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## National Breast Cancer Awareness Month — October 1998

October is National Breast Cancer Awareness Month. This nationwide educational campaign directly supports efforts such as CDC's National Breast and Cervical Cancer Early Detection Program (NBCCEDP) to increase public awareness of the importance of screening. A key date in the month-long campaign is October 16, National Mammography Day, a yearly observance formally established by the President in 1992.

Now in its ninth year, the NBCCEDP supports critical breast and cervical cancer screening services for underserved women, including older women, women with low income, and women of racial/ethnic minority populations. CDC supports early detection programs in 50 states, the District of Columbia, five territories, and 15 programs serving American Indians/Alaskan Natives. Through March 1998, these programs have provided more than 1.7 million screenings.

Additional information about National Breast Cancer Awareness Month and the NBCCEDP is available from CDC's Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, World-Wide Web site http://www.cdc.gov/nccdphp/dcpc/nbccedp, and telephone (770) 4884751.

## Self-Reported Use of Mammography and Insurance Status Among Women Aged $\geq 40$ Years - United States, 1991-1992 and 1996-1997

In the United States, breast cancer is the most commonly diagnosed malignancy among women and the second leading cause of cancer death (1). Lack of health insurance coverage often is an important financial barrier to seeking preventive health care such as mammography screenings ( 2,3 ). To assess mammography use and the impact of insurance status on mammography use, state-specific proportions of women aged $\geq 40$ years who reported receiving a mammogram during the preceding 2 years by insurance status were derived using data from the Behavioral Risk Factor Surveillance System (BRFSS) for 1991-1992 and 1996-1997. This report describes the results of this analysis, which indicate that the percentage of women reporting having had a

## U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

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screening mammogram during the previous 2 years increased, but women with insurance were substantially more likely than women without insurance to have had a mammogram.

Forty-six states and the District of Columbia (DC) participated in BRFSS surveys during 1991-1992 and 1996-1997.* Using a multistage sampling design and randomdigit dialing, each state conducted monthly telephone interviews sampling noninstitutionalized adults (aged $\geq 18$ years) ( 3,4 ). Annual data were weighted to the age, sex, and race distribution of each state's adult population using 1994 census or intercensal estimates. Female respondents aged $\geq 40$ years were asked, "Have you ever had a mammogram?" If the respondent answered "yes," she was asked, "How long has it been since your last mammogram?" and "Was it part of a routine checkup, or was it because of a breast problem other than cancer, or was it because you had already had breast cancer?" Respondents also were asked, "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?" In the 1996 and 1997 surveys, respondents who answered "no" were asked to reconsider the question. For consistency between the surveys, this analysis categorized respondents in 1996 and 1997 who first answered "no" to the insurance question as uninsured, even if they answered "yes" when asked again; the increase in the percentage of persons insured based on "yes" responses on reconsideration of the question was $<2 \%$.

Almost all women aged $\geq 65$ years have Medicare coverage (3). However, the aggregated results for all women aged $\geq 40$ years are presented because this format is consistent with prior analyses of trends in mammography coverage using data from the BRFSS and national objectives for breast cancer screening ( 5,6 ). To compensate for the potential affects of the resulting differences in age distributions between insured and uninsured women, estimates were age-adjusted to the age distribution of women in the 1994 BRFSS sample for participating states.

The overall pooled age-adjusted proportion of women with insurance who reported having had a mammogram was $65.2 \%$ in 1991-1992 and 70.9\% in 1996-1997; the proportion of women without insurance who reported having had a mammogram was $39.6 \%$ in 1991-1992 and $46.2 \%$ in 1996-1997. In each of the 46 states and DC in both 1991-1992 and 1996-1997, the prevalence of self-reported screening mammography use within the previous 2 years was higher among insured women than among uninsured women; uninsured women represented approximately $9 \%$ of the sample in 1996-1997 (Table 1).

Among insured women, from 1991-1992 to 1996-1997, the age-adjusted proportion aged $\geq 40$ years who reported having had a mammogram during the preceding 2 years increased in 43 states. Increases in 26 states were statistically significant; the largest absolute increases in mammography use were in Mississippi (from 51.4\% to $65.3 \%$ ) and Alaska (from $63.9 \%$ to $76.4 \%$ ). Mammography use decreased in three states (Minnesota, Vermont, and Washington), and DC, but the changes were not statistically significant.

Among uninsured women, mammography use increased in 33 states; the increase was significant in six. The largest absolute increases were $31.0 \%$ in Alaska (from $33.8 \%$ to $64.8 \%$ ) and $23.9 \%$ in New Jersey (from 23.7\% to 47.6\%). Although there were

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decreases in 14 states, the only statistically significant decrease was in New Hampshire (from $51.1 \%$ to $32.4 \% ; p=0.047$ ).
Reported by the following BRFSS coordinators: J Cook, MBA, Alabama; P Owen, Alaska; B Bender, MBA, Arizona; J Senner, PhD, Arkansas; B Davis, PhD, California; M Leff, MSPH, Colorado; M Adams, MPH, Connecticut; F Breukelman, Delaware; C Mitchell, District of Columbia; S Hoecherl, Florida; L Martin, MS, Georgia; A Onaka, PhD, Hawaii; J Aydelotte, Idaho; B Steiner, MS, Illinois; K Horvath, Indiana; A Wineski, Iowa; M Perry, Kansas; K Asher, Kentucky; R Jiles, PhD, Louisiana; D Maines, Maine; A Weinstein, MA, Maryland; D Brooks, MPH, Massachusetts; H McGee, MPH, Michigan; N Salem, PhD, Minnesota; D Johnson, Mississippi; T Murayi, PhD, Missouri; P Feigley, PhD, Montana; M Metroka, Nebraska; E DeJan, MPH, Nevada; L Powers, MA, New Hampshire; G Boeselager, MS, New Jersey; W Honey, MPH, New Mexico; T Melnik, DrPH, New York; K Passaro, PhD, North Carolina; J Kaske, MPH, North Dakota; P Pullen, Ohio; N Hann, MPH, Oklahoma; J Grant-Worley, MS, Oregon; L Mann, Pennsylvania; J Hesser, PhD, Rhode Island; D Shepard, South Carolina; M Gildemaster, South Dakota; D Ridings, Tennessee; K Condon, Texas; R Giles, Utah; C Roe, MS, Vermont; L Redman, MPH, Virginia; K Wynkoop-Simmons, PhD, Washington; F King, West Virginia; P Imm, MS, Wisconsin; M Futa, MA, Wyoming. Epidemiology and Health Svcs Research Br, Div of Cancer Prevention and Control, and Health Care and Aging Studies Br, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.
Editorial Note: The findings in this report indicate that the percentage of women reporting having had a screening mammogram in the previous 2 years has increased over time, and this increase has been observed among both insured and uninsured women. However, women without insurance continue to be substantially less likely than women with insurance to have this procedure. These results underscore the importance of public health activities to increase access to breast and cervical cancer screening services for women who are medically underserved (7). If breast cancer mortality is to continue to decrease, then access to mammography for all women, particularly the uninsured, must be enhanced (8).

The findings in this report are subject to at least three limitations. First, because the BRFSS is a telephone survey, women living in a household without a telephone ( $5 \%$ of U.S. households) are excluded (9). Second, the survey's self-reported data may not be consistent with reports of mammography use from medical records. However, studies comparing self-reports with medical records found that the error in self-reporting mammography use is not substantial enough to explain the differences seen in the analyses described in this report (10). Finally, the response rates within the BRFSS have dropped from $84.1 \%$ and $82.9 \%$ in 1991 and 1992, respectively, to $77.9 \%$ and $76.8 \%$ in 1996 and 1997, respectively. Because respondents may differ from nonrespondents, this increase in nonresponse could portend greater bias in later samples.

This study indicates that lack of health insurance decreases the likelihood that a woman will receive a mammogram. This is an important finding given the efforts being made to reduce breast cancer mortality in this country, where a substantial proportion of women lack health insurance. The demonstrated efficacy of regular breast cancer screening with mammography suggests that efforts such as CDC's National Breast and Cervical Cancer Early Detection Program, a comprehensive nationwide program administered through state health departments and American Indian/ Alaskan Native tribal organizations, could facilitate the early detection of breast cancer in underserved women.

## References

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TABLE 1. Percentage of women aged $\geq 40$ years who reported having had a mammogram during the previous 2 years, by insurance status - United States, Behavioral Risk Factor Surveillance System (BRFSS), 1991-1992 and 1996-1997*

| State | Insured |  |  |  |  |  | Uninsured |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sample size |  | $\begin{aligned} & \text { Percentage } \\ & \text { 1991-1992 } \end{aligned}$ |  | $\begin{aligned} & \text { Percentage } \\ & \text { 1996-1997 } \end{aligned}$ |  | Sample size |  | $\begin{aligned} & \text { Percentage } \\ & \text { 1991-1992 } \end{aligned}$ |  | $\begin{aligned} & \text { Percentage } \\ & \text { 1996-1997 } \end{aligned}$ |  |
|  | 1991- | 1996- |  |  | 1991- | 1996- |  |  |  |  |
|  | 1992 | 1997 | \% | ( $\mathrm{SE}^{\dagger}$ ) |  |  | \% | (SE) | 1992 | 1997 | \% | (SE) | \% | (SE) |
| Alabama | 1,225 | 1,424 | 68.3 | (1.5) | 70.7 | (1.4) | 190 | 200 | 41.5 | ( 4.3) | 43.0 | ( 5.1) |
| Alaska | 641 | 754 | 63.9 | (2.8) | $76.4{ }^{\text {§ }}$ | (2.4) | 83 | 162 | 33.8 | ( 8.1) | $64.8{ }^{\text {§ }}$ | ( 5.2) |
| Arizona | 977 | 1,231 | 63.6 | (2.2) | $73.2{ }^{\text {§ }}$ | (2.2) | 133 | 119 | 47.2 | ( 4.5) | 41.8 | ( 7.0) |
| California | 1,764 | 2,370 | 72.0 | (1.3) | 74.1 | (1.1) | 185 | 263 | 43.1 | ( 6.7) | 45.9 | ( 6.0) |
| Colorado | 997 | 1,128 | 68.7 | (1.6) | 71.7 | (1.6) | 85 | 80 | 42.9 | ( 6.6) | 30.5 | ( 5.9) |
| Connecticut | 1,144 | 1,375 | 69.5 | (1.6) | $74.1{ }^{\text {§ }}$ | (1.4) | 64 | 83 | 50.3 | ( 7.3) | 36.4 | ( 7.4) |
| Delaware | 973 | 1,636 | 69.2 | (1.7) | $77.2^{\text {8 }}$ | (1.3) | 83 | 106 | 36.3 | ( 6.8) | 41.8 | ( 5.4) |
| District of Columbia | 853 | 822 | 80.7 | (1.7) | 76.9 | (1.7) | 114 | 83 | 54.9 | ( 5.2) | 63.4 | ( 6.7) |
| Florida | 1,581 | 2,356 | 65.4 | (1.6) | $77.3^{\text {§ }}$ | (1.1) | 207 | 294 | 39.0 | ( 4.4) | 43.6 | ( 4.2) |
| Georgia | 1,017 | 1,383 | 64.0 | (1.7) | $70.9{ }^{\text {§ }}$ | (1.4) | 139 | 105 | 44.7 | ( 5.8) | $60.2{ }^{\text {§ }}$ | ( 4.6) |
| Hawaii | 1,076 | 1,418 | 66.8 | (1.8) | $74.2^{\text {§ }}$ | (1.4) | 67 | 74 | 32.0 | ( 5.8) | 48.6 | (10.7) |
| Idaho | 1,055 | 2,430 | 56.0 | (1.8) | 59.5 | (1.3) | 112 | 245 | 26.0 | ( 4.0) | 24.6 | ( 4.3) |
| Illinois | 1,244 | 1,828 | 66.1 | (1.7) | 68.7 | (1.3) | 112 | 143 | 40.6 | ( 5.7) | 54.3 | ( 5.1) |
| Indiana | 1,422 | 1,458 | 61.5 | (1.5) | 65.9§ | (1.5) | 103 | 127 | 25.7 | ( 4.6) | 33.8 | ( 6.7) |
| Iowa | 1,046 | 2,627 | 60.0 | (1.9) | 64.1 | (1.2) | 57 | 125 | 45.2 | (10.2) | 40.3 | ( 8.0) |
| Kentucky | 1,264 | 2,695 | 55.8 | (1.7) | $68.0{ }^{\text {§ }}$ | (1.2) | 183 | 223 | 31.8 | ( 4.0) | 33.3 | ( 6.3) |
| Louisiana | 926 | 974 | 56.8 | (1.9) | $65.1{ }^{\text {§ }}$ | (1.8) | 175 | 186 | 29.0 | ( 5.3) | 49.9 § | ( 5.6) |
| Maine | 744 | 1,132 | 68.1 | (2.0) | 72.5 | (1.7) | 52 | 106 | 42.8 | ( 8.2) | 39.4 | ( 7.0) |
| Maryland | 1,172 | 2,899 | 75.0 | (1.5) | 78.5 | (1.0) | 88 | 195 | 42.9 | ( 6.1) | 56.8 | ( 5.5) |
| Massachusetts | 781 | 1,081 | 71.8 | (1.8) | 76.1 | (1.6) | 43 | 66 | 39.8 | ( 9.7) | 62.6 | ( 8.4) |
| Michigan | 1,440 | 1,605 | 68.5 | (1.4) | $75.1{ }^{\text {§ }}$ | (1.3) | 89 | 98 | 45.2 | ( 7.3) | 50.1 | ( 6.2) |
| Minnesota | 2,007 | 2,908 | 69.4 | (1.2) | 68.7 | (1.0) | 89 | 137 | 42.7 | ( 6.8) | 35.3 | ( 4.8) |
| Mississippi | 1,013 | 1,114 | 51.4 | (1.9) | $65.3{ }^{\text {§ }}$ | (1.8) | 148 | 128 | 35.6 | ( 4.9) | 39.8 | ( 7.0) |
| Missouri | 938 | 1,172 | 63.7 | (1.9) | 66.4 | (1.6) | 115 | 110 | 35.1 | ( 5.2) | 43.2 | ( 8.3) |
| Montana | 725 | 1,195 | 62.5 | (2.1) | $69.2^{\text {§ }}$ | (1.5) | 75 | 135 | 23.7 | ( 5.1) | $37.8{ }^{\text {§ }}$ | ( 4.6) |
| Nebraska | 993 | 1,755 | 55.7 | (2.0) | 64.5 ${ }^{\text {§ }}$ | (1.6) | 48 | 94 | 36.6 | ( 8.0) | 45.2 | (11.6) |
| New Hampshire | 845 | 982 | 70.6 | (1.8) | 73.5 | (1.5) | 54 | 64 | 51.1 | ( 8.1) | $32.4{ }^{\text {§ }}$ | ( 4.8) |
| New Jersey | 1,036 | 1,881 | 60.6 | (1.8) | $68.9{ }^{\text {§ }}$ | (1.3) | 48 | 136 | 23.7 | ( 7.9) | $47.6{ }^{\text {§ }}$ | ( 5.9) |
| New Mexico | 587 | 902 | 64.0 | (2.4) | 69.1 | (1.9) | 128 | 164 | 34.1 | ( 5.1) | 41.1 | ( 6.4) |


| New York | 1,221 | 2,448 | 64.4 | (1.7) | 73.9§ | (1.1) | 98 | 184 | 35.2 | ( 6.8) | 45.0 | ( 5.4) | 3 | S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North Carolina | 1,256 | 2,133 | 64.2 | (1.7) | $71.0{ }^{\text {§ }}$ | (1.2) | 127 | 192 | 35.2 | ( 5.0) | 42.6 | ( 4.6) | 今 | $\pm$ |
| North Dakota | 1,105 | 1,222 | 65.6 | (1.7) | $71.1{ }^{\text {§ }}$ | (1.6) | 60 | 88 | 29.2 | ( 7.6) | 27.5 | ( 6.0) | $\bigcirc$ | ミ |
| Ohio | 790 | 1,715 | 60.4 | (2.1) | 69.8 | (1.6) | 56 | 120 | 46.9 | ( 7.1) | 56.4 | ( 5.9) | $\bigcirc$ | z |
| Oklahoma | 931 | 1,235 | 57.9 | (1.9) | $64.8{ }^{\text {§ }}$ | (1.7) | 157 | 147 | 29.2 | ( 4.2) | 26.7 | ( 5.3) | $\stackrel{\square}{0}$ | $\bigcirc$ |
| Oregon | 2,094 | 2,084 | 70.3 | (1.1) | 73.3 | (1.1) | 183 | 160 | 42.0 | ( 5.1) | 37.6 | ( 5.0) | $\stackrel{5}{2}$ | - |
| Pennsylvania | 1,521 | 2,472 | 62.1 | (1.5) | $68.5{ }^{\text {§ }}$ | (1.1) | 73 | 159 | 46.4 | ( 7.7) | 53.8 | ( 5.5) | 1 |  |
| Rhode Island | 1,093 | 1,220 | 69.5 | (1.6) | $77.0^{\text {§ }}$ | (1.5) | 48 | 63 | 37.1 | ( 7.7) | 48.3 | ( 8.8) | $\bigcirc$ | $\bigcirc$ |
| South Carolina | 1,258 | 1,352 | 64.2 | (1.7) | $71.5^{\text {§ }}$ | (1.6) | 177 | 155 | 43.2 | ( 4.6) | 54.4 | ( 6.6) | $\bigcirc$ |  |
| South Dakota | 1,113 | 1,439 | 59.7 | (1.7) | $67.3^{\text {§ }}$ | (1.5) | 68 | 107 | 24.4 | ( 5.4) | 37.4 | ( 7.6) | F | . |
| Tennessee | 1,588 | 2,167 | 60.4 | (1.4) | $66.5^{\text {§ }}$ | (1.3) | 174 | 179 | 36.9 | ( 4.7) | 45.8 | ( 5.0) | ¢ |  |
| Texas | 1,033 | 1,167 | 62.7 | (1.8) | 66.3 | (1.7) | 196 | 222 | 40.6 | ( 5.0) | 47.3 | ( 4.9) | 2 |  |
| Utah | 944 | 1,606 | 62.9 | (1.8) | 64.6 | (1.6) | 71 | 150 | 35.8 | ( 9.6) | 21.8 | ( 5.6) |  |  |
| Vermont | 1,038 | 1,813 | 69.6 | (1.6) | 69.2 | (1.3) | 96 | 168 | 35.1 | ( 6.0) | 50.0 | ( 5.1) |  |  |
| Virginia | 931 | 1,752 | 65.6 | (1.8) | 70.5§ | (1.5) | 101 | 206 | 48.7 | ( 6.0) | 47.0 | ( 5.4) |  |  |
| Washington | 1,319 | 2,289 | 69.9 | (1.5) | 68.7 | (1.1) | 99 | 133 | 39.1 | ( 6.7) | 49.9 | ( 7.4) |  |  |
| West Virginia | 1,664 | 1,783 | 60.1 | (1.4) | $69.1{ }^{\text {§ }}$ | (1.3) | 232 | 196 | 31.2 | ( 3.8) | 43.4 | ( 6.0) |  |  |
| Wisconsin | 803 | 1,402 | 64.7 | (1.9) | 67.4 | (1.8) | 31 | 84 | 60.8 | ( 8.7) | 50.3 | ( 8.1) |  |  |
| Pooled | 53,188 | 77,834 | 65.2 | (0.3) | 70.9§ | (0.3) | 5,116 | 6,764 | 39.6 | ( 1.3) | $46.2^{\text {§ }}$ | ( 1.3) |  | 3 |

*Percentages are age-adjusted to the distribution of the 1994 BRFSS sample.
$\dagger$ Standard error.
${ }^{\S}$ Difference within insurance group between $1991-1992$ and 1996-1997 is significant ( $p<0.05$ ).

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## Update: Influenza Activity — Worldwide, April-September 1998

In collaboration with the World Health Organization (WHO), the WHO international network of approximately 110 collaborating laboratories in 83 countries, and U.S. state and local health departments, CDC conducts surveillance to monitor influenza activity and to detect antigenic changes in the circulating strains of influenza viruses. During October 1997-April 1998. influenza activity was moderate to severe in the Northern Hemisphere (1). Influenza A(H3N2) viruses were predominant, but influenza $\mathrm{A}(\mathrm{H} 1 \mathrm{~N} 1)$ viruses were associated with outbreaks, and influenza $B$ viruses were identified sporadically in all regions. Since April 1998, increased influenza outbreak and epidemic level activity, primarily associated with influenza A(H3N2), has been reported in the Southern Hemisphere. This report summarizes worldwide influenza activity during April-September 1998 and the antigenic characteristics of influenza isolates collected during April-September.

Africa. Influenza activity in South Africa primarily was associated with influenza A(H3N2) viruses. Activity began earlier, in March, and was more extensive than usual. Influenza A(H3N2) activity peaked from mid-May through the first week of June, but viruses continued to be isolated through July. Influenza A(H1N1) and influenza B viruses were detected sporadically during June-July. In Mauritius, outbreaks of influenza $A(H 3 N 2)$ were detected from the end of April through May; viruses were isolated sporadically through June. Influenza A(H3N2) viruses were isolated in Senegal during May-July, and in Réunion during July.

Asia. Influenza $A(H 3 N 2)$ viruses predominated in Asia, but influenza $A(H 1 N 1)$ and influenza B viruses also were isolated. In China, outbreaks of influenza $A(H 3 N 2)$ viruses were reported each month from April through June. Influenza B viruses were isolated less frequently, but were detected each month from April through June with outbreaks reported in April; influenza A(H1N1) viruses were isolated during April. In

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Hong Kong, influenza $A(H 3 N 2)$ viruses were predominant. The number of virus isolations peaked during March with a second smaller peak during July. Influenza B viruses were isolated every month from April through August with the numbers increasing during June-July. Influenza A(H1N1) virus isolations declined after the beginning of 1998, but H1N1 viruses were detected sporadically during April and June. In Japan, influenza $\mathrm{A}(\mathrm{H} 3 \mathrm{~N} 2)$ viruses predominated during the winter and continued to be isolated through April; influenza B viruses were detected each month from April to July. In Sri Lanka, outbreaks of influenza A(H3N2) began during the last week of April and continued through May. In Myanmar, an influenza A outbreak was detected in late June; four of five isolates were influenza $A(H 3 N 2)$ and one was influenza $A(H 1 N 1)$. In Thailand, influenza A viruses were detected during June-July; most subtyped viruses were $A(H 3 N 2)$, but a few influenza $A(H 1 N 1)$ viruses were isolated. In Guam, influenza A(H3N2) viruses were isolated during April-June, and in Nepal during April-May. In Malaysia, influenza A(H3N2) and A(H1N1) viruses were isolated during June. Influenza $B$ viruses were isolated in Turkey during May.

Europe. During the 1997-98 season, influenza activity was lower in Europe than last season and began later than in North America. Activity levels peaked in many European countries during March, but isolation of influenza viruses was common through April. Influenza $A(H 3 N 2)$ viruses were most frequently isolated, but influenza $A(H 1 N 1)$ viruses predominated in Belarus, Latvia, and Portugal. In Finland, Sweden, Switzerland, and the United Kingdom, influenza A(H3N2) viruses continued to be isolated during May and during June in France. Influenza B viruses were isolated in Finland and France during May, in Spain during June, and in Finland during September.

North America. In the United States, influenza A(H3N2) viruses predominated during the winter and continued to be isolated every month through September. Influenza B viruses were isolated through June and during August. No influenza A(H1N1) viruses have been isolated in the United States since March. Summer outbreaks associated with influenza A(H3N2) viruses were reported in Montana, Florida, Tennessee (2), and Alaska and the Yukon Territory, Canada ( 3,4 ). During September, an outbreak of influenza $\mathrm{A}(\mathrm{H} 3 \mathrm{~N} 2)$ in a nursing home was reported in California. In addition to the influenza activity in the Yukon Territory, Canada reported influenza $A$ and influenza $B$ isolates through May and April, respectively, and influenza A again in September.

Oceania. Influenza activity peaked in southern Australia during July and in Sydney and Brisbane during August and September, respectively. Influenza A(H3N2) viruses predominated, but influenza B viruses were detected sporadically; no influenza A(H1N1) viruses were isolated. In New Zealand, rates of influenza-like illness were lower than in recent years. Influenza A viruses were isolated during June-August; influenza $A(H 1 N 1)$ viruses were isolated more frequently, but influenza $A(H 3 N 2)$ viruses also were detected. A small number of influenza B viruses were detected in New Zealand during May. In New Caledonia, outbreaks of influenza $A(H 3 N 2)$ viruses were reported from the beginning of April through the first week of July.

South America. Influenza A(H3N2) viruses predominated in South America during 1998. In Argentina, influenza A(H3N2) viruses were associated with outbreaks during March and each month from May through August. In Brazil, influenza A(H3N2) viruses predominated and were isolated from March through August. Influenza type B viruses were isolated less frequently but were associated with outbreaks in São Paulo during April-June; a single influenza A(H1N1) virus was identified in June. In Chile, influenza

Influenza Activity - Continued
A(H3N2) viruses first were detected during March. Influenza activity peaked during the first half of May, and lower activity levels were reported through August. All influenza viruses identified from Chile were influenza A(H3N2) with the exception of one influenza A(H1N1) virus. In Uruguay, influenza activity peaked during June-July and was associated with influenza A(H3N2) viruses. Influenza A(H3N2) viruses were identified in Peru during April, in French Guyana during May, and in Venezuela during June. Influenza A(H1N1) viruses were detected in French Guyana during May. Outbreaks of influenza A were reported from Colombia in September.

Characterization of influenza virus isolates. The WHO Collaborating Center for Surveillance, Epidemiology, and Control of Influenza at CDC analyzes isolates received worldwide. This report describes isolates collected during April-September, including those from the end of the influenza season in the Northern Hemisphere and from the epidemic season in the Southern Hemisphere. Of the 40 influenza B isolates that were characterized antigenically or genetically, 35 were similar to B/Harbin/07/94, the $B /$ Beijing/184/93-like virus contained in the 1998-99 influenza vaccine. Of the 35 B/Harbin/07/94-like viruses, 19 were collected in the United States and Europe, four were from South America, two were from New Zealand, and 10 were from Asia. The remaining five influenza $B$ isolates were $B /$ Victoria/02/87-like viruses collected in Asia. These viruses have not been identified outside of Asia since 1991.

Among 10 influenza $\mathrm{A}(\mathrm{H} 1 \mathrm{~N} 1)$ viruses collected during April-September, seven H1N1 viruses from Asia were similar to A/Beijing/262/95, the H1N1 component of the 1998-99 influenza vaccine. Three influenza A(H1N1) viruses from Brazil and New Zealand were antigenically related to A/Bayern/07/95.

Of 312 influenza A(H3N2) viruses tested, 305 (98\%) were similar to A/Sydney/05/97, the H3N2 component of the 1998-99 influenza vaccine, and seven were similar to older H3N2 strains. Of the H3N2 isolates, 45 (14\%) were from North America, four (1\%) were from Europe, 88 (28\%) were from Asia, 146 (47\%) were from Central and South America, and 29 (9\%) were from South Africa, Australia, or New Zealand.
Reported by: World Health Organization National Influenza Centers, Emerging and Other Communicable Diseases Div, World Health Organization, Geneva, Switzerland. World Health Organization Collaborating Center for Surveillance, Epidemiology, and Control of Influenza, Influenza Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.
Editorial Note: Worldwide surveillance for influenza viruses provides the basis for selecting influenza vaccine strains. Vaccine strains are chosen approximately 7 months before the start of the following influenza vaccination season. In the United States, all of the influenza isolates identified during the past summer have been similar to the strains contained in the 1998-99 influenza vaccine. The influenza vaccine for the 199899 influenza season contains A/Beijing/262/95-like (H1N1), A/Sydney/05/97-like (H3N2), and $B / B e i j i n g / 184 / 93-l i k e ~ a n t i g e n s . ~ U . S . ~ v a c c i n e ~ m a n u f a c t u r e r s ~ w i l l ~ u s e ~ t h e ~ a n t i g e n i-~$ cally equivalent strain B/Harbin/07/94 for the B/Beijing/184/93-like antigen, because of its growth properties (1).

Annual vaccination against influenza is recommended by the Advisory Committee on Immunization Practices for persons aged $\geq 65$ years; persons who reside in nursing homes or chronic-care facilities; persons with chronic cardiovascular or pulmonary disorders, including children with asthma; persons who required medical follow-up or hospitalization during the previous year because of diabetes or other chronic metabolic diseases, renal dysfunction, hemoglobinopathies, or immunosuppression; children

## Influenza Activity - Continued

and teenagers (aged 6 months-18 years) receiving long-term aspirin therapy (who may therefore be at risk for developing Reye syndrome after influenza); and women who will be in the second or third trimester of pregnancy during the influenza season. Vaccination also is recommended for health-care workers and other persons, including household members, in frequent contact with persons at high risk for influenzarelated complications. Influenza vaccine also can be administered to other persons who want to reduce their likelihood of acquiring influenza and for whom vaccination is not contraindicated (5).

In the United States, the optimal time for organized influenza vaccination campaigns is October through mid-November. After mid-November, health-care providers should continue to offer influenza vaccine to unvaccinated high-risk persons even after influenza activity has begun in the community. Influenza surveillance reports from local health departments can be useful for determining the period during which continuing influenza vaccination is beneficial.

Influenza vaccine production during the 1997-98 influenza season was approximately 80 million doses (Food and Drug Administration, unpublished data, 1998), and vaccine production for the 1998-99 influenza season is expected to match or exceed that amount. Although vaccination against influenza is the most effective means of reducing the impact of influenza, antiviral agents provide a useful adjunct (5). Amantadine and rimantadine are available for the prophylaxis or treatment of influenza type A infection, but neither is effective against influenza type $B$ viruses.

Information about influenza surveillance is available through the toll-free CDC Voice Information System, telephone (888) 232-3238, fax (888) 232-3299 (document no. 361100), or CDC's World-Wide Web site http://www.cdc.gov/ncidod/ diseases/flu/weekly.htm. From October through May, the information is updated weekly.

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## Outbreaks of Group B Meningococcal Disease - Florida, 1995 and 1997

Since 1992, Neisseria meningitidis serogroup B strains have caused several com-munity- and school-based outbreaks in the United States (1). Response to such outbreaks is difficult because no serogroup B vaccine is licensed currently for use in the United States, and mass chemoprophylaxis has been evaluated only in restricted settings $(2,3)$. This report describes the use of mass prophylaxis to control outbreaks of serogroup B meningococcal disease in Florida in two unusual settings: a hotel resort and a nursing home.

## Group B Meningococcal Disease - Continued

## Miami-Dade County

During July-August 1995, the Miami-Dade County Health Department was notified of one probable and four laboratory-confirmed cases of serogroup B meningococcal disease among children vacationing at a local resort area. All of the cases occurred among county residents who either stayed at or visited Hotel A. One child died.

The first reported case was in a guest at Hotel A who developed a fever on July 8. On July 9, symptoms developed in a sister and brother staying at Hotel B who had visited Hotel A to play with other children. The sister died shortly after admission to a local hospital; N. meningitidis serogroup B was isolated from blood cultures. Her brother was admitted with fever, vomiting, leg pain, and a petechial rash, and gram negative diplococci were observed in the cerebrospinal fluid (CSF). However, cultures were negative for $N$. meningitidis.

For the investigation, a hotel-related confirmed case was defined as isolation of $N$. meningitidis serogroup B from the blood or CSF of a person with classic symptoms of meningitis who was staying at or visiting hotel A. A presumptive case was defined as detection of gram-negative diplococci in specimens from a normally sterile site (blood and CSF) in a person with classic symptoms who had close contact with a confirmed case-patient.

Investigators noted overcrowding at hotel A, where some rooms had as many as 12 residents. An estimated 730 persons stayed or worked at hotels $A$ and $B$ during the week before onset of symptoms in the first two cases (attack rate: 274 per 100,000 population). The Advisory Committee on Immunization Practices defines an outbreak of serogroup C meningococcal disease as three or more confirmed or probable cases occurring during a period of approximately 3 months in persons with a common affiliation but no close contact, resulting in a primary disease attack rate of at least 10 cases per 100,000 persons (4).

After consultation with epidemiologists at the Florida Department of Health and CDC, county health officials offered prophylaxis on site to all guests and employees at both hotels. Over a 2 -day period, 480 persons ( $66 \%$ of the targeted group) received the recommended rifampin dosage. The hotel swimming pool, the site of organized activities for children, was closed.

Approximately 5 weeks after the first cluster of cases was identified, a case was diagnosed in a 17 -year-old who provided child care at hotel A during the days before onset of symptoms. A secondary case (occurring at least 24 hours after onset in the primary case) was diagnosed in a child who had been in this 17-year-old's care and who had resided at the hotel since June. The child and her family had received prophylaxis at the time of the first meningitis cluster. The county again offered prophylaxis to all guests and employees at hotel A. No further cases were identified among visitors to the resort area.

## Skilled Nursing Facility

On December 5, 1997, the Florida Department of Health was notified of a labora-tory-confirmed case of $N$. meningitidis in a resident of a 104-bed skilled nursing facility. Within 5 days, two additional laboratory-confirmed cases were diagnosed from the facility; all three cases were serogroup B.

Group B Meningococcal Disease - Continued
For the investigation, a suspected case of meningococcal disease was defined as clinical diagnosis of meningococcal disease in a nursing home resident or staff member; a case was confirmed by isolation of $N$. meningitidis from blood or CSF.

A nurse had been hospitalized on December 1 with confusion and fever following 2 weeks of influenza-like symptoms. His CSF contained elevated protein, decreased glucose, and a mononuclear cell count of 7500 per cc. Specimens for culture were not obtained until 3 hours after antibiotics were started and were negative for bacterial pathogens.

On December 2, a 90 -year-old patient in the wing where the staff nurse was assigned was hospitalized with a fever of 104 F ( 40 C ) and vomiting. She died the following day. Blood cultures were positive for N. meningitidis. On December 5, a 56 -year-old nursing assistant who had cared for the first confirmed case-patient was hospitalized after abrupt onset of fever and stiff neck; her CSF was positive for $N$. meningitidis.

On December 5, the Florida Department of Health recommended chemoprophylaxis for all patients and staff. However, the facility had consulted a community physician who recommended administration of prophylaxis to all persons who had visited the facility during the previous 14 days, nasopharyngeal swabs for culturing of all patients and staff, and closure of the facility to all visitors.

Ciprofloxacin ( 750 mg ) was administered to all 114 staff members, 103 of 104 patients, and to approximately 250 visitors. Nasopharyngeal swabs, obtained post prophylaxis from all available patients, were negative for $N$. meningitidis. The facility placed itself on quarantine from December 6 through December 10, permitting no visitors, discharges, or admissions.

On December 10, a 73 -year-old man who resided on the same floor as the first confirmed case-patient was hospitalized with fever and lethargy. Blood cultures were positive for $N$. meningitidis. This patient had refused prophylaxis on December 6. No further cases were reported.

The state laboratory performed pulsed-field gel electrophoresis on the first two outbreak-related case-patients and on two serogroup B case-patients that were linked to each other in another county. The two isolates from the facility showed similar banding patterns, but were different from the controls from the other county. Multilocus enzyme electrophoresis (MEE) subtyping was not performed.
Reported by: R Duany, MD, MA Cruz, MPH, S Atherley, MPH, JA Suarez, V Sneller, PhD, L Vaamonde, MD, K Mavunda, MD, E Sfakianaki, MD, Miami-Dade County Health Dept; E Jennings, Hernando County Health Dept, Spring Hill; R Sanderson, DJ Katz, PhD, R Hopkins, MD, Bur of Epidemiology, P Fiorella, PhD, Bur of Laboratory Svcs, WG Hlady, MD, Florida Dept of Health. Meningitis and Special Pathogens Br, Div of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, CDC.
Editorial Note: Organization-based outbreaks of meningococcal disease previously have been identified in military barracks, schools, universities, among jail inmates, and in a Job Corps center (3,5-8). The Florida serogroup B outbreaks occurred in institutions that have not been reported previously as settings for meningococcal outbreaks.

Crowding may have contributed to the outbreak at the resort hotel, where the hotel pool was the center of activities for a large number of children, and investigators noted room overcrowding. Crowding previously has been identified as a factor in the transmission of $N$. meningitidis at a university campus bar (7) and among jail in-

## Group B Meningococcal Disease - Continued

mates (5), and outbreaks have been reported among children participating in schoolbased group activities (6). In the nursing home outbreak, the first illness occurred in a nurse who had had symptoms of a respiratory infection during the preceding 2 weeks. Coincident upper respiratory infections have been suggested as predisposing risk factors for the subsequent development of meningococcal disease and spread of infection (9). Guidelines for evaluation and management of suspected outbreaks are available only for serogroup C (4); these guidelines were adapted for use in the Florida clusters of serogroup $B$ cases.

The primary tool in the control and prevention of meningococcal disease is identification and chemoprophylaxis of close contacts. Serogrouping of isolates also is necessary to determine whether an outbreak exists and whether vaccination should be considered. Pulsed-field gel electrophoresis and MEE may be useful for identifying the particular strain involved and for linking cases. In the nursing home outbreak, electrophoresis was able to establish that at least three of the four cases were related. Because MEE was not performed on isolates from either outbreak, it is not known whether the Florida outbreaks were caused by the ET-5 strains that have emerged recently as important causes of disease in Europe and the Americas (1).

When an outbreak is confirmed, a decision must be made on the appropriateness of more extensive control measures. Chemoprophylaxis of small, well-defined populations is the only available mass intervention for serogroup B outbreaks.

In many situations, the disadvantages of mass chemoprophylaxis (i.e., expense, side effects, and the emergence of resistant organisms) outweigh the benefits. However, in outbreaks involving small populations (e.g., an outbreak in a nursing home or a single school), administration of chemoprophylaxis to all persons within this population may be effective in preventing larger outbreaks (3).

To be effective, mass prophylaxis must be given simultaneously to all persons at risk. Otherwise, persons may reinfect each other. That may have been the explanation for the occurrence of the second cluster of cases in the hotel outbreak.

Although mass prophylaxis was justified for staff and patients in the nursing home outbreak, more than 250 casual contacts received prophylaxis unnecessarily, which has implications for the development of resistant strains (3). The extensive inappropriate treatment and testing suggests the need for education of medical students and public health professionals about appropriate public health responses to outbreaks of meningococcal disease.

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## Incidence of Initiation of Cigarette Smoking — United States, 1965-1996

Tobacco use is the single leading preventable cause of death in the United States, and the risk for smoking-attributable disease increases the earlier in life smoking begins (1). Trends in the initiation of cigarette smoking are important indicators for directing and evaluating prevention activities (2). CDC and the Substance Abuse and Mental Health Services Administration (SAMHSA) analyzed self-reported data from the National Household Survey on Drug Abuse (NHSDA) for 1994-1997 to study the incidence of initiation of first cigarette smoking and of first daily smoking in the United States during 1965-1996 among persons aged $\leq 66$ years and to estimate the number of new smokers aged <18 years. The findings from the analysis indicated that, during 1988-1996 among persons aged 12-17 years, the incidence of initiation of first use increased by $30 \%$ and of first daily use increased by $50 \%$, and 1,226,000 persons aged <18 years became daily smokers in 1996.

The NHSDA samples households, noninstitutional group quarters (e.g., shelters, rooming houses, and dormitories), and civilians living on military bases (3). The surveys for 1994-1997 were administered to a multistage area probability sample ( $\mathrm{n}=78,330$ ) of the U.S. population aged $\geq 12$ years. The overall response rates for specific years ranged from $73 \%$ to $76 \%$. Data were weighted to provide national estimates, and confidence intervals (Cls) were calculated using SUDAAN ${ }^{\circledR *}$ (4).

Respondents completed the questionnaire that included questions about cigarette use. To estimate age of first use, respondents were asked, "How old were you the first time you smoked a cigarette, even one or two puffs?" To estimate age of first daily use, respondents were asked, "How old were you when you first started smoking cigarettes every day?" The year of initiation of first use and of first daily use were calculated by subtracting each respondent's date of birth from the interview date and then adding the age of first use or first daily use. Estimates of the number of new smokers for a given year during 1965-1995 (for first use) and 1965-1996 (for first daily use) were calculated by combining data on all respondents and applying sample weights; age-specific estimates for any given year used only data for persons in the respective age ranges during the year (2). Because the calculation of initiation of first use for 1996 would have excluded data on persons aged $\leq 11$ years, estimates of the incidence of first use were not made for 1996. Age-specific (i.e., 5-11 years, 1217 years, $18-25$ years, and $26-34$ years) incidence of initiation estimates for a given year were calculated using weighted estimates of the number of persons who were in the relevant age group and who first smoked or first smoked daily during that year divided by the number of persons who were in the relevant age group and who were

[^1]
## Initiation of Cigarette Smoking - Continued

exposed to risk for first use during the year (weighted by their estimated exposure time measured in years) (2). Incidences are expressed as per 1000 person-years (PY) of exposure. ${ }^{\dagger}$

Among persons aged 12-17 years, the incidence of first cigarette use decreased from 1974 (132.2) to 1987 (98.6) and increased from 1988 (107.0) to 1995 (139.1) (Table 1). For persons aged $18-25$ years, first use decreased from the late 1960s through the late 1980s and increased during the 1990s. For persons aged $5-11$ years and 26-34 years, first use was $<23$ throughout the study period.

Among persons aged 12-17 years, the incidence of first daily cigarette use fluctuated from 1966 (42.6) to 1983 (43.8) and gradually increased from 1988 (51.2) to 1996 (77.0) (Table 1). For persons aged 18-25 years, first daily use generally decreased from the 1960s through the early 1990s and then stabilized. First daily use among persons aged 12-17 years was equivalent to that of persons aged 18-25 years during the late 1980s. Among persons aged 26-34 years, first daily use decreased from 1974 (23.7) to 1996 (7.5). During 1965-1988, first daily use was $<4.3$ for persons aged $5-11$ years.

The number of new smokers in the United States increased from the 1980s to 1995 and 1996. The number of persons aged <18 years who first smoked a cigarette was $1,929,000(95 \% \mathrm{Cl}= \pm 153,000)$ in 1988, 2,175,000 ( $95 \% \mathrm{Cl}= \pm 180,000$ ) in 1993, 2,392,000 ( $95 \% \mathrm{Cl}= \pm 231,000$ ) in 1994, and $2,441,000$ ( $95 \% \mathrm{Cl}= \pm 298,000$ ) in 1995. The number of persons aged $<18$ years who first smoked daily was $708,000(95 \% \mathrm{Cl}= \pm 84,000)$ in 1988, $897,000(95 \% \mathrm{Cl}= \pm 100,000)$ in 1993, 1,056,000 (95\% Cl= $\pm 112,000$ ) in 1994, 1,174,000 ( $95 \% \mathrm{Cl}= \pm 163,000$ ) in 1995, and 1,226,000 ( $95 \% \mathrm{Cl}= \pm 196,000$ ) in 1996. In 1995, 3,263,000 persons of all ages first smoked a cigarette; of these, 2,441,000 (74.8\%) were aged <18 years. In 1996, 1,851,000 persons of all ages became daily smokers; of these, 1,226,000 ( $66.2 \%$ ) were aged $<18$ years. If the incidence of initiation had not increased during 1988-1996, approximately $1,492,000$ fewer persons aged $<18$ years would have been daily smokers by 1996.
Reported by: C Crump, L Packer, Research Triangle Institute, Research Triangle Park, North Carolina. J Gfroerer, Office of Applied Studies, Substance Abuse and Mental Health Svcs Administration. Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion; and an EIS Officer, CDC.
Editorial Note: The findings in this report indicate that, during 1988-1996 among persons aged 12-17 years, the incidence of initiation of first use increased by $30 \%$ and of first daily use increased by $50 \%$, more than 6000 persons aged $<18$ years try a cigarette each day, and more than 3000 persons aged <18 years become daily smokers each day. These findings are consistent with previous studies that suggest significant increases in smoking prevalence among U.S. adolescents since 1991 (5,6). Overall, these data show that public health gains observed during the 1970s and 1980s are being reversed.

The magnitude and patterns of the incidence calculated from the mid-1960s through the mid-1980s are generally consistent with those observed from a previous study (2). An estimated 1.1 million persons aged 20 years were regular smokers in 1985 (7), consistent with data from this study that showed 1.0 million persons aged <20 years became daily smokers in 1985

[^2]Initiation of Cigarette Smoking - Continued
TABLE 1. Estimated annual age-specific incidence* of first use and of first daily use of cigarettes among persons aged 12-17 years and 18-25 years, by year and age group — United States, 1965-1996

| Year | First use |  |  |  | First daily use |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 12-17 years |  | 18-25 years |  | 12-17 years |  | 18-25 years |  |
|  | Incidence | (95\% CI ${ }^{\dagger}$ ) | Incidence | (95\% CI) | Incidence | (95\% CI) | Incidence | (95\% CI) |
| 1965 | 101.3 | $( \pm 14.9)$ | 112.9 | ( $\pm 27.2$ ) | 44.0 | ( $\pm 14.1$ ) | 106.2 | ( $\pm 22.7$ ) |
| 1966 | 88.3 | $( \pm 14.3)$ | 125.4 | $( \pm 28.4)$ | 42.6 | $( \pm 9.6)$ | 117.0 | ( $\pm 27.2$ ) |
| 1967 | 112.9 | $( \pm 14.5)$ | 114.6 | ( $\pm 21.8)$ | 48.1 | $( \pm 11.6)$ | 100.8 | $( \pm 25.3)$ |
| 1968 | 101.6 | $( \pm 16.5)$ | 114.6 | ( $\pm 22.0$ ) | 49.7 | $( \pm 11.6)$ | 155.2 | $( \pm 28.4)$ |
| 1969 | 111.0 | $( \pm 15.5)$ | 122.3 | ( $\pm 24.3$ ) | 57.1 | $( \pm 12.2)$ | 116.4 | $( \pm 24.3)$ |
| 1970 | 113.7 | $( \pm 17.8)$ | 112.9 | ( $\pm 22.1$ ) | 52.5 | $( \pm 10.0)$ | 101.9 | $( \pm 20.6)$ |
| 1971 | 119.3 | $( \pm 15.3)$ | 102.1 | ( $\pm 21.6$ ) | 58.0 | $( \pm 11.0)$ | 117.9 | $( \pm 23.7)$ |
| 1972 | 129.6 | $( \pm 14.7)$ | 107.9 | $( \pm 19.8)$ | 57.7 | $( \pm 10.0)$ | 95.4 | $( \pm 17.6)$ |
| 1973 | 114.8 | $( \pm 13.5)$ | 87.2 | $( \pm 15.1)$ | 65.3 | $( \pm 13.1)$ | 106.5 | $( \pm 19.4)$ |
| 1974 | 132.2 | $( \pm 15.9)$ | 84.3 | $( \pm 19.4)$ | 66.2 | $( \pm 11.8)$ | 109.2 | $( \pm 21.0)$ |
| 1975 | 125.0 | $( \pm 15.1)$ | 95.7 | $( \pm 18.8)$ | 49.4 | $( \pm 7.8)$ | 87.1 | $( \pm 18.0)$ |
| 1976 | 124.8 | $( \pm 14.5)$ | 87.6 | $( \pm 19.4)$ | 54.8 | $( \pm 8.2)$ | 93.1 | $( \pm 16.5)$ |
| 1977 | 126.9 | $( \pm 11.8)$ | 87.8 | ( $\pm 18.4)$ | 66.8 | $( \pm 10.0)$ | 108.0 | $( \pm 22.5)$ |
| 1978 | 112.0 | $( \pm 9.4)$ | 72.7 | $( \pm 12.9)$ | 59.6 | $( \pm 7.6)$ | 88.1 | $( \pm 15.1)$ |
| 1979 | 111.0 | $( \pm 11.2)$ | 83.8 | ( $\pm 17.4)$ | 54.7 | $( \pm 17.8)$ | 92.5 | $( \pm 13.7)$ |
| 1980 | 105.1 | $( \pm 9.6)$ | 70.0 | ( $\pm 12.9)$ | 51.6 | $( \pm 6.7)$ | 81.7 | $( \pm 13.5)$ |
| 1981 | 107.0 | $( \pm 10.2)$ | 66.7 | ( $\pm 12.5$ ) | 56.4 | $( \pm 7.6)$ | 73.3 | $( \pm 14.5)$ |
| 1982 | 102.4 | $( \pm 9.2)$ | 67.2 | $( \pm 12.9)$ | 49.2 | $( \pm 6.7)$ | 73.3 | $( \pm 15.3)$ |
| 1983 | 106.0 | $( \pm 10.4)$ | 64.5 | ( $\pm 9.4$ ) | 43.8 | $( \pm 6.3)$ | 73.9 | $( \pm 12.0)$ |
| 1984 | 99.4 | $( \pm 9.0)$ | 71.1 | $( \pm 11.2)$ | 52.3 | $( \pm 7.1)$ | 65.4 | ( $\pm$ 7.8) |
| 1985 | 111.3 | $( \pm 10.2)$ | 69.4 | ( $\pm$ 7.8) | 50.2 | ( $\pm 7.4)$ | 66.2 | $( \pm 10.0)$ |
| 1986 | 107.0 | $( \pm 11.2)$ | 77.2 | $( \pm 11.2)$ | 56.7 | $( \pm 7.6)$ | 69.5 | ( $\pm 9.0$ ) |
| 1987 | 98.6 | $( \pm 9.6)$ | 66.1 | $( \pm 9.2)$ | 51.8 | $( \pm 9.2)$ | 68.0 | $( \pm 9.8)$ |
| 1988 | 107.0 | $( \pm 10.0)$ | 58.6 | $( \pm 9.0)$ | 51.2 | ( $\pm 7.4$ ) | 60.8 | $( \pm 8.8)$ |
| 1989 | 99.5 | $( \pm 9.4)$ | 60.9 | $( \pm 8.6)$ | 53.8 | $( \pm 6.9)$ | 61.4 | ( $\pm 8.8)$ |
| 1990 | 101.6 | $( \pm 8.0)$ | 71.3 | $( \pm 10.2)$ | 57.8 | $( \pm 7.1)$ | 63.6 | ( $\pm$ 8.6) |
| 1991 | 100.5 | $( \pm 8.8)$ | 66.4 | $( \pm 11.0)$ | 57.6 | $( \pm 7.4)$ | 58.0 | $( \pm 8.4)$ |
| 1992 | 115.0 | $( \pm 8.2)$ | 64.7 | $( \pm 8.8)$ | 61.9 | $( \pm 7.8)$ | 69.1 | ( $\pm 8.2$ ) |
| 1993 | 121.4 | ( $\pm$ 9.8) | 70.1 | $( \pm 9.6)$ | 58.7 | $( \pm 6.3)$ | 60.0 | ( $\pm$ 8.4) |
| 1994§ | 131.0 | $( \pm 12.9)$ | 82.0 | $( \pm 14.3)$ | 67.7 | ( $\pm$ 7.3) | 68.9 | $( \pm 11.6)$ |
| 1995 ${ }^{\text {I }}$ | 139.1 | $( \pm 17.8)$ | 85.8 | $( \pm 19.8)$ | 71.8 | ( $\pm$ 8.8) | 62.3 | $( \pm 12.7)$ |
| 1996** | NA ${ }^{\dagger \dagger}$ |  | NA |  | 77.0 | $( \pm 13.7)$ | 68.4 | $( \pm 15.3)$ |

[^3]
## Initiation of Cigarette Smoking - Continued

The findings of this report are subject to at least three potential limitations. First, differential mortality could have influenced the results for the earlier years of the study period because persons who become smokers, especially at a young age, experience higher death rates than persons who do not (2). Second, some persons either may have forgotten that they had ever smoked or reported that initiation occurred more recently than it actually did (2). Third, some persons (especially younger respondents [8]) may not have disclosed smoking behavior because of concerns about social acceptability or fear of disclosure.

If trends continue, approximately 5 million persons aged <18 years will die eventually from a smoking-attributable disease (9). Data on the comprehensive tobacco prevention and control programs in California and Massachusetts indicate that the recent pattern of increases in youth smoking rates can be attenuated (10). Efforts to reduce smoking initiation can be enhanced by further research on the interactions of factors such as tobacco product marketing, distress, and the drug effects of nicotine. Although primary prevention is the major goal of programmatic efforts, immediate cessation is critically important for adolescents (8). Tobacco-use prevention activities should include increasing tobacco prices; reducing the access to, and appeal of, tobacco products; conducting mass media campaigns and school-based tobacco use prevention programs; increasing provision of smoke-free indoor air; decreasing tobacco use by parents, teachers, and influential role models; developing and disseminating effective youth smoking cessation programs; and increasing support and involvement from parents and schools (8).

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FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending October 3, 1998, with historical data - United States

*Ratio of current 4-week total to mean of 154 -week totals (from previous, comparable, and subsequent 4 -week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary - provisional cases of selected notifiable diseases, United States, cumulative, week ending October 3, 1998 (39th Week)

|  | Cum. 1998 |  | Cum. 1998 |
| :---: | :---: | :---: | :---: |
| Anthrax | - | Plague | 6 |
| Brucellosis | 42 | Poliomyelitis, paralytic | 1 |
| Cholera | 7 | Psittacosis | 30 |
| Congenital rubella syndrome | 3 | Rabies, human | - |
| Cryptosporidiosis* | 2,541 | Rocky Mountain spotted fever (RMSF) | 247 |
| Diphtheria | 1 | Streptococcal disease, invasive Group A | 1,677 |
| Encephalitis: California* | 63 | Streptococcal toxic-shock syndrome* | 41 |
| eastern equine* | 4 | Syphilis, congenital ${ }^{\text {I }}$ | 307 |
| St. Louis* | 3 | Tetanus | 32 |
| western equine* | - | Toxic-shock syndrome | 100 |
| Hansen Disease | 86 | Trichinosis | 9 |
| Hantavirus pulmonary syndrome* ${ }^{+\dagger}$ | 15 | Typhoid fever | 254 |
| Hemolytic uremic syndrome, post-diarrheal* | 54 | Yellow fever | - |
| HIV infection, pediatric*§ | 178 |  |  |

-:no reported cases
*Not notifiable in all states.
${ }^{\dagger}$ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID)
§ Updated monthly to the Division of HIV/AIDS Prevention-Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update September 27, 1998.
$\llbracket$ Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending October 3, 1998, and September 27, 1997 (39th Week)

| Reporting Area | AIDS |  | Chlamydia |  | Escherichia coli 0157:H7 |  | Gonorrhea |  | Hepatitis C/NA,NB |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | NETSS ${ }^{\dagger}$ | PHLIS ${ }^{\text { }}$ |  |  |  |  |
|  | $\begin{aligned} & \hline \text { Cum. } \\ & \text { 1998* } \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ |  |  | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1998 \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1997 \end{gathered}$ | $\begin{gathered} \hline \text { Cum. } \\ 1998 \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ |
| UNITED STATES | 35,486 | 43,681 | 396,438 | 343,217 | 2,245 | 1,325 | 241,098 | 217,368 | 2,917 | 2,670 |
| NEW ENGLAND | 1,381 | 1,895 | 14,256 | 13,294 | 273 | 220 | 4,104 | 4,447 | 51 | 46 |
| Maine | 24 | 46 | 743 | 773 | 32 | - | 53 | 52 | - |  |
| N.H. | 28 | 29 | 673 | 599 | 37 | 40 | 71 | 74 | - | - |
| Vt. | 17 | 31 | 315 | 305 | 17 | 10 | 28 | 42 | - | 2 |
| Mass. | 712 | 640 | 6,275 | 5,434 | 130 | 131 | 1,636 | 1,593 | 48 | 37 |
| R.I. | 94 | 119 | 1,710 | 1,506 | 11 | 1 | 282 | 344 | 3 | 7 |
| Conn. | 506 | 1,030 | 4,540 | 4,677 | 46 | 38 | 2,034 | 2,342 | - | - |
| MID. ATLANTIC | 9,642 | 13,711 | 47,100 | 42,877 | 231 | 63 | 27,037 | 28,306 | 288 | 248 |
| Upstate N.Y. | 1,102 | 2,133 | N | N | 173 | - | 4,168 | 4,838 | 224 | 178 |
| N.Y. City | 5,457 | 7,287 | 26,156 | 20,249 | 6 | 12 | 11,673 | 10,369 | - | - |
| N.J. | 1,765 | 2,685 | 7,858 | 7,421 | 52 | 41 | 4,952 | 5,740 | - | - |
| Pa . | 1,318 | 1,606 | 13,086 | 15,207 | N | 10 | 6,244 | 7,359 | 64 | 70 |
| E.N. CENTRAL | 2,567 | 3,310 | 65,965 | 45,338 | 336 | 255 | 46,660 | 29,681 | 391 | 446 |
| Ohio | 540 | 676 | 18,995 | 16,285 | 94 | 53 | 12,187 | 10,668 | 7 | 14 |
| Ind. | 414 | 444 | 4,656 | 6,873 | 76 | 40 | 3,353 | 4,603 | 4 | 12 |
| III. | 993 | 1,345 | 18,908 | U | 84 | 39 | 15,697 | U | 25 | 74 |
| Mich. | 468 | 648 | 15,932 | 13,989 | 82 | 54 | 12,212 | 10,876 | 355 | 321 |
| Wis. | 152 | 197 | 7,474 | 8,191 | N | 69 | 3,211 | 3,534 | - | 25 |
| W.N. CENTRAL | 664 | 823 | 22,676 | 24,053 | 407 | 234 | 11,469 | 10,557 | 247 | 49 |
| Minn. | 136 | 156 | 4,571 | 4,930 | 200 | 98 | 1,723 | 1,724 | 9 | 3 |
| Iowa | 58 | 85 | 2,063 | 3,264 | 79 | 46 | 660 | 845 | 8 | 24 |
| Mo. | 312 | 380 | 8,950 | 8,973 | 32 | 47 | 6,561 | 5,542 | 222 | 9 |
| N. Dak. | 4 | 10 | 616 | 627 | 10 | 13 | 51 | 48 | - | 2 |
| S. Dak. | 13 | 8 | 1,156 | 982 | 22 | 21 | 181 | 103 | - | - |
| Nebr. | 59 | 71 | 1,471 | 1,916 | 42 | - | 508 | 768 | 3 | 2 |
| Kans. | 82 | 113 | 3,849 | 3,361 | 22 | 9 | 1,785 | 1,527 | 5 | 9 |
| S. ATLANTIC | 9,235 | 10,556 | 81,681 | 70,006 | 186 | 119 | 68,014 | 68,667 | 138 | 180 |
| Del. | 112 | 183 | 1,920 |  | - | 2 | 1,109 | 904 | - | - |
| Md. | 1,304 | 1,384 | 5,599 | 5,338 | 27 | 12 | 6,658 | 8,627 | 8 | 4 |
| D.C. | 691 | 751 | N | N | 1 |  | 2,729 | 3,293 | - | - |
| Va. | 688 | 878 | 10,309 | 8,793 | N | 38 | 6,913 | 6,134 | 11 | 23 |
| W. Va. | 70 | 80 | 1,904 | 2,205 | 8 | 6 | 609 | 700 | 6 | 15 |
| N.C. | 638 | 679 | 16,473 | 12,859 | 44 | 37 | 14,440 | 12,767 | 18 | 41 |
| S.C. | 604 | 576 | 13,334 | 9,286 | 11 | 8 | 8,526 | 8,525 | 5 | 33 |
| Ga . | 972 | 1,265 | 17,684 | 11,998 | 61 | - | 15,487 | 13,982 | 9 | - |
| Fla. | 4,156 | 4,760 | 14,458 | 19,527 | 34 | 16 | 11,543 | 13,735 | 81 | 64 |
| E.S. CENTRAL | 1,444 | 1,553 | 29,027 | 25,913 | 93 | 33 | 28,514 | 26,099 | 168 | 279 |
| Ky. | 222 | 292 | 4,776 | 4,812 | 24 | - | 2,762 | 3,085 | 18 | 11 |
| Tenn. | 522 | 631 | 9,916 | 9,517 | 45 | 29 | 8,678 | 8,202 | 143 | 187 |
| Ala. | 395 | 384 | 7,611 | 6,378 | 21 | 2 | 9,811 | 8,934 | 5 | 7 |
| Miss. | 305 | 246 | 6,724 | 5,206 | 3 | 2 | 7,263 | 5,878 | 2 | 74 |
| W.S. CENTRAL | 4,202 | 4,634 | 59,586 | 47,947 | 103 | 14 | 35,192 | 31,445 | 515 | 361 |
| Ark. | 159 | 180 | 2,808 | 2,242 | 9 | 6 | 1,827 | 3,703 | 13 | 11 |
| La. | 708 | 763 | 11,165 | 6,980 | 5 | 2 | 9,644 | 6,744 | 41 | 163 |
| Okla. | 238 | 240 | 7,535 | 5,641 | 12 | 6 | 4,140 | 3,704 | 12 | 7 |
| Tex. | 3,097 | 3,451 | 38,078 | 33,084 | 77 |  | 19,581 | 17,294 | 449 | 180 |
| MOUNTAIN | 1,230 | 1,228 | 16,687 | 22,094 | 275 | 194 | 6,384 | 5,992 | 282 | 240 |
| Mont. | 23 | 34 | 999 | 772 | 15 | - | 32 | 34 | 7 | 19 |
| Idaho | 19 | 41 | 1,497 | 1,191 | 34 | 19 | 135 | 102 | 87 | 49 |
| Wyo. | 1 | 13 | 399 | 436 | 51 | 54 | 18 | 43 | 51 | 61 |
| Colo. | 230 | 313 | 10 | 5,291 | 62 | 48 | 1,716 | 1,600 | 23 | 26 |
| N. Mex. | 179 | 141 | 2,453 | 2,822 | 17 | 13 | 623 | 662 | 76 | 45 |
| Ariz. | 499 | 269 | 7,537 | 8,116 | 21 | 25 | 2,724 | 2,698 | 3 | 24 |
| Utah | 101 | 98 | 1,527 | 1,262 | 65 | 21 | 163 | 202 | 21 | 3 |
| Nev. | 178 | 319 | 2,265 | 2,204 | 10 | 14 | 973 | 651 | 14 | 13 |
| PACIFIC | 5,121 | 5,971 | 59,460 | 51,695 | 341 | 193 | 13,724 | 12,174 | 837 | 821 |
| Wash. | 335 | 455 | 8,155 | 6,800 | 71 | 56 | 1,425 | 1,450 | 17 | 22 |
| Oreg. | 138 | 249 | 4,334 | 3,619 | 91 | 89 | 635 | 555 | 5 | 3 |
| Calif. | 4,500 | 5,173 | 43,797 | 38,821 | 175 | 35 | 11,063 | 9,490 | 760 | 665 |
| Alaska | 17 | 43 | 1,405 | 1,136 | 4 | - | 242 | 300 | 1 | - |
| Hawaii | 131 | 51 | 1,769 | 1,319 | N | 13 | 359 | 379 | 54 | 131 |
| Guam | - | 2 | 201 | 193 | N | - | 24 | 27 | - | - |
| P.R. | 1,246 | 1,509 | U | U | 6 | U | 284 | 449 | - | - |
| V.I. | 24 | 79 | N | N | N | U | U | U | U | U |
| Amer. Samoa | - |  | U | U | N | U | U | U | U | U |
| C.N.M.I. | - | 1 | N | N | N | U | 28 | 17 | - | 2 |

N : Not notifiable U: Unavailable $\quad-:$ no reported cases $\quad$ C.N.M.I.: Commonwealth of Northern Mariana Islands

[^4]last update September 27, 1998.
${ }^{\dagger}$ National Electronic Telecommunications System for Surveillance.
${ }^{\text {§Public Health Laboratory Information System. }}$

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States,
weeks ending October 3, 1998, and September 27, 1997 (39th Week)

| Reporting Area | Legionellosis |  | Lyme Disease |  | Malaria |  | Syphilis <br> (Primary \& Secondary) |  | Tuberculosis |  | Rabies, <br> Animal <br> Cum. <br> 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cum. 1998 | Cum. 1997 | Cum. 1998 | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | $\begin{aligned} & \hline \text { Cum. } \\ & \text { 1998* } \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ |  |
| UNITED STATES | 891 | 721 | 9,161 | 9,201 | 996 | 1,384 | 5,383 | 6,402 | 10,670 | 13,314 | 5,299 |
| NEW ENGLAND | 58 | 64 | 2,271 | 2,470 | 47 | 70 | 56 | 113 | 346 | 323 | 1,111 |
| Maine | 1 | 2 | 11 | 8 | 4 | 1 | 1 | - | 9 | 17 | 179 |
| N.H. | 3 | 6 | 34 | 26 | 5 | 8 | 1 | - | 9 | 10 | 47 |
| Vt. | 5 | 11 | 8 | 8 | 1 | 2 | 4 | - | 2 | 5 | 51 |
| Mass. | 25 | 23 | 626 | 267 | 15 | 25 | 35 | 56 | 196 | 175 | 397 |
| R.I. | 15 | 6 | 427 | 338 | 4 | 5 | 1 | 2 | 41 | 29 | 73 |
| Conn. | 9 | 16 | 1,165 | 1,823 | 18 | 29 | 14 | 55 | 89 | 87 | 364 |
| MID. ATLANTIC | 210 | 145 | 5,774 | 5,278 | 249 | 412 | 204 | 308 | 2,120 | 2,328 | 1,199 |
| Upstate N.Y. | 71 | 42 | 3,237 | 2,190 | 75 | 58 | 28 | 31 | 273 | 318 | 851 |
| N.Y. City | 25 | 17 | 19 | 145 | 109 | 259 | 51 | 66 | 1,102 | 1,170 | U |
| N.J. | 11 | 20 | 1,139 | 1,555 | 41 | 73 | 67 | 124 | 451 | 484 | 148 |
| Pa. | 103 | 66 | 1,379 | 1,388 | 24 | 22 | 58 | 87 | 294 | 356 | 200 |
| E.N. CENTRAL | 272 | 233 | 89 | 466 | 97 | 129 | 736 | 489 | 893 | 1,318 | 114 |
| Ohio | 103 | 86 | 63 | 34 | 13 | 17 | 110 | 161 | 75 | 220 | 50 |
| Ind. | 50 | 38 | 20 | 25 | 10 | 13 | 150 | 135 | 85 | 108 | 10 |
| III. | 25 | 21 | 5 | 12 | 27 | 52 | 286 | U | 485 | 678 | 14 |
| Mich. | 64 | 55 | 1 | 24 | 40 | 35 | 141 | 102 | 245 | 222 | 30 |
| Wis. | 30 | 33 | U | 371 | 7 | 12 | 49 | 91 | 3 | 90 | 10 |
| W.N. CENTRAL | 60 | 39 | 173 | 82 | 75 | 45 | 101 | 141 | 293 | 413 | 564 |
| Minn. | 6 | 1 | 143 | 56 | 42 | 19 | 7 | 16 | 111 | 109 | 97 |
| lowa | 8 | 9 | 21 | 5 | 8 | 8 |  | 6 | 28 | 46 | 127 |
| Mo. | 20 | 7 | 1 | 15 | 14 | 9 | 76 | 91 | 88 | 168 | 19 |
| N. Dak. | - | 2 | - | - | 2 | 3 | - | - | 8 | 9 | 119 |
| S. Dak. | 3 | 2 | - | 1 | - | 1 | 1 | - | 16 | 10 | 121 |
| Nebr. | 16 | 14 | 3 | 2 | 1 | 1 | 4 | 3 | 11 | 15 | 6 |
| Kans. | 7 | 4 | 5 | 3 | 8 | 4 | 13 | 25 | 31 | 56 | 75 |
| S. ATLANTIC | 110 | 92 | 628 | 625 | 234 | 249 | 2,200 | 2,612 | 1,512 | 2,520 | 1,559 |
| Del. | 11 | 9 | 12 | 107 | 3 | 5 | 18 | 17 | 18 | 25 | 17 |
| Md. | 23 | 15 | 463 | 407 | 64 | 73 | 493 | 731 | 218 | 238 | 367 |
| D.C. | 6 | 4 | 4 | 7 | 15 | 14 | 59 | 87 | 81 | 75 | - |
| Va. | 16 | 20 | 50 | 46 | 48 | 60 | 119 | 180 | 187 | 254 | 456 |
| W. Va. | N | N | 9 | 5 | 2 |  | 2 | 3 | 30 | 45 | 62 |
| N.C. | 9 | 12 | 43 | 27 | 19 | 14 | 571 | 669 | 321 | 321 | 136 |
| S.C. | 10 | 6 | 4 | 2 | 5 | 15 | 240 | 285 | 199 | 252 | 117 |
| Ga. | 8 | - | 5 | 1 | 32 | 28 | 536 | 411 | 388 | 473 | 245 |
| Fla. | 25 | 26 | 38 | 23 | 46 | 40 | 162 | 229 | 70 | 837 | 159 |
| E.S. CENTRAL | 53 | 43 | 71 | 73 | 24 | 32 | 910 | 1,362 | 826 | 990 | 227 |
| Ky. | 24 | 9 | 14 | 12 | 4 | 11 | 81 | 107 | 129 | 132 | 28 |
| Tenn. | 17 | 25 | 40 | 35 | 13 | 7 | 426 | 582 | 243 | 351 | 118 |
| Ala. | 5 | 2 | 16 | 7 | 5 | 10 | 219 | 347 | 295 | 324 | 79 |
| Miss. | 7 | 7 | 1 | 19 | 2 | 4 | 184 | 326 | 159 | 183 | 2 |
| W.S. CENTRAL | 24 | 24 | 23 | 62 | 24 | 18 | 782 | 980 | 1,535 | 1,933 | 125 |
| Ark. | - | 1 | 6 | 18 | 1 | 4 | 81 | 121 | 104 | 147 | 29 |
| La. | 2 | 2 | 4 | 2 | 11 | 9 | 318 | 276 | 106 | 183 | - |
| Okla. | 12 | 1 | 2 | 12 | 4 | 5 | 80 | 97 | 134 | 157 | 96 |
| Tex. | 10 | 20 | 11 | 30 | 8 | - | 303 | 486 | 1,191 | 1,446 |  |
| MOUNTAIN | 51 | 44 | 12 | 9 | 45 | 61 | 165 | 135 | 291 | 422 | 174 |
| Mont. | 2 | 1 | - | - | 1 | 2 | - | - | 16 | 6 | 46 |
| Idaho | 2 | 2 | 3 | 3 | 7 | - | 2 | 1 | 8 | 7 | - |
| Wyo. | 1 | 1 | 1 | 1 | - | 2 | 1 |  | 4 | 2 | 54 |
| Colo. | 15 | 16 | 3 | - | 16 | 27 | 9 | 11 | U | 66 | 29 |
| N. Mex. | 2 | 2 | 3 | 1 | 12 | 8 | 22 | 8 | 45 | 45 | 5 |
| Ariz. | 10 | 9 | - | 1 | 8 | 10 | 119 | 101 | 138 | 188 | 12 |
| Utah | 18 | 8 | - | 1 | 1 | 3 | 3 | 5 | 46 | 26 | 26 |
| Nev. | 1 | 5 | 2 | 2 | - | 9 | 9 | 9 | 34 | 82 | 2 |
| PACIFIC | 53 | 37 | 120 | 136 | 201 | 368 | 229 | 262 | 2,854 | 3,067 | 226 |
| Wash. | 9 | 6 | 6 | 8 | 17 | 18 | 27 | 9 | 164 | 236 | - |
| Oreg. | - | - | 18 | 17 | 15 | 19 | 5 | 7 | 102 | 119 | 4 |
| Calif. | 42 | 30 | 95 | 109 | 164 | 319 | 195 | 244 | 2,428 | 2,510 | 199 |
| Alaska | 1 | - | 1 | 2 | 2 | 3 | 1 | 1 | 35 | 60 | 23 |
| Hawaii | 1 | 1 | - | - | 3 | 9 | 1 | 1 | 125 | 142 | - |
| Guam | 2 | - | - | - | 1 | - | 1 | 3 | 36 | 13 | - |
| P.R. | 2 | - | - | , | - | 5 | 150 | 181 | 68 | 164 | 40 |
| V.I. | U | U | U | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. |  | - | - | - | - | - | 164 | 9 | 77 | 2 | - |

N : Not notifiable U: Unavailable $\quad-$ : no reported cases
*Additional information about areas displaying "U" for cumulative 1998 Tuberculosis cases can be found in Notice to Readers, $M M W R$ Vol. 47, No. 2, p. 39.

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending October 3, 1998, and September 27, 1997 (39th Week)


TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending October 3, 1998, and September 27, 1997 (39th Week)

| Reporting Area | Meningococcal Disease |  | Mumps |  |  | Pertussis |  |  | Rubella |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ | 1998 | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ | 1998 | $\begin{gathered} \hline \text { Cum. } \\ 1998 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ | 1998 | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ |
| UNITED STATES | 2,045 | 2,530 | 4 | 368 | 479 | 101 | 4,200 | 4,052 | 4 | 324 | 140 |
| NEW ENGLAND | 80 | 158 | - | 6 | 8 | 9 | 683 | 722 | - | 39 | 1 |
| Maine | 5 | 17 | - | - | - | - | 5 | 9 | - | - | - |
| N.H. | 4 | 12 | - | - | - | 1 | 75 | 101 | - | - | - |
| V t. | 3 | 4 | - | - | - | - | 65 | 193 | - |  | - |
| Mass. | 40 | 77 | - | 4 | 2 | 8 | 495 | 388 | - | 9 | 1 |
| R.I. | 3 | 15 | - | - | 5 | - | 9 | 12 | - | 1 | - |
| Conn. | 25 | 33 | - | 2 | 1 | - | 34 | 19 | - | 29 | - |
| MID. ATLANTIC | 182 | 264 | 1 | 20 | 48 | 6 | 423 | 306 | - | 130 | 31 |
| Upstate N.Y. | 47 | 71 | 1 | 5 | 10 | 6 | 230 | 121 | - | 111 | 4 |
| N.Y. City | 20 | 45 | - | 4 | 3 | - | 23 | 59 | - | 14 | 27 |
| N.J. | 49 | 52 | - | 2 | 7 | - | 5 | 12 | - | 4 | - |
| Pa . | 66 | 96 | - | 9 | 28 | - | 165 | 114 | - | 1 | - |
| E.N. CENTRAL | 303 | 377 | - | 60 | 54 | 3 | 420 | 437 | - | - | 6 |
| Ohio | 114 | 134 | - | 23 | 20 | - | 191 | 124 | - | - | - |
| Ind. | 51 | 42 | - | 6 | 7 | - | 96 | 45 | - | - | - |
| III. | 77 | 113 | - | 10 | 8 | 3 | 65 | 62 | - | - | 2 |
| Mich. | 35 | 55 | - | 21 | 16 | - | 51 | 48 | - | - | - |
| Wis. | 26 | 33 | - | - | 3 | - | 17 | 158 | - | - | 4 |
| W.N. CENTRAL | 172 | 181 | 1 | 26 | 14 | 12 | 384 | 314 | - | 27 | - |
| Minn. | 29 | 29 | - | 12 | 5 | 12 | 212 | 201 | - | - | - |
| Iowa | 32 | 39 | - | 9 | 7 | - | 61 | 29 | - | - | - |
| Mo. | 63 | 79 | - | 3 | - | - | 22 | 55 | - | 2 | - |
| N. Dak. | 5 | 2 | 1 | 2 | - | - | 2 | 1 | - | - | - |
| S. Dak. | 7 | 5 | - | - | - | - | 8 | 4 | - | - | - |
| Nebr. | 9 | 9 | - | - | 1 | - | 14 | 5 | - | - | - |
| Kans. | 27 | 18 | - | - | 1 | - | 65 | 19 | - | 25 | - |
| S. ATLANTIC | 353 | 426 | 1 | 44 | 57 | 19 | 262 | 356 | 3 | 18 | 63 |
| Del. | 2 | 5 | - | - | - | 2 | 5 | 1 | - | - | - |
| Md. | 25 | 40 | - | - | 1 | 1 | 47 | 102 | - | 1 | - |
| D.C. | 1 | 8 | - | - | - | - | 1 | 3 | - | - | 1 |
| Va . | 29 | 43 | 1 | 7 | 10 | 7 | 26 | 42 | 1 | 1 | 1 |
| W. Va. | 12 | 15 | - | - | - | - | 1 | 6 | - | - | - |
| N.C. | 49 | 78 | - | 10 | 9 | 7 | 88 | 99 | 2 | 13 | 53 |
| S.C. | 49 | 46 | - | 6 | 10 | 1 | 25 | 23 | - | - | 6 |
| Ga. | 77 | 83 | - | 1 | 8 | - | 21 | 11 | - | - | - |
| Fla. | 109 | 108 | - | 20 | 19 | 1 | 48 | 69 | - | 3 | 2 |
| E.S. CENTRAL | 189 | 190 | - | 13 | 24 | 1 | 85 | 112 | 1 | 3 | 1 |
| Ky. | 26 | 40 | - | - | 3 | - | 25 | 49 | - | - | - |
| Tenn. | 60 | 62 | - | 1 | 4 | 1 | 32 | 32 | 1 | 2 | - |
| Ala. | 79 | 64 | - | 7 | 7 | - | 25 | 21 | - | 1 | 1 |
| Miss. | 24 | 24 | U | 5 | 10 | U | 3 | 10 | U | - | - |
| W.S. CENTRAL | 256 | 248 | - | 52 | 68 | 3 | 276 | 189 | - | 88 | 4 |
| Ark. | 26 | 29 | - | 7 | 1 | 2 | 60 | 21 | - | - | - |
| La. | 53 | 47 | - | 9 | 12 | - | 5 | 17 | - | 1 | - |
| Okla. | 34 | 33 | - | - | - | - | 19 | 28 | - | - | - |
| Tex. | 143 | 139 | - | 36 | 55 | 1 | 192 | 123 | - | 87 | 4 |
| MOUNTAIN | 114 | 147 | - | 31 | 51 | 26 | 787 | 916 | - | 5 | 7 |
| Mont. | 4 | 7 | - | - | - | - | 9 | 15 | - | - | - |
| Idaho | 9 | 10 | - | 4 | 2 | 2 | 228 | 484 | - | - | 2 |
| Wyo. | 5 | 2 | U | 1 | 1 | U | 8 | 7 | U | - | - |
| Colo. | 23 | 38 | - | 7 | 3 | 1 | 151 | 270 | - | - | - |
| N. Mex. | 22 | 24 | N | N | N | - | 80 | 79 | - | 1 | - |
| Ariz. | 35 | 39 | - | 5 | 31 | 14 | 162 | 31 | - | 1 | 5 |
| Utah | 11 | 12 | - | 5 | 7 | 9 | 120 | 14 | - | 2 | - |
| Nev. | 5 | 15 | - | 9 | 7 | - | 29 | 16 | - | 1 | - |
| PACIFIC | 396 | 539 | 1 | 116 | 155 | 22 | 880 | 700 | - | 14 | 27 |
| Wash. | 54 | 68 | - | 7 | 14 | 17 | 255 | 288 | - | 9 | 5 |
| Oreg. | 68 | 101 | N | N | N | 1 | 88 | 36 | - | - | - |
| Calif. | 266 | 361 | 1 | 85 | 110 | 3 | 515 | 343 | - | 3 | 14 |
| Alaska | 3 | 2 | - | 2 | 8 | - | 14 | 16 | - | - | - |
| Hawaii | 5 | 7 | - | 22 | 23 | 1 | 8 | 17 | - | 2 | 8 |
| Guam | 1 | 1 | U | 2 | 1 | U | - | - | U | - | - |
| P.R. | 6 | 8 | - | 1 | 7 | - | 3 | - | - | - | - |
| V.I. | U | U | U | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. |  | - | U | 2 | 4 | U | 1 | - | U | - | - |

TABLE IV. Deaths in 122 U.S. cities,* week ending October 3, 1998 (39th Week)

| Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | $\begin{aligned} & \text { P\&I }{ }^{\dagger} \\ & \text { Total } \end{aligned}$ | Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | $\underset{\text { P\&I }}{\substack{\dagger}}$Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 |  |  | $\begin{aligned} & \text { All } \\ & \text { Ages } \end{aligned}$ | >65 | 45-64 | 25-44 | 1-24 | <1 |  |
| NEW ENGLAND | 530 | 375 | 103 | 38 | 5 | 9 | 48 | S. ATLANTIC | 1,145 | 716 | 237 | 121 | 36 | 34 | 54 |
| Boston, Mass. | 136 | 88 | 28 | 12 | 2 | 6 | 21 | Atlanta, Ga. | 172 | 85 | 49 | 25 | 4 | 9 | 2 |
| Bridgeport, Conn. | 27 | 25 | 1 | - | 1 | - | 2 | Baltimore, Md. | 216 | 121 | 54 | 31 | 6 | 4 | 15 |
| Cambridge, Mass. | 14 | 11 | 3 |  |  |  | 1 | Charlotte, N.C. | 79 | 51 | 16 | 9 | 3 |  | 6 |
| Fall River, Mass. | 20 | 16 | 2 | 2 |  |  | 1 | Jacksonville, Fla. | 128 | 85 | 20 | 10 | 4 | 9 | 4 |
| Hartford, Conn. | 46 | 29 | 7 | 8 | 1 | 1 | 2 | Miami, Fla. | 107 | 68 | 20 | 16 | 1 | 2 |  |
| Lowell, Mass. | 28 | 23 | 3 | 2 |  |  | 3 | Norfolk, Va. | 48 | 32 | 7 | 4 | 3 | 2 | 2 |
| Lynn, Mass. | 17 | 11 | 6 |  |  |  |  | Richmond, Va. | 68 | 44 | 14 | 5 | 1 | 3 | 3 |
| New Bedford, Mass. | 16 | 13 | 2 | 1 |  |  |  | Savannah, Ga. | 34 | 26 | 5 | 3 | - |  | 2 |
| New Haven, Conn. | 43 | 28 | 11 | 4 |  |  | 3 | St. Petersburg, Fla. | 39 | 33 | 5 | 1 | 7 | $\bar{\square}$ | 2 |
| Providence, R.I. | 58 | 40 | 12 | 4 |  | 2 | 2 | Tampa, Fla. | 141 | 105 | 20 | 8 | 7 | 1 | 13 |
| Somerville, Mass. | 6 | 4 | 2 |  |  |  | 1 | Washington, D.C. | 101 | 56 | 25 | 9 | 7 | 4 | 5 |
| Springfield, Mass. | 34 | 25 | 6 | 3 |  | - | 3 | Wilmington, Del. | 12 | 10 | 2 | - | - |  | - |
| Waterbury, Conn. | 30 | 20 | 9 | 1 |  |  | 4 |  |  |  |  |  |  |  |  |
| Worcester, Mass. | 55 | 42 | 11 | 1 | 1 | - | 5 | E.S. CENTRAL Birmingham, Ala. | 808 | 554 114 | $\begin{array}{r} 162 \\ 34 \end{array}$ | 55 | 13 3 | 21 | 45 |
| MID. ATLANTIC | 2,225 | 1,527 | 435 | 180 | 37 | 46 | 108 | Chattanooga, Tenn. | 71 | 45 | 16 | 6 | 2 | 2 | 4 |
| Albany, N.Y. | 53 | 40 | 8 | 3 | 2 | - | 4 | Knoxville, Tenn. | 82 | 49 | 21 | 7 | 1 | 4 | 5 |
| Allentown, Pa. | 22 | 17 | 4 | 1 |  |  |  | Lexington, Ky. | 90 | 58 | 17 | 9 | 3 | 3 | 5 |
| Buffalo, N.Y. | 99 | 75 | 16 | 6 | 1 |  | 7 | Memphis, Tenn. | 128 | 100 | 19 | 5 | 2 | 2 | 11 |
| Camden, N.J. | 29 | 20 | 6 | 1 |  | 2 | 2 | Mobile, Ala. | 110 | 81 | 19 | 8 | 1 | 1 | 2 |
| Elizabeth, N.J. | 5 | 1 | 2 | 2 | $\overline{-}$ | - |  | Montgomery, Ala. | 33 | 21 | 9 | 2 | - | 1 | 3 |
| Erie, Pa. | 55 | 43 | 7 | 4 | 1 |  | 1 | Nashville, Tenn. | 127 | 86 | 27 | 11 | 1 | 2 | 4 |
| Jersey City, N.J. | 33 | 21 | 8 | 2 | 1 | 1 |  |  |  |  |  |  |  |  |  |
| New York City, N.Y. | 1,084 | 717 | 229 | 102 | 16 | 20 | 45 | W.S. CENTRAL | 1,384 | 896 | 272 14 | 129 | 49 | 38 | 92 |
| Newark, N.J. | 57 | 32 | 19 | 4 | 1 | 1 | 6 | Austin, Tex. Baton Rouge, La. | 77 | 51 6 | 14 5 | 6 3 | 4 2 | 2 | 5 |
| Paterson, N.J. | 12 | 7 | 3 | 2 | ${ }^{-}$ |  |  | Corpus Christi, Tex. | 66 | 49 | 8 | 6 | 2 | 1 | 1 |
| Philadelphia, Pa. Pittsburgh, Pa.§ | 399 51 | 270 34 | 74 9 | 32 | 10 | 13 5 | 17 | Dallas, Tex. | 181 | 120 | 31 | 16 | 7 | 7 | 7 |
| Reading, Pa. | 23 | 21 | 2 | - | - | - | 2 | El Paso, Tex. | 81 | 58 | 13 | 6 | 3 | 1 | 4 |
| Rochester, N.Y. | 129 | 101 | 19 | 7 |  | 2 | 9 | Ft. Worth, Tex. | 101 | 68 | 20 | 6 | 2 | 5 | 8 |
| Schenectady, N.Y. | 23 | 17 | 5 |  | 1 | - | - | Houston, Tex. | 333 | 200 | 72 | 38 | 16 | 7 | 36 |
| Scranton, Pa. | 20 | 16 | 3 | 1 |  |  |  | Little Rock, Ark. | 71 | 40 | 17 | 10 | 1 | 3 | 2 |
| Syracuse, N.Y. | 88 | 67 | 15 | 4 | 1 | 1 | 10 | New Orleans, La. | 65 | 42 | 6 | 13 | 3 | 1 |  |
| Trenton, N.J. | 24 | 16 | 3 | 4 | 1 | - | 1 | San Antonio, Tex. | 212 | 137 | 54 | 14 | 3 | 4 | 13 |
| Utica, N.Y. | 19 | 12 | 3 | 2 | 2 |  | 1 | Shreveport, La. | 75 | 49 | 17 | 3 | 5 | 1 | 4 |
| Yonkers, N.Y. | U | U | U | U | U | U | U | Tulsa, Okla. | 105 | 76 | 15 | 8 | 1 | 5 |  |
| E.N. CENTRAL | 1,855 | 1,226 | 409 | 133 | 43 | 44 | 103 | MOUNTAIN | 794 | 547 | 130 | 74 | 23 | 20 | 49 |
| Akron, Ohio | , 48 | 30 | 12 | 3 | 1 | 2 |  | Albuquerque, N.M. | 92 | 60 | 19 | 8 | 3 | 2 | 3 |
| Canton, Ohio | 38 | 27 | 8 | 3 |  | - | 3 | Boise, Idaho | 36 | 29 | 7 | 1 | - | 2 |  |
| Chicago, III. | 366 | 231 | 87 | 32 | 14 | 2 | 21 | Colo. Springs, Colo. | 53 | 38 | 7 | 6 | U | 2 | 4 |
| Cincinnati, Ohio | 179 | 122 | 43 | 6 | 2 | 6 | 23 | Denver, Colo. | 183 | U | U | U | U | U | U |
| Cleveland, Ohio | 124 | 84 | 28 | 10 | 1 | 1 | 1 | Las Vegas, Nev. | 183 | 126 | 32 | 18 | 2 | 5 | 11 |
| Columbus, Ohio | 167 | 115 | 34 | 9 | 4 | 5 | 15 | Ogden, Utah | 145 | 17 | 2 | 3 | 9 |  |  |
| Dayton, Ohio | 100 | 71 | 27 | - | 1 | 1 | 7 | Phoenix, Ariz. | 145 | 94 | 24 | 12 | 9 | 6 | 8 |
| Detroit, Mich. | 169 | 96 | 38 | 21 | 7 | 7 | 6 | Pueblo, Colo. | 22 | 16 | 12 | 18 | 2 | 4 | 5 |
| Evansville, Ind. | 50 | 45 | 4 | 1 | - | - | 2 | Salt Lake City, Utah | 96 144 | 60 | 12 | 18 | 2 | 4 | +5 |
| Fort Wayne, Ind. | 42 | 31 | 8 | 2 | - | 1 | 4 | Tucson, Ariz. | 144 | 107 | 25 | 7 | 5 |  | 15 |
| Gary, Ind. | 6 | 36 | 4 | 1 | - |  |  | PACIFIC | 1,584 | 1,112 | 290 | 105 | 43 | 34 | 125 |
| Grand Rapids, Mich. | 51 | 36 | 10 | 3 | $\square$ | 2 | 4 | Berkeley, Calif. | 16 | 9 | 2 | 4 | 1 |  | 3 |
| Indianapolis, Ind. | 188 | 112 | 43 | 18 | 9 | 6 | 8 | Fresno, Calif. | 111 | 80 | 18 | 9 | 4 |  | 13 |
| Lansing, Mich. | 52 | 37 | 12 | 3 | - |  | 1 | Glendale, Calif. | 16 | 14 | 2 | - | - |  | 1 |
| Milwaukee, Wis. | 105 | 70 | 26 | 6 | - | 3 | 4 | Honolulu, Hawaii | 68 | 49 | 11 | 6 | 1 | 1 | 3 |
| Peoria, III. | 45 | 35 | 3 | 2 | - | 5 | 2 | Long Beach, Calif. | 75 | 49 | 15 | 5 | 2 | 4 | 10 |
| Rockford, III. | 27 | 17 | 5 | 3 | 1 | 1 | 1 | Los Angeles, Calif. | 270 | 197 | 47 | 14 | 7 | 5 | 14 |
| South Bend, Ind. | 43 | 30 | 7 | 4 | 1 | 1 | 1 | Pasadena, Calif. | 23 | 20 | 2 | 1 |  |  | 3 |
| Toledo, Ohio | U | U | U | U | U | U | U | Portland, Oreg. | 115 | 84 | 18 | 7 | 4 | 2 | 5 |
| Youngstown, Ohio | 55 | 37 | 10 | 6 | 2 | - |  | Sacramento, Calif. | 157 | 114 | 29 | 8 | 4 | 1 | 18 |
| W.N. CENTRAL | 856 | 602 | 149 | 59 | 26 | 15 | 41 | San Diego, Calif. | 140 | 88 | 36 | 12 | 3 | 1 | 14 |
| Des Moines, lowa | 62 | 47 | 8 | 3 | 1 | 3 | 8 | San Francisco, Calif. | 116 | 70 | 29 | 8 | 3 | 6 | 11 |
| Duluth, Minn. | 26 | 17 | 4 | 4 | 1 | 3 |  | San Jose, Calif. | 179 | 135 | 28 | 12 | 3 | 1 | 16 |
| Kansas City, Kans. | 40 | 28 | 9 | 1 | 2 | - |  | Santa Cruz, Calif. | 23 | 18 | 5 | 8 | 1 | 7 | 3 |
| Kansas City, Mo. | 103 | 68 | 23 | 5 | 2 | - | 5 | Seattle, Wash. | 137 | 92 | 25 9 | 8 | 1 | 7 | 2 |
| Lincoln, Nebr. | 34 | 25 | 5 | 2 | 1 | 1 | 1 | Spokane, Wash. | 61 | 46 | 9 | 3 | 4 | 2 | 4 |
| Minneapolis, Minn. | 196 | 147 | 30 | 10 | 3 | 6 | 15 | Tacoma, Wash. | 77 | 47 | 18 | 5 | 4 | 3 | 5 |
| Omaha, Nebr. | 80 | 67 | 9 | 3 | 1 | - | 4 | TOTAL | 11,181 ${ }^{\text {T }}$ | 7,555 | 2,187 | 894 | 275 | 261 | 665 |
| St. Louis, Mo. | 112 | 68 | 25 | 13 | 4 | 2 |  |  |  |  |  |  |  |  |  |
| St. Paul, Minn. | 83 | 63 | 16 | 3 | 11 | 1 | 6 |  |  |  |  |  |  |  |  |
| Wichita, Kans. | 120 | 72 | 20 | 15 | 11 | 2 | 2 |  |  |  |  |  |  |  |  |

*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.
${ }^{\dagger}$ Pneumonia and influenza.
${ }^{\S}$ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
TTotal includes unknown ages.

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[^0]:    *Arkansas, Kansas, Nevada, and Wyoming did not participate.

[^1]:    * Differences between estimates were considered statistically significant if the $95 \%$ Cls did not overlap. Use of trade names and commercial sources is for identification only and does not imply endorsement by CDC or the U.S. Department of Health and Human Services.

[^2]:    ${ }^{\dagger}$ For example, a 34 -year-old person who was surveyed in 1994 and first smoked a cigarette at age 15 years in 1975 would have been 5 years old in 1965 and would have contributed person-years from 1965 to 1975. From 1965 through 1974, exposure time was 1 for each year. For 1975, exposure time was 0.5 (this assumes that persons initiate, on average, midway through the year). For subsequent years, exposure time was 0.

[^3]:    *Per 1000 person-years of exposure.
    ${ }^{\dagger}$ Confidence interval.
    ${ }^{\S}$ Estimated using 1995, 1996, and 1997 data only.
    TEstimated using 1996 and 1997 data only.
    **Estimated using 1997 data only.
    ${ }^{\dagger \dagger}$ Not available.
    Source: Substance Abuse and Mental Health Services Administration, National Household Survey on Drug Abuse for 1994-1997 (3).

[^4]:    *Updated monthly to the Division of HIV/AIDS Prevention-Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention,

