(705) | $-18.8{ }^{1}$ | -0.5 | -0.8 |
| Welders and flame-cutters (680)/(721) | -3.5 | $-12.7{ }^{1}$ | -3.9 |
| Transport operatives |  |  |  |
| Bus drivers (703)/(641) | $+6.6{ }^{1}$ | $+11.2^{1}$ | +4.0 |
| Deliverymen and routemen (705)/(650) | -11.6 | $+10.0{ }^{1}$ | -10.9 |
| Farm workers |  |  |  |
| Farmers (801)/(200) | -4.4 | +9.3 ${ }^{1}$ | -3.4 |
| Farm laborers, wage workers (822)/(902) | -14.5 | $-6.2^{1}$ | -14.8 |
| Service workers |  |  |  |
| Cleaners and charwormen (902)/(824) | $-14.3{ }^{1}$ | -2.3 | -1.6 |
| Cooks, except private household (912)/(825) | -19.2 ${ }^{1}$ | -5.5 | -9.4 |
| Janitors and sextons (903)/(834) | -1.9 | +10.4 ${ }^{1}$ | -0.4 |
| Waiters (915)/(875) | -2.9 ${ }^{1}$ | -9.0 | -8.7 |
| Practical nurses (926)/(842) | $-31.1^{1}$ | +4.3 | +3.7 |
| Hairdressers and cosmetologists (944)/(843) | $-5.4{ }^{1}$ | -7.4 | -8.0 |
| Guards and watchmen (962)/(851) | -5.5 | +17.6 ${ }^{\prime}$ | -6.9 |
| Policemen and detectives (964)/(853) | -3.2 | +24.4 ${ }^{\text {1 }}$ | -2.0 |

${ }^{1}<100$ cases in the denominator (unweighted sample).
${ }^{2}$ Not elsewhere classified.
SOURCE: National Center for Health Statistica Health Interview Surveys. 1978-1980 (combined).

TABLE 23.-Estimates of percentage of U.S. population, aged 20 to 64 years, in selected occupations, 1978-1980

| Occupation | Men | Women | Total |
| :---: | :---: | :---: | :---: |
| WHITE-COLLAR |  |  |  |
| Professional, technical, and kindred workers |  |  |  |
| Accountants (001) | 1.2 | 0.7 | 1.0 |
| Electrical and electronic engineers (012) | 0.6 | 0.0 | 0.3 |
| Lawyers (031) | 0.7 | 0.1 | 0.4 |
| Personnel and labor relations workers (056) | 0.5 | 0.4 | 0.4 |
| Physicians, medical and osteopathic (065) | 0.5 | 0.1 | 0.3 |
| Registered nurses (075) | 0.1 | 2.0 | 1.1 |
| Social workers (100) | 0.2 | 0.4 | 0.3 |
| Elementary school teachers (142) | 0.5 | 2.1 | 1.3 |
| Secondary school teachers (144) | 1.0 | 1.0 | 1.0 |
| Managers and administrators, except farm |  |  |  |
| Bank officers and financial managers (202) | 0.7 | 0.4 | 0.5 |
| Office managers n.e.c. ${ }^{1}$ (220) | 0.1 | 0.3 | 0.2 |
| Officials and administrators; public administrators n.e.c. (222) | 0.4 | 0.2 | 0.3 |
| Restaurant, cafeteria, and bar managers (230) | 0.5 | 0.3 | 0.4 |
| Sales mansgers and department heads, retail trade (231) | 0.4 | 0.2 | 0.3 |
| Managers and administratora n.e.c. (245) | 9.4 | 2.4 | 5.8 |
| Salea workers |  |  |  |
| Insurance agents, brokers, and underwriters (265) | 0.6 | 0.2 | 0.4 |
| Real eatate agents and brokers (270) | 0.6 | 0.4 | 0.5 |
| Sales representatives, manufacturing industries (281) | 0.9 | 0.2 | 0.5 |
| Sales representatives, wholesale trade (282) | 0.9 | 0.1 | 0.5 |
| Sales clerks, retail trade (283) | 0.5 | 1.0 | 1.6 |
| Salesmen, retail trade (284) | 0.5 | 0.1 | 0.3 |
| Clerical and kindred workers |  |  |  |
| Bank tellers (301) | 0.0 | 0.6 | 0.3 |
| Bookkeepers (305) | 0.3 | 2.7 | 1.5 |
| Cashiers (310) | 0.2 | 1.5 | 0.9 |
| Estimators and investigators n.e.c. (321) | 0.3 | 0.4 | 0.4 |
| Expediters and production controllers (323) | 0.4 | 0.2 | 0.3 |
| Computer and peripheral equipment operators (343) | 0.4 | 0.4 | 0.4 |
| Postal clerks (361) | 0.4 | 0.2 | 0.3 |
| Receptionists (364) | 0.0 | 0.6 | 0.3 |
| Secretaries n.e.c. (372) | 0.1 | 5.5 | 2.9 |
| Stock clerks and storekeepers (381) | 0.6 | 0.4 | 0.5 |
| Typista (391) | 0.1 | 1.1 | 0.6 |
| Clerical workers, miscellaneous (394) | 0.3 | 1.1 | 0.7 |
| Clerical workers, not specified (395) | 0.1 | 0.7 | 0.8 |

TABLE 23.-Continued

| Occupation | Men | Women | Total |
| :--- | :--- | :--- | :--- |


| BLUE-COLLAR |  |  |  |
| :---: | :---: | :---: | :---: |
| Craftsmen and kindred workers |  |  |  |
| Carpenters (415) | 2.4 | 0.0 | 1.2 |
| Electricians (430) | 1.0 | 0.0 | 0.5 |
| Foremen n.e.c. (441) | 3.0 | 0.4 | 1.7 |
| Machinists (461) | 1.1 | 0.0 | 0.5 |
| Automobile mechanics (473) | 1.7 | 0.0 | 0.8 |
| Heavy equipment mechanics, incl. diesel (481) | 1.2 | 0.0 | 0.6 |
| Painters, construction and maintenance (510) | 0.7 | 0.1 | 0.4 |
| Plumbers and pipe fitters (522) | 0.8 | 0.0 | 0.4 |
| Operatives, except transport |  |  |  |
| Assemblers (602) | 0.8 | 1.1 | 0.9 |
| Checkers, examiners, and inspectors, manufacturing (610) | 0.7 | 0.7 | 0.7 |
| Packers and wrappers, except meat and produce (643) | 0.3 | 0.6 | 0.5 |
| Sewers and stitchers (663) | 0.1 | 1.3 | 0.7 |
| Welders and flame-cutters (680) | 1.0 | 0.1 | 0.5 |
| Machine operatives, miscellaneous, specified (690) | 1.7 | 0.9 | 1.3 |
| Machine operatives, not specified (692) | 0.4 | 0.1 | 0.2 |
| Miscellaneous operatives (694) | 0.7 | 0.3 | 0.5 |
| Transport operatives |  |  |  |
| Bus drivers (703) | 0.3 | 0.3 | 0.3 |
| Deliverymen and routemen (705) | 0.7 | 0.1 | 0.4 |
| Fork lift and tow motor operatives (706) | 0.6 | 0.0 | 0.3 |
| Truck drivers (715) | 3.0 | 0.0 | 1.5 |
| Workers, except farm |  |  |  |
| Construction laborers, except carpenters' helpers (751) | 1.2 | 0.0 | 0.6 |
| Freight and material handlers (753) Gardeners and groundskeepers, except farm (755) | 0.8 | 0.1 | 0.4 |
|  | 0.7 | 0.0 | 0.4 |
| Stock handlers (762) | 0.5 | 0.2 | 0.3 |
| Not specified laborers (785) | 0.7 | 0.1 | 0.4 |
| Farm workers |  |  |  |
| Farmers (B01) | 2.0 | 0.2 | 1.1 |
| Farm laborers, wage workers (822) | 0.7 | 0.3 | 0.5 |

TABLE 23.-Continued

| Occupation | Men | Women | Total |
| :--- | :---: | :---: | :---: |
| Service workers |  |  |  |
| Cleaners and charwomen (902) | 0.5 | 0.7 | 0.6 |
| Janitors and sextons (903) | 1.3 | 0.4 | 0.8 |
| Cooks, except private household (912) | 0.6 | 1.0 | 0.8 |
| Waiters (915) | 0.2 | 1.4 | 0.8 |
| Food service workers n.e.c., except private |  |  |  |
| household (916) | 0.1 | 0.6 | 0.4 |
| Nursing aides, orderlies, and attendants (925) | 0.2 | 1.3 | 0.8 |
| Practical nurses (926) | 0.1 | 0.7 | 0.4 |
| Child care workers, except private |  |  |  |
| household (942) | 0.0 | 0.6 | 0.3 |
| Hairdressers and cosmetologists (944) | 0.1 | 0.8 | 0.4 |
| Guards and watchmen (962) | 0.7 | 0.2 | 0.5 |
| Policemen and detectives (964) | 0.9 | 0.1 | 0.4 |
| Maids and servants, private household (984) | 0.0 | 0.7 | 0.4 |
|  |  | 15.9 | 22.7 |
| All other occupations | 30.2 | 38.6 | 25.3 |
| Not in labor force | 10.9 |  |  |

NOTE: Includes all cccupational codes with at least 100 cases (aged 20 to 64 ) in the 1978-1980 HIS (unweighted sample).
${ }^{1}$ Not eisewhere classified.
SOURCE: National Center for Health Statistics Health Interview Surveys, 1978-1980 (combined).


FIGURE 13.-Changes in the prevalence of cigarette smoking among successive birth cohorts of U.S. men employed in professional, technical, and kindred occupations, 1900-1978
SOURCE: Data from National Center for Health Statistics, National Health Interview Surveys, 1978-1980 (combined).


FIGURE 14.-Changes in the prevalence of cigarette smoking among successive birth cohorts of U.S. men employed as managers and administrators, 1900-1978
SOURCE: Data from National Center for Health Statistics. National Health Interview Surveys, 1978-1980 (combined).


FIGURE 15.-Changes in the prevalence of cigarette smoking among successive birth cohorts of U.S. men employed as craftsmen or in kindred occupations, 1900-1978
SOURCE: Data from National Center for Health Statistics, National Health Interview Surveys, 1978-1980 (combined).


FIGURE 16.-Changes in the prevalence of cigarette smoking among successive birth cohorts of U.S. men employed as operatives or in kindred occupations, 1900-1978
SOURCE: Data from National Center for Health Statistics, National Health Interview Surveys, 1978-1980 (combined).


FIGURE 17.-Changes in the prevalence of cigarette smoking among successive birth cohorts of U.S. women employed in professional, technical, or kindred occupations, 1900-1978
SOURCE: Data from National Center for Health Statistics. National Health Interview Surveys, 1978-1980 (combined).


FIGURE 18.-Changes in the prevalence of cigarette smoking among successive birth cohorts of U.S. women employed in clerical or kindred occupations, 1900-1978
SOURCE: Data from National Center for Health Statiatics, National Health Interview Surveys, 1978-1980 (combined).

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[^0]:    ${ }^{\text {I }}$ White-collar occupations are designated by code values 001-399; blue-collar occupations are designated by code values $400-785$.

[^1]:    ${ }^{1}<100$ casea in the denominator (unweighted sample).
    ' Not elsewhere classified.
    SOURCE: National Center for Health Statistics Health Interview Surveys, 1978-1980 (combined).

