

MORBIDITY AND MORTALITY WEEKLY REPORT

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## Impact of the Sequential IPV/OPV Schedule on Vaccination Coverage Levels - United States, 1997

In January 1997, the Advisory Committee on Immunization Practices (ACIP) recommended adoption of a sequential inactivated poliovirus vaccine (IPV)-oral poliovirus vaccine (OPV) vaccination schedule (1). The schedule of injections of IPV at 2 months and 4 months of age, followed by OPV at 12-18 months and again at 4-6 years was intended to minimize the risk for vaccine-associated paralytic poliomyelitis (VAPP) while maintaining population immunity to the potential introduction of wild-type poliovirus. To determine whether this change may result in reduced or delayed vaccination coverage because parents or physicians might be reluctant to administer multiple injections at a single visit (2), CDC investigated the impact of the change to a sequential IPV-OPV vaccination schedule at two large West coast health maintenance organizations (HMOs). This report summarizes the results of the investigation and indicates that changing to an initial two doses of IPV was not associated with decreases in vaccination coverage levels of routinely recommended vaccinations.

This study focused on children enrolled at Group Health Cooperative of Puget Sound (GHC), a Seattle-based HMO with approximately 530,000 members, and Kaiser Permanente of Northern California (KPNC), an Oakland-based HMO with approximately 2.8 million members. Both sites have automated vaccination tracking systems (3) that allow for assessment of vaccination coverage by region, clinic, and individual patient. Beginning in April 1997, GHC adopted the ACIP guidelines for the sequential IPV schedule as an option for physicians and families. Within KPNC, each of its 17 medical centers made a local decision about whether and when to adopt the IPV schedule. Children in the study were born during October 1, 1996-June 30, 1997; resided in King, Pierce, Thurston, and Kitsap counties, Washington, and all counties of the KPNC region; had been continuously enrolled during the first 12 months of life; and had received at least one polio vaccination ( $\mathrm{N}=1745$ GHC and 15,707 KPNC enrollees). Up-to-date status, defined as receipt of two polio vaccinations, three diphtheria and tetanus toxoids and pertussis/acellular pertussis (DTP/DTaP) vaccinations, and two Haemophilus influenzae type $b$ and two hepatitis $B$ vaccinations administered after age 3 weeks, was measured at age 12 months.

The percentage of GHC children who received their first polio vaccine as IPV increased from $18 \%$ during the fourth quarter of 1996 , to $19 \%$ in the first, $34 \%$ in the second, and $82 \%$ in the third quarter of 1997. Among GHC clinics that had at least 20

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children in the evaluation, the percentage of children who received IPV during the third quarter of 1997 ranged from $81 \%$ to $98 \%$. In comparison, at KPNC, the percentages by quarter were $10 \%, 15 \%, 24 \%$, and $36 \%$, respectively; among KPNC clinics that had at least 20 children in the evaluation, the percentage of children who received IPV during the fourth quarter ranged from $6 \%$ to $98 \%$. Among GHC children who received IPV as their first polio vaccination, vaccination up-to-date status by age 12 months for routinely recommended vaccines was $82 \%, 83 \%$, and $82 \%$ in the first three quarters following implementation, and among those receiving OPV, vaccination up-to-date status was $82 \%, 81 \%$, and $79 \%$, respectively. At KPNC, the quarterly up-to-date percentages were $90 \%, 89 \%$, and $91 \%$ for children receiving IPV, and $92 \%, 90 \%$, and $91 \%$ for children receiving OPV.

After adjusting for sex, trends over time, Medicaid status, and primary clinic, GHC children receiving IPV as their first polio vaccination were as likely to be up-to-date at age 12 months as children receiving OPV (risk ratio [RR]=1.1; 95\% confidence interval $[C I]=1.0-1.3$ ). KPNC children receiving IPV as their first polio vaccination also were as likely as those receiving OPV to be up-to-date ( $\mathrm{RR}=1.0 ; 95 \% \mathrm{Cl}=0.9-1.0$ ). At GHC, children enrolled in Medicaid had lower coverage levels at age 12 months ( $71 \%$ up-to-date among Medicaid enrollees compared with $83 \%$ among nonenrollees); KPNC Medicaid enrollees and non-Medicaid enrollees had similar up-to-date status ( $90 \%$ compared with 91\%, respectively). Among GHC Medicaid enrollees, vaccination with IPV was not significantly associated with a decreased up-to-date status ( $68 \%$ at age 12 months among IPV recipients compared with $73 \%$ at age 12 months among OPV recipients). At KPNC, Medicaid enrollees receiving IPV were as likely to be up-to-date as those receiving OPV (91\% compared with $90 \%$, respectively).
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Editorial Note: The findings in this report indicate that use of IPV for the initial polio vaccine doses in these two West coast HMOs was not associated with decreases in vaccination coverage levels. These findings are consistent with evaluations conducted in other settings, including clinics serving children from low-income families (4-6).

An important ancillary finding from the study was that the sequential polio vaccination schedule was implemented to a much greater degree in the HMO that used a more centralized decision making process than in the HMO that relied on local decision making ( $82 \%$ compared with $36 \%$, respectively, for the percentage of children who received IPV for their initial polio vaccination). In the United States, use of IPV increased from 6\% of all polio vaccine doses distributed in 1996 to $29 \%$ in 1997 (CDC, unpublished data, 1998).

Despite the increased use of IPV, four cases of VAPP have occurred in the United States since January 1997. All cases were associated with receipt of the first or second dose of OPV vaccine in an all OPV schedule; three cases were in OPV recipients, and one case was in an adult contact of an OPV recipient.

To further reduce the incidence of VAPP by decreasing reliance on OPV for the initial doses of poliovirus vaccine, in October 1998, ACIP changed the routine childhood polio vaccination schedule. Use of OPV is no longer recommended for the first two doses

IPV/OPV Vaccination Coverage - Continued
except in special circumstances (e.g., a child whose parents do not accept the recommended number of injections or who will be traveling to areas with endemic polio). OPV remains the vaccine of choice for mass vaccination campaigns to control outbreaks associated with wild poliovirus.

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## Fatal Car Trunk Entrapment Involving Children United States, 1987-1998

During July-August 1998, at least 11 U.S. children died in three separate incidents of car trunk entrapment. This report summarizes these three incidents, describes characteristics of car trunk entrapment incidents involving children since 1987, and reviews measures to prevent children from becoming trapped in car trunks. The findings indicate that at least nine incidents of fatal car trunk entrapment involving children occurred during 1987-1998, that all incidents occurred in hot weather and involved children aged $\leq 6$ years, and that these deaths were preventable.

## Case Reports

Incident 1. On July 13, 1998, at approximately 6 p.m., four children aged 2-5 years were discovered inside the closed trunk of a car in Gallup, New Mexico. The children had climbed into the car's open trunk and had not been seen for 1 hour before a search began. They were found approximately 1 hour after the search began. The outside ambient temperature that afternoon was 90 F (32.2 C). The children were rushed to a local emergency department, where three were pronounced dead. The remaining child, a 5 -year-old girl, was transported to a tertiary-care hospital, where her rectal temperature was recorded at $108 \mathrm{~F}(42.2 \mathrm{C})$; she died on July 14. No carbon monoxide was detected in blood samples of the children. The autopsy report cited hyperthermia and asphyxia as the causes of death.

Incident 2. On August 2, 1998, at approximately 1 p.m., two brothers aged 2 and 5 years from Greene County, Pennsylvania, were found dead in the trunk of their parents' car in front of their house. The boys had found the car keys, opened the trunk, and climbed inside. They were missing for several hours during the morning and early

## Fatal Car Trunk Entrapment - Continued

afternoon. The outside ambient temperature that afternoon was approximately 85 F (29.5 C). The autopsy report cited hyperthermia and asphyxia as the causes of death.

Incident 3. On August 8, 1998, at 4:15 p.m., five girls in West Valley City, Utah, aged 2-6 years, were found dead inside the trunk of a car owned by one of the children's parents. The car had been parked at one of the children's residence. The outside ambient temperature was 100 F ( 37.8 C ). The vehicle's trunk-release lever was adjacent to the driver's seat, and at least one of the two 6-year-old girls reportedly knew how to operate the release lever. The children had not been seen for approximately 20 minutes before a search began and were found approximately $1 \frac{1}{2}$ hours after the search began. Liver temperatures taken at the death scene $11 / 2-2$ hours after the children were found ranged from 99 F to $117 \mathrm{~F}(37.2 \mathrm{C}$ to 47.2 C ). The autopsy report cited the cause of death as hyperthermia.

## Surveillance for Fatalities Associated with Trunk Entrapments, 1987-1998

The LEXIS-NEXIS database (1) was used to search newspapers, magazines, wire services, and broadcast transcripts for additional deaths associated with car trunk entrapment. During 1987-1998, nine incidents were identified of fatal car trunk entrapment involving children, including the three incidents described in this report. Medical examiner/coroner (ME/C) offices were contacted for information about death investigations and autopsy findings. ME/C offices provided written and verbal cause-ofdeath information for seven of the incidents, and for two incidents, information was obtained from media sources, who cited coroner's reports for cause-of-death information.

A total of 19 children aged $\leq 6$ years died in the nine incidents. Eighteen children underwent autopsies. The cause of death for all children was either hyperthermia or a combination of hyperthermia and asphyxia. Three of the nine incidents occurred during the summer of 1998 and accounted for 11 (58\%) of the 19 deaths. Eight incidents occurred when outside ambient temperatures were at least 90 F (32.2 C) (Table 1), and at least five ( $56 \%$ ) of the cars involved were parked in direct sunlight.

The method of trunk entry varied among the nine incidents. In two incidents, children found the keys to their parents' cars and opened the trunks. In two other incidents, children entered trunks without using a key-either a driver's side trunk-release lever or a manual release on the trunk itself was present. In one additional incident, four children climbed into an open trunk. The method of trunk entry could not be determined for the remaining four incidents. At least 15 children died in cars parked either at their own houses or at a relative's or neighbor's house. In three incidents, a dead child was alone in the trunk. In one incident, one 3 -year-old child survived, and a 4 -year-old child died. In six incidents, children were missing approximately $1-2 \frac{1}{2}$ hours. In two other incidents, they were missing for 5-8 hours.
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Editorial Note: Although heat-related deaths in the United States have been described previously ( 2,3 ), the number and characteristics of car trunk entrapment-related

Fatal Car Trunk Entrapment - Continued
TABLE 1. Selected characteristics of deaths associated with car trunk entrapments among children, by year - United States, 1987-1998

| Year | No. children | Age <br> (yrs) | Month | Cause of death* | Outside temperature ${ }^{\dagger}$ | Time missing (hrs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1987 | 1 | 4 | July | § | 101 F (38.3 C) | 8 |
| 1987 | 1 | 3 | August | Hyperthermia | 91 F (32.7 C) | 2 |
| 1989 | 1 | 5 | June | § | $106 \mathrm{~F}(41.1 \mathrm{C})$ | 21/2 |
| 1993 | 2 | 3,5 | July | Hyperthermia/ Asphyxiation ${ }^{\\|}$ | 97 F (36.1 C) | § |
| 1994 | 1 | 4 | August | Hyperthermia | $101 \mathrm{~F}(38.3 \mathrm{C})$ | 1 |
| 1995 | 2 | 3,4 | May | Hyperthermia/ Asphyxiation | 90 F (32.2 C) | 2 |
| 1998 | 4 | 2,3,5,5 | July | Hyperthermia/ Asphyxiation | 90 F (32.2 C) | 2 |
| 1998 | 2 | 2,5 | August | Hyperthermia/ Asphyxiation | 85 F (29.4 C) | 5 |
| 1998 | 5 | 2,3,5,6,6 | August | Hyperthermia | 100 F (37.7 C) | 2 |

* Medical examiners/coroners provided written and verbal cause-of-death information.
${ }^{\dagger}$ Outside temperatures are approximated.
§Data were not available.
IInformation was available only for the 3-year-old.
deaths have not been described, and the identified cases probably represent a minimum number of such deaths. No surveillance system exists to detect or report car trunk entrapment-related deaths, and no International Classification of Diseases, Ninth Revision, external cause-of-injury code exists for deaths associated with car trunk entrapments.

Heatstroke (hyperthermia) is a medical emergency and is often fatal despite medical care (4). Heatstroke is usually designated when a rectal or core temperature reaches $105 \mathrm{~F}(40.6 \mathrm{C})(4,5)$. The car trunk entrapment-related deaths described in this report were mainly heat related-no deaths were identified that occurred when the outside temperature was <85 F (<29.5 C), and all causes of death included hyperthermia.

Cars parked in direct sunlight can reach internal temperatures up to $131 \mathrm{~F}-172 \mathrm{~F}$ ( $55 \mathrm{C}-78 \mathrm{C}$ ) when outside temperatures are $80 \mathrm{~F}-100 \mathrm{~F}(27 \mathrm{C}-38 \mathrm{C})(6,7)$. Cars that are parked in direct sunlight and that are poorly ventilated also reach higher temperatures more rapidly than cars that are parked in the shade or that have windows completely opened ( 7 ). Most temperature increases inside cars occur during the first 15 minutes of being left in the sun (8). In at least two incidents during the summer of 1998, deaths occurred in dark cars, and the dark color probably contributed to the intense heat in the trunks (6).

The major mechanism for heat loss by the body in high ambient temperatures is evaporation (7). This mechanism is quickly defeated in the rising humidity of closed car trunks. Younger children are more sensitive to heat than older children and adults and are at greater risk for heatstroke (5). In addition to heatstroke, asphyxia was listed as a contributing cause of death in four of the seven incidents for which ME/C data were obtained. The combination of high temperature, humidity, and poor ventilation all contribute to the extreme danger of car trunks (7).

Fatal Car Trunk Entrapment - Continued
The findings in this report are subject to at least three limitations. First, because LEXIS-NEXIS may exclude cases in areas with minimal media coverage, may overlook cases that are not in the database because of search technique, and does not contain all newspapers in the country, the total number of cases identified may be underestimated. Second, because primary source ME/C data were not obtained for two incidents, information accuracy in media reports used for analysis is unknown. Third, because autopsy findings are often minimal or nonspecific, determining cause of death for these types of deaths is largely dependent on the circumstances and a thorough examination of the death scene.

State and local public health officials can use the findings in this report to guide prevention messages about children playing in or around car trunks. Effective public health strategies to prevent deaths associated with car trunk entrapments should include 1) preventing children's access to car keys; 2) keeping cars locked, with trunks closed, when cars are not in use; and 3) supervising young children closely when they are around cars.

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## Forecasted State-Specific Estimates of Self-Reported Asthma Prevalence - United States, 1998

Asthma is a chronic inflammatory disorder of the lungs characterized by episodic and reversible symptoms of airflow obstruction (1). During 1993-1994, an estimated 13.7 million persons in the United States reported having asthma, and from 1980 to 1994 the prevalence of self-reported asthma in the United States increased 75\% (2). Despite this increase, surveillance data are limited for asthma at the state and local levels (3). To estimate the 1998 prevalence rate of asthma for each state, CDC analyzed national self-reported asthma prevalence data from 1995. This report summarizes the results of the analyses, which project that approximately 17 million persons in the United States have asthma.

For this analysis, persons were considered to have asthma if they had had asthma diagnosed by a physician at some time in their life and had reported symptoms of asthma during the preceding 12 months. Using methods that have been applied elsewhere to forecast cancer rates (4), state-specific asthma prevalence estimates for 1998 were calculated using a three-step procedure: 1) race-, sex-, and age-specific asthma prevalence rates were calculated for each of the four U.S. census regions using data from the 1995 National Health Interview Survey (NHIS); 2) each state's 1998

## Self-Reported Asthma Prevalence - Continued

demographic composition as estimated by the Bureau of Census was multiplied by the corresponding regional prevalences; and 3) linear extrapolations of region-specific increases in asthma prevalence from 1980 to 1994 were applied to the 3 -year period from 1995 to 1998 for each state. Confidence intervals and relative standard errors for all estimates were calculated using regression parameters provided by CDC's National Center for Health Statistics for prevalence of chronic conditions (5).

In 1998, asthma affected an estimated 17,299,000 persons in the United States. The state with the largest estimated number of persons with asthma was California $(2,268,300)$, followed by New York $(1,236,200)$ and Texas $(1,175,100)$ (Table 1). Statespecific prevalence rates ranged from $5.8 \%$ to $7.2 \%$. Differences in asthma prevalence rates between states were not significant. By region, 1-year period prevalence estimates ranged from $6.4 \%$ to $6.8 \%$ in the Northeast, $5.8 \%$ to $6.1 \%$ in the South, $6.6 \%$ to $6.7 \%$ in the Midwest, and $6.0 \%$ to $7.2 \%$ in the West.* The narrow range of prevalence rates within each of these regions indicates that state-specific differences in demographic composition minimally influenced estimated asthma prevalence.
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Editorial Note: The findings in this report project state-specific prevalence rates of $5.8 \%$ to $7.2 \%$. These findings are consistent with those from a study in Oregon, which estimated asthma prevalence at $6 \%-7 \%$ (6). However, surveys of self-reported asthma prevalence in Bogalusa, Louisiana (7), Chicago, Illinois (8), and Bronx, New York (9) all indicated estimates considerably higher than those in this report. State program planners can use these findings to estimate the burden of asthma within their states.

The findings in this report are subject to at least two limitations. First, the findings assume a linear growth in asthma prevalence since 1995. Although this linear assumption was selected after review of regional growth trends in asthma prevalence during the preceding 15 years ( 2 ), changes in the trends of self-reported asthma rates that may have occurred in the 3-year interval during 1995-1998 could not be captured by these linear extrapolations. Second, these results are based on the assumption that age, sex, and race-specific rates of asthma do not vary within any of the four geographic regions of the United States. Each state's estimated prevalence reflects its regional placement in the United States and its demographic composition. These analyses do not account for differences among states in the relative presence or absence of environmental risk factors in asthma prevalence, possible differences in genetic susceptibility toward the condition, or other sociodemographic indicators (e.g., poverty status). As a result, these findings underestimate the variability in asthma prevalence between states within regions. They also do not accurately represent asthma prevalence in geographic subpopulations within states.

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## Self-Reported Asthma Prevalence - Continued

TABLE 1. Forecasted estimates of self-reported asthma prevalence*, by state — United States, 1998

| Region/State | No. cases | Estimated prevalence | (95\% CI' ${ }^{\text {) }}$ | Standard error |
| :---: | :---: | :---: | :---: | :---: |
| Northeast |  |  |  |  |
| Connecticut | 215,900 | 6.6\% | (5.6\%-7.5\%) | 7.2\% |
| Maine | 80,300 | 6.4\% | (5.4\%-7.4\%) | 7.8\% |
| Massachusetts | 401,000 | 6.5\% | (5.6\%-7.5\%) | 7.2\% |
| New Hampshire | 78,500 | 6.6\% | (5.5\%-7.6\%) | 7.8\% |
| New Jersey | 540,400 | 6.7\% | (5.7\%-7.6\%) | 7.2\% |
| New York | 1,236,200 | 6.8\% | (5.8\%-7.8\%) | 7.3\% |
| Pennsylvania | 800,900 | 6.6\% | (5.6\%-7.5\%) | 7.2\% |
| Rhode Island | 64,400 | 6.5\% | (5.5\%-7.4\%) | 7.3\% |
| Vermont | 39,500 | 6.5\% | (5.5\%-7.6\%) | 7.8\% |
| Total | 3,241,200 | 6.7\% | (5.7\%-7.6\%) | 7.3\% |
| Midwest |  |  |  |  |
| Iowa | 190,100 | 6.6\% | (5.6\%-7.6\%) | 7.5\% |
| Illinois | 795,200 | 6.7\% | (5.7\%-7.6\%) | 7.5\% |
| Indiana | 398,400 | 6.7\% | (5.7\%-7.7\%) | 7.3\% |
| Kansas | 174,900 | 6.7\% | (5.7\%-7.6\%) | 7.3\% |
| Michigan | 642,300 | 6.7\% | (5.7\%-7.7\%) | 7.5\% |
| Minnesota | 318,600 | $6.7 \%$ | (5.8\%-7.7\%) | 7.1\% |
| Missouri | 362,300 | 6.1\% | (4.7\%-7.4\%) | 11.3\% |
| Nebraska | 112,100 | 6.7\% | (5.7\%-7.7\%) | 7.4\% |
| North Dakota | 43,600 | 6.7\% | (5.7\%-7.6\%) | 7.3\% |
| Ohio | 748,200 | 6.7\% | (5.7\%-7.6\%) | 7.4\% |
| South Dakota | 51,000 | 6.7\% | (5.8\%-7.7\%) | 7.3\% |
| Wisconsin | 350,800 | 6.7\% | (5.7\%-7.7\%) | 7.2\% |
| Total | 4,187,600 | 6.6\% | (5.6\%-7.6\%) | 7.4\% |
| South |  |  |  |  |
| Alabama | 280,500 | 6.0\% | (4.8\%-7.1\%) | 9.5\% |
| Arkansas | 162,600 | 5.9\% | (4.9\%-6.9\%) | 6.9\% |
| District of Columbia | 31,400 | 5.9\% | (3.6\%-8.2\%) | 19.7\% |
| Delaware | 44,300 | 5.9\% | (4.9\%-6.9\%) | 8.5\% |
| Florida | 863,900 | 5.8\% | (4.9\%-6.8\%) | 8.0\% |
| Georgia | 458,700 | 6.0\% | (4.9\%-7.2\%) | 9.7\% |
| Kentucky | 232,800 | 5.9\% | (4.9\%-6.9\%) | 8.2\% |
| Louisiana | 265,500 | 6.1\% | (4.8\%-7.3\%) | 10.5\% |
| Maryland | 307,300 | 6.5\% | (5.6\%-7.5\%) | 7.2\% |
| Mississippi | 167,900 | 6.1\% | (4.7\%-7.4\%) | 11.3\% |
| North Carolina | 447,200 | 5.9\% | (4.9\%-7.0\%) | 8.9\% |
| Oklahoma | 191,700 | 5.8\% | (4.8\%-6.7\%) | 7.9\% |
| South Carolina | 228,600 | 6.0\% | (4.8\%-7.2\%) | 10.1\% |
| Tennessee | 328,300 | 5.9\% | (4.9\%-6.9\%) | 8.3\% |
| Texas | 1,175,100 | 6.0\% | (5.0\%-7.0\%) | 8.2\% |
| Virginia | 403,400 | 5.9\% | (4.9\%-6.9\%) | 8.6\% |
| West Virginia | 108,600 | 5.8\% | (4.9\%-6.8\%) | 8.2\% |
| Total | 5,697,800 | 5.9\% | (4.9\%-7.0\%) | 8.8\% |
| West |  |  |  |  |
| Alaska | 42,500 | 6.7\% | (5.7\%-7.7\%) | 7.7\% |
| Arizona | 316,200 | 6.9\% | (6.0\%-7.9\%) | 6.9\% |
| California | 2,268,300 | 7.1\% | (6.1\%-8.0\%) | 6.8\% |
| Colorado | 283,700 | 7.1\% | (6.1\%-8.0\%) | 6.8\% |
| Hawaii | 73,100 | 6.0\% | (4.1\%-7.8\%) | 15.3\% |
| Idaho | 86,100 | 6.7\% | (5.7\%-7.8\%) | 7.6\% |
| Montana | 61,600 | 6.6\% | (5.7\%-7.6\%) | 7.4\% |
| Nevada | 125,700 | 7.2\% | (6.3\%-8.1\%) | 6.4\% |
| New Mexico | 121,800 | 6.8\% | (5.8\%-7.8\%) | 7.2\% |
| Oregon | 225,900 | 6.9\% | (5.9\%-7.8\%) | 6.9\% |
| Utah | 141,200 | 6.7\% | (5.6\%-7.8\%) | 8.1\% |
| Washington | 391,900 | 6.9\% | (5.9\%-7.8\%) | 6.8\% |
| Total | 4,172,400 | 7.0\% | (6.0\%-8.0\%) | 7.0\% |
| Total | 17,299,000 | 6.4\% | (5.5\%-7.5\%) | 7.8\% |

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## Self-Reported Asthma Prevalence - Continued

Asthma is the ninth leading cause of hospitalization nationally (10). Its severity can be managed with appropriate medical treatment, education, and environmental modification (1). However, fewer than 10 states have conducted asthma prevalence surveys. The initiation of state-based asthma control and management programs will require better state and local data on asthma prevalence to evaluate the effectiveness of these programs. State-level surveillance could incorporate existing data such as hospital discharge data and managed-care data. Questions about asthma could also be added to state and community-level surveys such as the State and Local Integrated Telephone Survey and other surveys conducted in individual states such as the Behavioral Risk Factor Surveillance System.

State-based surveys should include questions related to asthma diagnosis, severity, management techniques, and known geographic and household risk factors. These surveillance data will provide a foundation for planning and evaluating asthmacontrol programs, identifying high-risk and hard-to-access populations, and structuring health promotion and education initiatives.

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## Abortion Surveillance: Preliminary Analysis - United States, 1996

For 1996, CDC compiled data about legal induced abortions from the 50 states, New York City, and the District of Columbia. The total number of legal induced abortions was available from all reporting areas; however, not all areas collected information about the characteristics of women who obtained abortions. This report presents preliminary data for 1996; final abortion data for 1996 will be published during spring 1999.

In 1996, a total of 1,221,585 legal induced abortions were reported to CDC (Table 1), a slight increase of $0.9 \%$ from the number reported for 1995 (1). The number of live births decreased slightly by $0.2 \%$ during the same period (2). From 1995 to 1996, the

TABLE 1. Reported number of legal induced abortions, abortion ratios,* abortion rates, ${ }^{\dagger}$ and characteristics of women who obtained legal induced abortions, by year — United States, selected years, 1972-1996

| Characteristic | 1972 | 1976 | 1980 | 1985 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 ${ }^{\text {§ }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reported no. legal abortions | 586,760 | 988,267 | 1,297,606 | 1,328,570 | 1,429,577 | 1,388,937 | 1,359,145 | 1,330,414 | 1,267,415 | 1,210,883 | 1,221,585 |
| Abortion ratio | 180 | 312 | 359 | 354 | 345 | 339 | 335 | 334 | 321 | 311 | 314 |
| Abortion rate | 13 | 21 | 25 | 24 | 24 | 24 | 23 | 22 | 21 | 20 | 20 |
|  | Percentage distribution ${ }^{\text {d }}$ |  |  |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| In-state | 56.2 | 90.0 | 92.6 | 92.4 | 91.8 | 891.6 | 92.0 | 91.4 | 91.5 | 91.7 | 91.9 |
| Out-of-state | 43.8 | 10.0 | 7.4 | 7.6 | 8.2 | 28.4 | 8.0 | 8.6 | 8.5 | 8.3 | 8.1 |
| Age group (yrs) |  |  |  |  |  |  |  |  |  |  |  |
| $\leq 19$ | 32.6 | 32.1 | 29.2 | 26.3 | 22.4 | 421.0 | 20.1 | 20.0 | 20.2 | 20.1 | 20.3 |
| 20-24 | 32.5 | 33.3 | 35.5 | 34.7 | 33.2 | 34.4 | 34.5 | 34.4 | 33.5 | 32.5 | 31.9 |
| $\geq 25$ | 34.9 | 34.6 | 35.3 | 39.0 | 44.4 | 444.6 | 45.4 | 45.6 | 46.3 | 47.4 | 47.8 |
| Race |  |  |  |  |  |  |  |  |  |  |  |
| White | 77.0 | 66.6 | 69.9 | 66.6 | 64.8 | $8 \quad 63.8$ | 61.5 | 60.9 | 60.5 | 59.5 | 59.1 |
| Black | 23.0 | 33.4 | 30.1 | 29.8 | 31.8 | - 32.5 | 33.9 | 34.9 | 34.7 | 35.0 | 35.2 |
| Other** | - | 33.4 | 0.1 | 3.5 | 3.4 |  | 4.6 | 4.2 | 4.8 | 5.5 | 5.7 |
| Ethnicity |  |  |  |  |  |  |  |  |  |  |  |
| Hispanic | - | - | - | - | 9.8 | $8 \quad 13.5$ | 15.2 | 14.7 | 14.5 | 15.4 | 16.1 |
| Non-Hispanic | - | - | - | - | 90.2 | 286.5 | 84.8 | 85.3 | 85.5 | 84.6 | 83.9 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |
| Married | 29.7 | 24.6 | - 23.1 | 19.3 | 21.7 | 21.4 | 20.8 | 20.4 | 19.9 | 19.7 | 20.1 |
| Unmarried | 70.3 | 75.4 | 46.9 | 80.7 | 78.3 | 38.6 | 79.2 | 79.6 | 80.1 | 80.3 | 79.9 |
| No. live births ${ }^{\dagger \dagger}$ |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 49.4 | 47.7 | 58.4 | 56.3 | 49.2 | 277.8 | 45.9 | 46.3 | 46.2 | 45.2 | 44.2 |
| 1 | 18.2 | 20.7 | 719.4 | 21.6 | - 24.4 | $4 \quad 25.3$ | 25.9 | 26.0 | 25.9 | 26.5 | 26.8 |
| 2 | 13.3 | 15.4 | -13.7 | 14.5 | 16.9 | 17.4 | 18.0 | 17.8 | 17.8 | 18.0 | 18.4 |
| 3 | 8.7 | 8.3 | 3.3 | 5.1 | 6.1 | 6.4 | 6.7 | 6.6 | 6.7 | 6.8 | 7.0 |
| $\geq 4$ | 10.4 | 7.9 | 3.2 | 2.5 | 3.4 |  | 3.5 | 3.3 | 3.4 | 3.5 | 3.6 |
| Type of procedure |  |  |  |  |  |  |  |  |  |  |  |
| Curettage | 88.6 | 92.8 | 95.5 | 97.5 | 98.8 | 898.9 | 98.9 | 99.0 | 99.1 | 98.9 | 98.8 |
| Suction | 65.2 | 82.6 | - 89.8 | 94.6 | 96.0 | 097.3 | 97.0 | 96.4 | 96.5 | 96.6 | 96.5 |
| Sharp | 23.4 | 10.2 | - 5.7 | 2.9 | - 2.8 | - 1.6 | 1.9 | 2.6 | 2.6 | 2.3 | 2.3 |
| Intrauterine |  |  |  |  |  |  |  |  |  |  |  |
| Other ${ }^{\text {§§ }}$ | 1.0 | 1.2 | 21.4 | 0.8 | 0.4 |  | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 |



## Abortion Surveillance - Continued

number of reported abortions decreased in 26 of 52 reporting areas. From 1995 to 1996, the national abortion ratio (number of legal abortions per 1000 live births reported by all reporting areas) increased slightly, from 311 to 314 , respectively (Table 1), and the national abortion rate (number of legal abortions per 1000 women aged $15-44$ years) remained stable at 20 . Consistent with previous years, approximately $92 \%$ of women who had legal abortions were residents of the state in which the procedure was performed.

Women who obtained legal induced abortions in 1996 were predominately white and unmarried. As in 1995, approximately $20 \%$ of women who obtained legal abortions in 1996 were aged $\leq 19$ years; $32 \%$ were aged $20-24$ years. Curettage (suction and sharp) remained the primary abortion procedure ( $99 \%$ of all procedures). As in previous years, more than half of legal abortions ( $55 \%$ ) were performed during the first 8 weeks of gestation; specifically, $16 \%$ were at $\leq 6$ weeks; $17 \%$ at 7 weeks; and $21 \%$ at 8 weeks. Approximately $88 \%$ of abortions were performed during the first 12 weeks of pregnancy.
Reported by: Surveillance Unit, Statistics and Computer Resources Br, Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.
Editorial Note: From 1980 to 1990, the number of legal induced abortions in the United States varied by $\leq 5 \%$ annually and increased overall by $10 \%$ (1). However, from 1990 (the year in which the number of abortions was highest) to 1995, the number of reported abortions decreased by $15 \%$. In 1996, the number increased slightly by $0.9 \%$.

During 1972-1980, the national legal abortion rate increased each year; during 1980-1992, the rate remained stable, then declined during 1992-1995. The 1996 abortion rate of 20 per 1000 women of reproductive age (i.e., aged $15-44$ years) remained unchanged from 1995 and was the lowest rate recorded since 1975 (1,3).

From 1987 to 1995, the national ratio of abortions to live births steadily declined each year reaching the lowest level in 1995 for any year since 1975 (1,3). In 1996, despite an increase in the ratio, the ratio was still at its lowest recorded level since $1976(1,4)$. The ratio increased in 1996 because the numerator of this ratio (the number of abortions) increased slightly, and the denominator (the number of live births) decreased slightly. Factors contributing to the decrease in the proportion of pregnancies that ended in abortion since 1990 include a reduction in the number of unintended pregnancies, attitudinal changes concerning the decision to have an abortion or to carry a pregnancy to term, and reduced access to abortion services (5-7).

The decline in the abortion ratios also may be attributed to a shift in the age distribution of reproductive-aged women obtaining abortions. Although the actual number of women of reproductive age in the United States has increased by $12 \%$ since 1980, the proportion who are older (i.e., in later, less fertile reproductive years) has increased (2). For example, from 1980 to 1996, the percentage of women of reproductive age who were aged <30 years (the age group having highest fertility) declined from $58 \%$ to $45 \%$, respectively (Bureau of the Census, unpublished data, 1998), and the percentage of women aged 35-44 years (the age group having lowest fertility) increased from $25 \%$ to $37 \%$, respectively.

During 1996, the total number of legal induced abortions were available for all 52 reporting areas. However, approximately $31 \%$ of abortions were reported from states that, in 1996, did not have centralized reporting of abortions (four states) or from states whose state health departments did not collect, and therefore could not pro-

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending November 28, 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 November 28, 1998 (47th Week)

|  | Cum. 1998 |  | Cum. 1998 |
| :---: | :---: | :---: | :---: |
| Anthrax | - | Plague | 8 |
| Brucellosis | 52 | Poliomyelitis, paralytic | 1 |
| Cholera | 12 | Psittacosis | 46 |
| Congenital rubella syndrome | 3 | Rabies, human | - |
| Cryptosporidiosis* | 2,920 | Rocky Mountain spotted fever (RMSF) | 308 |
| Diphtheria | 1 | Streptococcal disease, invasive Group A | 1,891 |
| Encephalitis: California* | 82 | Streptococcal toxic-shock syndrome* | 46 |
| eastern equine* | 3 | Syphilis, congenital ${ }^{\text {I }}$ | 361 |
| St. Louis* | 24 | Tetanus | 34 |
| western equine* | - | Toxic-shock syndrome | 122 |
| Hansen Disease | 100 | Trichinosis | 12 |
| Hantavirus pulmonary syndrome* ${ }^{+}$ | 19 | Typhoid fever | 299 |
| Hemolytic uremic syndrome, post-diarrheal* | 78 | Yellow fever | - |

## :no reported cases

*Not notifiable in all states.
† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID)
$\S$ Updated monthly from reports to the Division of HIV/AIDS Prevention-Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update October 25, 1998.
II Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending November 28, 1998, and November 22, 1997 (47th Week)

| Reporting Area | AIDS |  | Chlamydia |  | Escherichia coli O157:H7 |  | Gonorrhea |  | Hepatitis C/NA,NB |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | NETSS ${ }^{\dagger}$ | PHLIS ${ }^{\text { }}$ |  |  |  |  |
|  | $\begin{aligned} & \hline \text { Cum. } \\ & \text { 1998* } \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ |  |  | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1998 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1997 \end{gathered}$ | $\begin{gathered} \hline \text { Cum. } \\ 1998 \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ |
| UNITED STATES | 38,924 | 51,445 | 492,859 | 424,676 | 2,736 | 1,782 | 297,085 | 268,538 | 4,521 | 3,147 |
| NEW ENGLAND | 1,539 | 2,235 | 16,518 | 16,330 | 314 | 246 | 4,698 | 5,395 | 88 | 52 |
| Maine | 26 | 50 | 959 | 906 | 35 | - | 61 | 61 | - | - |
| N.H. | 28 | 39 | 860 | 735 | 43 | 43 | 81 | 86 | - | - |
| V t. | 18 | 32 | 378 | 386 | 19 | 17 | 34 | 47 | 3 | 3 |
| Mass. | 785 | 803 | 7,588 | 6,650 | 144 | 142 | 2,077 | 1,915 | 82 | 42 |
| R.I. | 108 | 133 | 2,060 | 1,835 | 12 | 1 | 371 | , 396 | 3 | 7 |
| Conn. | 574 | 1,178 | 4,673 | 5,818 | 61 | 43 | 2,074 | 2,890 | - | - |
| MID. ATLANTIC | 10,425 | 15,287 | 54,604 | 51,706 | 274 | 70 | 33,433 | 34,684 | 334 | 287 |
| Upstate N.Y. | 1,249 | 2,371 | N | N | 206 | - | 6,027 | 5,868 | 249 | 214 |
| N.Y. City | 5,885 | 8,011 | 31,564 | 24,928 | 8 | 12 | 14,164 | 13,153 |  |  |
| N.J. | 1,909 | 3,044 | 9,954 | 9,125 | 60 | 48 | 6,998 | 6,875 |  | - |
| Pa. | 1,382 | 1,861 | 13,086 | 17,653 | N | 10 | 6,244 | 8,788 | 85 | 73 |
| E.N. CENTRAL | 2,741 | 3,819 | 80,271 | 57,929 | 422 | 305 | 58,023 | 37,347 | 460 | 499 |
| Ohio | 562 | 786 | 22,949 | 20,387 | 115 | 61 | 14,997 | 13,344 | 8 | 18 |
| Ind. | 448 | 483 | 4,656 | 8,516 | 94 | 47 | 4,477 | 5,568 | 7 | 12 |
| III. | 1,044 | 1,517 | 24,415 | U | 105 | 58 | 20,274 | U | 32 | 84 |
| Mich. | 531 | 800 | 18,875 | 18,952 | 108 | 62 | 14,220 | 13,965 | 413 | 360 |
| Wis. | 156 | 233 | 9,376 | 10,074 | N | 77 | 4,055 | 4,470 | - | 25 |
| W.N. CENTRAL | 754 | 1,039 | 27,940 | 29,661 | 458 | 375 | 14,393 | 13,068 | 266 | 58 |
| Minn. | 146 | 191 | 5,743 | 6,070 | 191 | 197 | 2,201 | 2,138 | 10 | 4 |
| lowa | 60 | 93 | 2,063 | 3,943 | 93 | 56 | 660 | 1,012 | 8 | 27 |
| Mo. | 367 | 509 | 10,936 | 10,996 | 45 | 60 | 8,120 | 6,742 | 241 | 10 |
| N. Dak. | 5 | 10 | 849 | 794 | 11 | 15 | 71 | 66 | - | 3 |
| S. Dak. | 15 | 8 | 1,418 | 1,254 | 33 | 34 | 207 | 151 | - |  |
| Nebr. | 59 | 84 | 2,364 | 2,432 | 54 | - | 960 | 1,072 | 4 | 2 |
| Kans. | 102 | 144 | 4,567 | 4,172 | 31 | 13 | 2,174 | 1,887 | 3 | 12 |
| S. ATLANTIC | 10,118 | 12,835 | 101,191 | 85,207 | 246 | 146 | 83,159 | 83,986 | 169 | 228 |
| Del. | 122 | 210 | 2,354 | 49 | - | 2 | 1,387 | 1,164 | - | - |
| Md. | 1,400 | 1,798 | 6,619 | 6,765 | 35 | 14 | 8,638 | 10,424 | 15 | 10 |
| D.C. | 751 | 978 | N | N | 1 | - | 3,163 | 4,011 | - | - |
| Va . | 771 | 1,096 | 11,750 | 10,695 | N | 42 | 8,169 | 7,958 | 11 | 25 |
| W. Va. | 72 | 108 | 2,355 | 2,654 | 12 | 7 | 744 | 840 | 6 | 16 |
| N.C. | 704 | 764 | 20,065 | 15,743 | 54 | 46 | 17,266 | 15,703 | 20 | 47 |
| S.C. | 640 | 704 | 14,761 | 11,327 | 17 | 9 | 9,335 | 10,420 | 9 | 37 |
| Ga . | 1,055 | 1,468 | 20,637 | 14,146 | 73 | - | 17,198 | 16,502 | 9 | - |
| Fla. | 4,603 | 5,709 | 22,650 | 23,828 | 54 | 26 | 17,259 | 16,964 | 99 | 93 |
| E.S. CENTRAL | 1,598 | 1,859 | 35,095 | 32,079 | 111 | 39 | 34,516 | 32,095 | 181 | 327 |
| Ky. | 249 | 340 | 5,834 | 5,695 | 32 | - | 3,390 | 3,662 | 19 | 13 |
| Tenn. | 591 | 717 | 12,078 | 11,551 | 53 | 33 | 10,508 | 10,121 | 155 | 217 |
| Ala. | 417 | 511 | 9,150 | 7,763 | 23 | 2 | 11,714 | 10,850 | 5 | 11 |
| Miss. | 341 | 291 | 8,033 | 7,070 | 3 | 4 | 8,904 | 7,462 | 2 | 86 |
| W.S. CENTRAL | 4,758 | 5,608 | 68,112 | 60,578 | 115 | 24 | 41,872 | 39,598 | 398 | 460 |
| Ark. | 177 | 216 | 3,607 | 2,518 | 11 | 10 | 3,607 | 4,264 | 10 | 14 |
| La. | 819 | 975 | 13,684 | 9,098 | 5 | 7 | 11,720 | 8,862 | 103 | 207 |
| Okla. | 256 | 274 | 8,611 | 6,669 | 23 | 7 | 4,796 | 4,334 | 14 | 7 |
| Tex. | 3,506 | 4,143 | 42,210 | 42,293 | 76 | - | 21,749 | 22,138 | 271 | 232 |
| MOUNTAIN | 1,360 | 1,540 | 29,537 | 27,113 | 337 | 217 | 8,285 | 7,416 | 335 | 289 |
| Mont. | 26 | 40 | 1,205 | 1,086 | 15 | - | 44 | 55 | 7 | 21 |
| Idaho | 27 | 50 | 1,848 | 1,489 | 38 | 23 | 158 | 137 | 87 | 65 |
| Wyo. | 3 | 14 | 626 | 542 | 53 | 55 | 29 | 47 | 66 | 72 |
| Colo. | 254 | 366 | 7,385 | 6,654 | 89 | 64 | 2,075 | 2,084 | 33 | 31 |
| N. Mex. | 189 | 164 | 3,491 | 3,460 | 19 | 13 | 839 | 784 | 92 | 56 |
| Ariz. | 549 | 375 | 10,243 | 9,737 | 21 | 26 | 3,717 | 3,318 | 8 | 25 |
| Utah | 114 | 132 | 1,973 | 1,588 | 80 | 21 | 207 | 249 | 23 | 5 |
| Nev. | 198 | 399 | 2,766 | 2,557 | 22 | 15 | 1,216 | 742 | 19 | 14 |
| PACIFIC | 5,631 | 7,223 | 79,591 | 64,073 | 459 | 360 | 18,706 | 14,949 | 2,290 | 947 |
| Wash. | 375 | 570 | 9,672 | 8,377 | 104 | 104 | 1,742 | 1,753 | 22 | 25 |
| Oreg. | 146 | 261 | 5,434 | 4,499 | 100 | 94 | 792 | 672 | 5 | 3 |
| Calif. | 4,949 | 6,257 | 60,719 | 48,184 | 248 | 147 | 15,470 | 11,724 | 2,208 | 758 |
| Alaska | 17 | 43 | 1,603 | 1,387 | 7 | - | 266 | 339 | 1 | - |
| Hawaii | 144 | 92 | 2,163 | 1,626 | N | 15 | 436 | 461 | 54 | 161 |
| Guam | 1 | 2 | 201 | 193 | N | - | 24 | 27 | - | - |
| P.R. | 1,499 | 1,716 | U | U | 6 | U | 342 | 499 | - | - |
| V.I. | 31 | 94 | 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 | 22 | - | 2 |

N : Not notifiable U: Unavailable $\quad$-: no reported cases $\quad$ C.N.M.I.: Commonwealth of Northern Mariana Islands
*Updated monthly from reports to the Division of HIV/AIDS Prevention-Surveillance and Epidemiology, National Center for HIV, STD,
and TB Prevention, last update October 25, 1998.
National Electronic Telecommunications System for Surveillance.
${ }^{\text {s }}$ Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States,
weeks ending November 28, 1998, and November 22, 1997 (47th Week)

| Reporting Area | Legionellosis |  | Lyme Disease |  | Malaria |  | Syphilis(Primary \& Secondary) |  | Tuberculosis |  | Rabies, Animal Cum. 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1997 \end{aligned}$ | $\begin{gathered} \text { Cum. } \\ 1998 \end{gathered}$ | $\begin{aligned} & \text { Cum. } \\ & 1997 \end{aligned}$ | $\begin{aligned} & \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{gathered} \text { Cum. } \\ 1997 \end{gathered}$ | $\begin{aligned} & \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ | Cum. 1998* | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ |  |
| UNITED STATES | 1,175 | 973 | 11,733 | 11,114 | 1,233 | 1,681 | 6,370 | 7,626 | 12,979 | 15,970 | 6,195 |
| NEW ENGLAND | 77 | 77 | 2,538 | 2,848 | 55 | 79 | 69 | 124 | 410 | 398 | 1,318 |
| Maine | 1 | 3 | 11 | 8 | 5 | 1 | 1 | , | 10 | 18 | 202 |
| N.H. | 7 | 7 | 44 | 36 | 5 | 8 | 2 | - | 12 | 15 | 74 |
| Vt. | 7 | 12 | 11 | 8 | 1 | 2 | 4 | - | 4 | 5 | 61 |
| Mass. | 30 | 27 | 704 | 284 | 16 | 30 | 42 | 62 | 229 | 226 | 470 |
| R.I. | 19 | 11 | 603 | 380 | 10 | 7 | 1 | 2 | 50 | 31 | 88 |
| Conn. | 13 | 17 | 1,165 | 2,132 | 18 | 31 | 19 | 58 | 105 | 103 | 423 |
| MID. ATLANTIC | 284 | 214 | 7,743 | 6,478 | 312 | 479 | 243 | 362 | 2,729 | 2,851 | 1,437 |
| Upstate N.Y. | 99 | 66 | 3,841 | 2,691 | 87 | 67 | 35 | 36 | 354 | 401 | 1,000 |
| N.Y. City | 27 | 23 | 28 | 168 | 147 | 296 | 72 | 79 | 1,352 | 1,447 | U |
| N.J. | 15 | 28 | 1,599 | 1,795 | 49 | 83 | 78 | 145 | 562 | 611 | 202 |
| Pa. | 143 | 97 | 2,275 | 1,824 | 29 | 33 | 58 | 102 | 461 | 392 | 235 |
| E.N. CENTRAL | 375 | 320 | 158 | 570 | 118 | 152 | 987 | 584 | 1,109 | 1,573 | 127 |
| Ohio | 124 | 114 | 81 | 37 | 15 | 18 | 124 | 196 | 87 | 236 | 55 |
| Ind. | 112 | 52 | 57 | 33 | 11 | 16 | 210 | 162 | 101 | 137 | 11 |
| III. | 32 | 33 | 8 | 13 | 36 | 60 | 424 | U | 564 | 823 | 16 |
| Mich. | 75 | 82 | 12 | 27 | 47 | 42 | 176 | 128 | 339 | 264 | 35 |
| Wis. | 32 | 39 | U | 460 | 9 | 16 | 53 | 98 | 18 | 113 | 10 |
| W.N. CENTRAL | 72 | 56 | 192 | 149 | 90 | 57 | 117 | 163 | 360 | 500 | 640 |
| Minn. | 8 | 3 | 157 | 110 | 55 | 28 | 9 | 16 | 133 | 134 | 112 |
| lowa | 10 | 9 | 22 | 6 | 8 | 9 | - | 7 | 43 | 46 | 139 |
| Mo. | 24 | 20 | 2 | 26 | 15 | 11 | 88 | 107 | 93 | 209 | 25 |
| N. Dak. | - | 2 | - | - | 2 | 3 | - | - | 8 | 12 | 131 |
| S. Dak. | 3 | 2 | - | 1 | - | 1 | 1 | 1 | 17 | 10 | 143 |
| Nebr. | 19 | 15 | 3 | 2 | 1 | 1 | 6 | 3 | 27 | 20 | 7 |
| Kans. | 8 | 5 | 8 | 4 | 9 | 4 | 13 | 29 | 39 | 69 | 83 |
| S. ATLANTIC | 135 | 113 | 811 | 727 | 297 | 301 | 2,353 | 3,175 | 1,788 | 3,044 | 1,780 |
| Del. | 13 | 11 | 40 | 109 | 3 | 5 | 20 | 22 | 18 | 32 | 30 |
| Md. | 28 | 19 | 567 | 462 | 85 | 79 | 599 | 836 | 255 | 282 | 416 |
| D.C. | 7 | 4 | 4 | 9 | 18 | 19 | 73 | 102 | 93 | 91 | - |
| Va . | 20 | 25 | 65 | 62 | 53 | 64 | 137 | 220 | 250 | 275 | 519 |
| W. Va. | N | N | 12 | 10 | 2 | 1 | 3 | 3 | 38 | 49 | 70 |
| N.C. | 14 | 14 | 54 | 32 | 27 | 18 | 675 | 899 | 409 | 374 | 136 |
| S.C. | 10 | 8 | 7 | 2 | 6 | 17 | 305 | 333 | 214 | 304 | 140 |
| Ga. | 8 | 1 | 5 | 7 | 37 | 46 | 255 | 484 | 441 | 542 | 272 |
| Fla. | 33 | 31 | 57 | 34 | 66 | 52 | 286 | 276 | 70 | 1,095 | 197 |
| E.S. CENTRAL | 59 | 53 | 85 | 86 | 30 | 36 | 1,101 | 1,545 | 961 | 1,174 | 251 |
| Ky. | 25 | 11 | 24 | 16 | 6 | 12 | 100 | 123 | 152 | 167 | 30 |
| Tenn. | 22 | 31 | 42 | 39 | 16 | 8 | 510 | 672 | 341 | 412 | 132 |
| Ala. | 5 | 4 | 17 | 10 | 6 | 10 | 262 | 379 | 302 | 380 | 87 |
| Miss. | 7 | 7 | 2 | 21 | 2 | 6 | 229 | 371 | 166 | 215 | 2 |
| W.S. CENTRAL | 39 | 33 | 24 | 89 | 28 | 54 | 932 | 1,194 | 1,836 | 2,297 | 135 |
| Ark. | - | 2 | 6 | 25 | 1 | 5 | 100 | 149 | 136 | 171 | 31 |
| La. | 4 | 6 | 4 | 3 | 15 | 13 | 394 | 331 | 255 | 199 | - |
| Okla. | 12 | 2 | 2 | 26 | 4 | 8 | 113 | 112 | 147 | 186 | 104 |
| Tex. | 23 | 23 | 12 | 35 | 8 | 28 | 325 | 602 | 1,298 | 1,741 | - |
| MOUNTAIN | 72 | 62 | 22 | 12 | 61 | 65 | 211 | 163 | 393 | 500 | 210 |
| Mont. | 2 | 1 | - | - | 1 | 2 | - | - | 18 | 16 | 51 |
| Idaho | 2 | 2 | 5 | 3 | 8 | - | 2 | 1 | 13 | 11 | - |
| Wyo. | 1 | 1 | 1 | 3 | - | 2 | 1 | - | 4 | 2 | 63 |
| Colo. | 17 | 18 | 5 | - | 19 | 30 | 11 | 15 | U | 76 | 39 |
| N. Mex. | 2 | 3 | 4 | 1 | 12 | 8 | 22 | 8 | 63 | 60 | 6 |
| Ariz. | 19 | 12 | 1 | 2 | 8 | 11 | 160 | 124 | 182 | 207 | 19 |
| Utah | 22 | 18 | - | 1 | 1 | 3 | 4 | 5 | 48 | 28 | 26 |
| Nev. | 7 | 7 | 6 | 2 | 12 | 9 | 11 | 10 | 65 | 100 | 6 |
| PACIFIC | 62 | 45 | 160 | 155 | 242 | 458 | 357 | 316 | 3,393 | 3,633 | 297 |
| Wash. | 12 | 8 | 7 | 10 | 17 | 46 | 27 | 9 | 194 | 265 | - |
| Oreg. | 1 | - | 21 | 17 | 16 | 25 | 6 | 9 | 124 | 135 | 7 |
| Calif. | 47 | 36 | 131 | 126 | 201 | 373 | 322 | 296 | 2,884 | 3,011 | 267 |
| Alaska | 1 | - | 1 | 2 | 3 | 3 | 1 | 1 | 46 | 66 | 23 |
| Hawaii | 1 | 1 | - | - | 5 | 11 | 1 | 1 | 145 | 156 | - |
| Guam | 2 | - | - | - | 1 | - | 1 | 3 | 36 | 13 | - |
| P.R. | - | - | - | - | - | 5 | 168 | 228 | 68 | 184 | 49 |
| 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 | 11 | 77 | 17 | - |

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 28, 1998, and November 22, 1997 (47th Week)

| Reporting Area | H. influenzae, invasive |  | Hepatitis (Viral), by type |  |  |  | Measles (Rubeola) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | A |  | B |  | Indigenous |  | Imported $^{\dagger}$ |  | Total |  |
|  | $\begin{aligned} & \hline \text { Cum. } \\ & \text { 1998* } \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1997 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Cum. } \\ 1998 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ | 1998 | $\begin{gathered} \hline \text { Cum. } \\ 1998 \\ \hline \end{gathered}$ | 1998 | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ |
| UNITED STATES | 928 | 973 | 19,898 | 25,788 | 7,821 | 8,610 | 1 | 61 | - | 25 | 86 | 129 |
| NEW ENGLAND | 61 | 55 | 252 | 602 | 175 | 164 | - | 1 | - | 2 | 3 | 19 |
| Maine | 3 | 5 | 19 | 59 | 5 | 6 | - | - | - | - | - | 1 |
| N.H. | 9 | 10 | 14 | 33 | 18 | 16 | - | - | - | - | - | 1 |
| V t. | 7 | 3 | 16 | 13 | 6 | 11 | - | - | - | 1 | 1 | - |
| Mass. | 36 | 32 | 104 | 246 | 55 | 69 | - | 1 | - | 1 | 2 | 16 |
| R.I. | 5 | 3 | 16 | 126 | 66 | 14 | - | - | - | - | - |  |
| Conn. | 1 | 2 | 83 | 125 | 25 | 48 | - | - | - | - | - | 1 |
| MID. ATLANTIC | 137 | 151 | 1,341 | 1,939 | 1,014 | 1,244 | - | 8 | - | 6 | 14 | 26 |
| Upstate N.Y. | 59 | 50 | 328 | 336 | 270 | 286 | - | 1 | - | 1 | 2 | 5 |
| N.Y. City | 26 | 41 | 351 | 848 | 261 | 429 | - | - | - | , | - | 10 |
| N.J. | 46 | 42 | 307 | 284 | 176 | 226 | - | 7 | - | 1 | 8 | 3 |
| Pa . | 6 | 18 | 355 | 471 | 307 | 303 | - | - | - | 4 | 4 | 8 |
| E.N. CENTRAL | 153 | 150 | 3,267 | 2,729 | 1,423 | 1,367 | 1 | 12 | - | 3 | 15 | 10 |
| Ohio | 46 | 81 | 280 | 289 | 72 | 79 | - | - | - | 1 | 1 | - |
| Ind. | 39 | 14 | 310 | 298 | 718 | 94 | - | 2 | - | 1 | 3 | - |
| III. | 53 | 37 | 619 | 755 | 177 | 257 | 1 | 1 | - |  | 1 | 7 |
| Mich. | 8 | 17 | 1,900 | 1,218 | 416 | 407 | - | 9 | - | 1 | 10 | 2 |
| Wis. | 7 | 1 | 158 | 169 | 40 | 530 | - | - | - | - | - | 1 |
| W.N. CENTRAL | 83 | 57 | 1,239 | 2,000 | 367 | 441 | - | 1 | - | - | 1 | 17 |
| Minn. | 65 | 44 | 118 | 192 | 48 | 41 | - | - | - | - |  | 8 |
| Iowa | 2 | 6 | 392 | 426 | 54 | 39 | U | 1 | U | - | 1 | - |
| Mo. | 9 | 4 | 562 | 1,021 | 219 | 310 | U | - | U | - | - | 1 |
| N. Dak. | - | - | 3 | 10 | 4 | 5 | - | - | - | - | - | - |
| S. Dak. | - | 2 | 31 | 23 | 2 | 1 | - | - | - | - | - | 8 |
| Nebr. | 1 | 1 | 39 | 86 | 14 | 16 | - | - | - | - | - | - |
| Kans. | 6 | - | 94 | 242 | 26 | 29 | - | - | - | - | - | - |
| S. ATLANTIC | 179 | 152 | 1,827 | 1,844 | 1,043 | 1,113 | - | 3 | - | 5 | 8 | 14 |
| Del. | - | - | 3 | 29 | 3 | 6 | - | - | - | 1 | 1 |  |
| Md. | 51 | 56 | 306 | 178 | 146 | 154 | - | - | - | 1 | 1 | 2 |
| D.C. | , |  | 54 | 32 | 11 | 29 | U | - | U | , | - | 1 |
| Va. | 16 | 13 | 195 | 211 | 92 | 116 | U | - | U | 2 | 2 | 1 |
| W. Va. | 5 | 4 | 7 | 11 | 8 | 16 | - | - | - | - | - | - |
| N.C. | 24 | 21 | 115 | 187 | 215 | 235 | - | - | - | - | - | 2 |
| S.C. | 3 | 4 | 38 | 98 | 42 | 90 | - | , | - | - |  | 1 |
| Ga. | 45 | 31 | 603 | 559 | 128 | 126 | - | 1 | - | 1 | 2 | 1 |
| Fla. | 35 | 23 | 506 | 539 | 398 | 341 | - | 2 | - | - | 2 | 6 |
| E.S. CENTRAL | 53 | 54 | 340 | 567 | 365 | 659 | - | - | - | 2 | 2 | 1 |
| Ky. | 7 | 8 | 22 | 68 | 41 | 36 | - | - | - | 2 | 2 | - |
| Tenn. | 31 | 30 | 207 | 344 | 255 | 411 | - | - | - | 1 | 1 | - |
| Ala. | 13 | 14 | 68 | 78 | 67 | 72 | - | - | - | 1 | 1 | 1 |
| Miss. | 2 | 2 | 43 | 77 | 2 | 140 | - | - | - | - | - | - |
| W.S. CENTRAL | 54 | 47 | 3,756 | 5,274 | 1,133 | 1,179 | - | 1 | - | - | 1 | 8 |
| Ark. | 5 | 2 | 3, 89 | 5,276 | 1,87 | 179 | - | - | - | - | , | 8 |
| La. | 23 | 12 | 108 | 214 | 154 | 158 | - | 1 | - | - | 1 | - |
| Okla. | 28 | 30 | 552 | 1,326 | 92 | 47 | - | - | - | - | - | 1 |
| Tex. | 3 | 3 | 3,007 | 3,538 | 800 | 895 | - | - | - | - | - | 7 |
| MOUNTAIN | 106 | 79 | 2,988 | 3,906 | 761 | 791 | - | 3 | - | 2 | 5 | 8 |
| Mont. | - | - | 93 | 68 | 5 | 12 | - | - | - | - | - | - |
| Idaho | 1 | 1 | 227 | 125 | 42 | 50 | - | - | - | - | - | - |
| Wyo. | 1 | 4 | 36 | 31 | 8 | 24 | - | - | - | - | - | - |
| Colo. | 18 | 18 | 319 | 377 | 105 | 134 | - | - | - | - | - | - |
| N. Mex. | 7 | 8 | 137 | 324 | 295 | 235 | - | - | - | - | - | - |
| Ariz. | 54 | 29 | 1,789 | 2,058 | 166 | 183 | - | 3 | - | 2 | 5 | 5 |
| Utah | 6 | 3 | 183 | 521 | 66 | 84 | - |  | - | 2 |  | 1 |
| Nev. | 19 | 16 | 204 | 402 | 74 | 69 | - | - | - | - | - | 2 |
| PACIFIC | 102 | 228 | 4,888 | 6,927 | 1,540 | 1,652 | - | 32 | - | 5 | 37 | 26 |
| Wash. | 10 | 5 | 884 | 595 | 111 | 73 | - | , | - | 1 | 1 | 2 |
| Oreg. | 37 | 32 | 355 | 344 | 114 | 108 | - | 5 | - | - | - | 0 |
| Calif. | 47 | 175 | 3,595 | 5,812 | 1,297 | 1,447 | - | 5 | - | 3 | 8 | 20 |
| Alaska | 1 | 8 | - 18 | 5,33 | 12 | 14 | - | 27 | - | 1 | 28 | - |
| Hawaii | 7 | 8 | 36 | 143 | 6 | 10 | - | - | - | - | - | 4 |
| Guam |  | - | , | , | 2 | 3 | U | - | U | - | - | - |
| P.R. | 2 | - | 49 | 259 | 333 | 748 | U | - | U | U | - | - |
| V.I. | U | U | U | U | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | 6 | 3 | 1 | 53 | 44 | U | - | U | - | - | 1 |

N : Not notifiable U: Unavailable -: no reported cases
*Of 216 cases among children aged $<5$ years, serotype was reported for 106 and of those, 42 were type b.
${ }^{\dagger}$ For imported measles, cases include only those resulting from importation from other countries.

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 28, 1998, and November 22, 1997 (47th Week)

| Reporting Area | Meningococcal Disease |  | Mumps |  |  | Pertussis |  |  | Rubella |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ | 1998 | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1997 \\ \hline \end{gathered}$ | 1998 | $\begin{gathered} \hline \text { Cum. } \\ 1998 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ | 1998 | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ |
| UNITED STATES | 2,375 | 2,888 | 5 | 434 | 586 | 71 | 5,526 | 5,056 | - | 328 | 158 |
| NEW ENGLAND | 100 | 181 | - | 7 | 12 | 7 | 850 | 922 | - | 38 | 1 |
| Maine | 6 | 17 | - | - | - | - | 5 | 19 | - |  | - |
| N.H. | 4 | 14 | - | - | 1 | 3 | 112 | 127 | - | - |  |
| V . | 5 | 4 | - | - | - | 2 | 71 | 235 | - | - | - |
| Mass. | 52 | 89 | - | 4 | 4 | - | 608 | 499 | - | 8 | 1 |
| R.I. | 8 | 20 | - | 1 | 6 | - | 9 | 16 | - | 1 | - |
| Conn. | 25 | 37 | - | 2 | 1 | 2 | 45 | 26 | - | 29 | - |
| MID. ATLANTIC | 226 | 316 | 2 | 31 | 55 | 8 | 526 | 372 | - | 130 | 34 |
| Upstate N.Y. | 65 | 83 | 2 | 8 | 11 | 8 | 290 | 152 | - | 111 | 6 |
| N.Y. City | 23 | 51 | - | 4 | 3 | - | 23 | 60 | - | 14 | 28 |
| N.J. | 54 | 67 | - | 2 | 8 | - | 5 | 13 | - | 4 | - |
| Pa . | 84 | 115 | - | 17 | 33 | - | 208 | 147 | - | 1 | - |
| E.N. CENTRAL | 353 | 441 | 1 | 72 | 80 | 6 | 591 | 555 | - | - | 6 |
| Ohio | 131 | 152 | 1 | 28 | 31 | 3 | 264 | 151 | - | - | - |
| Ind. | 63 | 51 | - | 6 | 12 | - | 140 | 55 | - | - | - |
| III. | 86 | 136 | - | 11 | 11 | 3 | 105 | 93 | - | - | 2 |
| Mich. | 41 | 65 | - | 27 | 22 | - | 65 | 55 | - | - | - |
| Wis. | 32 | 37 | - | - | 4 | - | 17 | 201 | - | - | 4 |
| W.N. CENTRAL | 197 | 211 | - | 30 | 17 | 14 | 515 | 468 | - | 33 | - |
| Minn. | 31 | 34 | - | 13 | 6 | 14 | 320 | 268 | - | - | - |
| Iowa | 40 | 44 | U | 11 | 9 | U | 68 | 92 | U | - | - |
| Mo. | 70 | 90 | - | 3 | - | - | 32 | 66 | - | 2 | - |
| N. Dak. | 5 | 2 | - | 2 | - | - | 3 | 1 | - | - | - |
| S. Dak. | 7 | 5 | - | - | - | - | 8 | 5 | - | - | - |
| Nebr. | 14 | 15 | - | - | 1 | - | 18 | 10 | - | - | - |
| Kans. | 30 | 21 | - | 1 | 1 | - | 66 | 26 | - | 31 | - |
| S. ATLANTIC | 421 | 494 | - | 48 | 71 | 1 | 309 | 403 | - | 19 | 78 |
| Del. | 2 | 5 | - | - | - | - | 5 | 1 | - | - | - |
| Md. | 29 | 42 | - | - | 1 | - | 54 | 112 | - | 1 | - |
| D.C. | 1 | 12 | U | $\overline{-}$ | - | U | 1 | 3 | U | - | 1 |
| Va . | 43 | 58 | - | 8 | 18 | - | 36 | 51 | - | 1 | 1 |
| W. Va. | 16 | 18 | - | - | - | - | 2 | 6 | - | - | - |
| N.C. | 56 | 87 | - | 11 | 10 | - | 98 | 115 | - | 13 | 59 |
| S.C. | 55 | 52 | - | 7 | 11 | - | 27 | 28 | - | - | 15 |
| Ga. | 92 | 94 | - | 1 | 10 | - | 27 | 13 | - | - | - |
| Fla. | 127 | 126 | - | 21 | 21 | 1 | 59 | 74 | - | 4 | 2 |
| E.S. CENTRAL | 221 | 218 | - | 14 | 31 | 1 | 117 | 136 | - | 2 | 1 |
| Ky. | 34 | 45 | - | - | 3 | - | 50 | 61 | - | - | - |
| Tenn. | 70 | 75 | - | 1 | 6 | 1 | 36 | 36 | - | 2 | - |
| Ala. | 93 | 73 | - | 8 | 9 | - | 28 | 28 | - | - | 1 |
| Miss. | 24 | 25 | - | 5 | 13 | - | 3 | 11 | - | - | - |
| W.S. CENTRAL | 273 | 274 | - | 59 | 81 | - | 351 | 269 | - | 87 | 4 |
| Ark. | 30 | 32 | - | 12 | 1 | - | 91 | 51 | - | - | - |
| La. | 58 | 48 | - | 10 | 14 | - | 9 | 19 | - | - | - |
| Okla. | 40 | 39 | - | - | - | - | 30 | 51 | - | 87 | - |
| Tex. | 145 | 155 | - | 37 | 66 | - | 221 | 148 | - | 87 | 4 |
| MOUNTAIN | 141 | 166 | 1 | 38 | 54 | 22 | 1,069 | 1,079 | - | 5 | 7 |
| Mont. | 4 | 8 | - | - | - | - | 12 | 18 | - | - | - |
| Idaho | 11 | 10 | - | 5 | 3 | 5 | 249 | 518 | - | - | 2 |
| Wyo. | 7 | 3 | - | 1 | 1 | - | 8 | 7 | - | - | - |
| Colo. | 30 | 44 | - | 6 | 3 | 1 | 220 | 342 | - | - | - |
| N. Mex. | 25 | 29 | N | N | N | - | 94 | 115 | - | 1 | - |
| Ariz. | 41 | 39 |  | 6 | 32 | - | 199 | 35 | - | 1 | 5 |
| Utah | 14 | 15 | 1 | 6 | 8 | 16 | 240 | 20 | - | 2 | - |
| Nev. | 9 | 18 | - | 14 | 7 | - | 47 | 24 | - | 1 | - |
| PACIFIC | 443 | 587 | 1 | 135 | 185 | 12 | 1,198 | 852 | - | 14 | 27 |
| Wash. | 59 | 83 | 1 | 11 | 19 | 3 | 308 | 362 | - | 9 | 5 |
| Oreg. | 82 | 114 | N | N | N | 1 | 87 | 46 | - | - | , |
| Calif. | 294 | 380 | N | 99 | 133 | 8 | 774 | 410 | - | 3 | 14 |
| Alaska | 3 | 3 | - | 2 | 8 | - | 14 | 16 | - | - |  |
| Hawaii | 5 | 7 | - | 23 | 25 | - | 15 | 18 | - | 2 | 8 |
| Guam | 1 | 1 | U | 2 | 1 | U | - | - | U | - | - |
| P.R. | 6 | 8 | - | 1 | 7 | - | 6 | - | - | - | - |
| 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 November 28, 1998 (47th Week)

| Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | P\&I ${ }^{\dagger}$ Total | Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | P\&I ${ }^{\dagger}$ <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 |  |  | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 |  |
| NEW ENGLAND | 518 | 385 | 85 | 29 | 10 | 9 | 38 | S. ATLANTIC | 1,004 | 677 | 193 | 86 | 20 | 26 | 48 |
| Boston, Mass. | 145 | 103 | 28 | 10 | 2 |  | 13 | Atlanta, Ga. | 26 | 13 | 8 | 3 | 1 | 1 | - |
| Bridgeport, Conn. | 42 | 33 | 7 | 1 |  | 1 | 6 | Baltimore, Md. | 184 | 116 | 36 | 19 | 7 | 6 | 19 |
| Cambridge, Mass. | 10 | 9 | 1 |  |  |  | - | Charlotte, N.C. | 57 | 38 | 12 | 5 | 1 | 1 | 5 |
| Fall River, Mass. | 17 | 16 | 1 |  |  |  |  | Jacksonville, Fla. | 101 | 74 | 14 | 6 |  | 5 | 1 |
| Hartford, Conn. | 41 | 28 | 7 | 1 | 3 | 2 | 1 | Miami, Fla. | 111 | 80 | 21 | 9 | 1 |  | 1 |
| Lowell, Mass. | 19 | 15 | 2 | 2 |  | - | 3 | Norfolk, Va. | 34 | 23 | 7 | 1 |  | 3 | 3 |
| Lynn, Mass. | 2 | 2 |  | - |  | - | - | Richmond, Va. | 40 | 29 | 8 | 3 |  |  | 2 |
| New Bedford, Mass. | 16 | 13 | 1 | 1 | 1 |  |  | Savannah, Ga. | 45 | 37 | 3 | 4 |  | 1 | 2 |
| New Haven, Conn. | 34 | 22 | 7 | 4 | 1 | - | 2 | St. Petersburg, Fla. | 37 | 33 | 3 | 1 |  | - | 2 |
| Providence, R.I. | 57 | 41 | 9 | 5 |  | 2 | 5 | Tampa, Fla. | 192 | 138 | 36 | 10 | 2 | 6 | 9 |
| Somerville, Mass. | 5 | 2 | 2 | 1 |  | - |  | Washington, D.C. | 168 | 89 | 43 | 25 | 8 | 3 | 4 |
| Springfield, Mass. | 31 | 24 | 5 | 1 | 1 | - | 2 | Wilmington, Del. | 9 | 7 | 2 | - | - | - | - |
| Waterbury, Conn. | 32 | 25 | 4 | 2 |  | 1 | 1 |  |  |  |  |  |  |  |  |
| Worcester, Mass. | 67 | 52 | 11 | 1 | 2 | 1 | 5 | E.S. CENTRAL <br> Birmingham, Ala. | $\begin{aligned} & 802 \\ & 199 \end{aligned}$ | 517 130 | 151 33 | 71 22 | 26 | 33 5 | 37 12 |
| MID. ATLANTIC | 2,356 | 1,702 | 431 | 148 | 35 | 40 | 111 | Chattanooga, Tenn. | 69 | 42 | 19 | 3 | 3 | 2 | 4 |
| Albany, N.Y. | 37 | 24 | 7 | 5 | 1 | - | 1 | Knoxville, Tenn. | 73 | 51 | 10 | 7 | 2 | 3 | 3 |
| Allentown, Pa. | 22 | 19 | 3 |  |  |  |  | Lexington, Ky. | 49 | 33 | 10 | 2 | 2 | 2 | 4 |
| Buffalo, N.Y. | 94 | 68 | 15 | 8 | 1 | 2 | 5 | Memphis, Tenn. | 232 | 155 | 48 | 9 | 6 | 14 | 11 |
| Camden, N.J. | 23 | 13 | 6 | - |  | 4 | 4 | Mobile, Ala. | 47 | 35 | 4 | 5 | 1 | 2 | - |
| Elizabeth, N.J. | 6 | 5 | 1 | - |  | - | - | Montgomery, Ala. | 27 | 17 | 4 | 4 | 1 |  | 1 |
| Erie, Pa. | 31 | 25 | 5 | $\overline{-}$ | - | 1 | 3 | Nashville, Tenn. | 106 | 54 | 23 | 19 | 6 | 4 | 2 |
| Jersey City, N.J. New York City, N.Y. | 17 1,511 | 10 1,063 | 202 | 102 | 23 | 21 | 64 | W.S. CENTRAL | 1,067 | 703 | 227 | 87 | 22 | 28 | 72 |
| New York City, N.Y. | 1,511 | 1,063 | 302 | 102 | $\stackrel{23}{\cup}$ | $\stackrel{21}{4}$ | 64 | Austin, Tex. | 1,067 | 29 | 11 | 4 | - 2 | 4 | 5 |
| Paterson, N.J. | 16 | 9 | 5 | 1 | U | 1 |  | Baton Rouge, La. | 38 | 21 | 8 | 6 | 3 | - |  |
| Philadelphia, Pa. | 300 | 225 | 43 | 21 | 6 | 5 | 13 | Corpus Christi, Tex. | 47 | 35 | 11 | 1 | - | $\bar{\square}$ | 1 |
| Pittsburgh, Pa.§ | 53 | 42 | 8 | 2 | - | 1 | 6 | Dallas, Tex. | 116 | 60 | 27 | 16 | 4 | 9 | 4 |
| Reading, Pa. | 26 | 23 | 3 |  |  |  | 3 | El Paso, Tex. | 55 | 30 | 13 | 8 | 1 | 3 | 7 |
| Rochester, N.Y. | 80 | 62 | 12 | 3 | 1 | 2 | 6 | Ft. Worth, Tex. | 50 | 35 | 11 | 3 | 5 | 1 | 78 |
| Schenectady, N.Y. | 23 | 20 | 3 | - | - | - | 3 | Houston, Tex. Little Rock, Ark. | 343 46 | 232 34 | 67 10 | 36 | 5 | 3 | 28 4 |
| Scranton, Pa. | 26 | 24 | 1 | 1 | $\bar{\square}$ | - |  | Little Rock, Ark. | 46 27 | 34 14 | 10 9 | 2 | 2 | 1 | 4 |
| Syracuse, N.Y. | 41 | 31 | 7 | 1 | 1 | 1 | 1 | New Orleans, La. | 27 136 | 14 103 | 9 25 | 1 | 2 | 3 | 11 |
| Trenton, N.J. | 24 | 18 | 4 | 1 | 1 | - | 2 | San Antonio, Tex. | 136 73 | 103 45 | 25 20 | 3 | 2 | 3 | 11 4 |
| Utica, N.Y. | 26 | 21 | 4 | 1 |  | - |  | Shreveport, La. | 73 86 | 65 | 15 | 1 | 3 | 2 | 4 7 |
| Yonkers, N.Y. | U | U | U | U | U | U | U | Tulsa, Okla. | 86 | 65 | 15 | 1 | 3 | 2 | 7 |
| E.N. CENTRAL | 1,800 | 1,227 | 337 | 137 | 41 | 53 | 111 | MOUNTAIN | 787 | 563 | 131 | 56 | 20 | 16 | 59 |
| Akron, Ohio | 34 | 19 | 8 | 3 | 1 | 3 | - | Albuquerque, N.M. | 59 | 49 | 7 | 3 | - |  | 3 |
| Canton, Ohio | 34 | 28 | 6 | - |  | - | 5 | Boise, Idaho | 32 | 26 | 5 | 1 | - | - | 3 |
| Chicago, III. | 461 | 284 | 94 | 44 | 13 | 21 | 24 | Colo. Springs, Colo. | 54 | 39 | 12 | 1 |  | 1 | 2 |
| Cincinnati, Ohio | 119 | 87 | 13 | 7 | 4 | 8 | 10 | Denver, Colo. | 103 | 69 | 19 | 6 | 2 | 7 | 6 |
| Cleveland, Ohio | 143 | 91 | 31 | 14 | 4 | 3 | 2 | Las Vegas, Nev. | 188 | 133 | 39 | 13 | 3 | - | 11 |
| Columbus, Ohio | 162 | 112 | 32 | 14 | 2 | 2 | 16 | Ogden, Utah | 14 | 12 | 15 | 2 | - | - | 2 |
| Dayton, Ohio | 78 | 58 | 15 | 3 | 2 | 2 | 5 | Phoenix, Ariz. | 126 | 78 | 15 | 18 | 8 | 6 | 10 |
| Detroit, Mich. | 120 | 66 | 28 | 20 | 4 | 2 | 8 | Pueblo, Colo. | 16 | 14 | 1 | 1 | 4 | 2 | 4 |
| Evansville, Ind. | 20 | 17 | 3 |  | - |  |  | Salt Lake City, Utah | 80 | 57 | 13 | 4 | 4 | 2 | 7 |
| Fort Wayne, Ind. | 69 | 54 | 10 | 3 | - | 2 | 2 | Tucson, Ariz. | 115 | 86 | 20 | 7 | 2 |  | 11 |
| Gary, Ind. | 3 | 1 | 1 | 1 | $\overline{-}$ | - |  | PACIFIC | 1,106 | 778 | 205 | 80 | 17 | 24 | 113 |
| Grand Rapids, Mich. | 62 | 42 | 11 | 4 | 2 | 3 | 7 | Berkeley, Calif. | 1, 11 | 6 | 2 | 3 |  | - | , |
| Indianapolis, Ind. | 125 | 82 | 27 | 10 | 3 | 3 | 5 | Fresno, Calif. | 99 | 74 | 16 | 8 |  | 1 | 15 |
| Lansing, Mich. | 27 | 23 | 2 | 2 | - | - | 1 | Glendale, Calif. | 4 | 3 | 1 | 8 |  | - | 1 |
| Milwaukee, Wis. | 91 | 61 | 21 | 5 | 2 | 2 | 13 | Honolulu, Hawaii | 60 | 45 | 9 | 2 | 1 | 2 | 5 |
| Peoria, III. | 46 | 34 | 10 | - | 1 | 1 | 5 | Long Beach, Calif. | 74 | 57 | 15 | 1 | - | 1 | 9 |
| Rockford, III. | 39 | 30 | 6 | 2 | 1 | - | 2 | Los Angeles, Calif. | 27 | 19 | 5 | 2 | - | 1 | 2 |
| South Bend, Ind. | 39 | 35 | 2 | 2 |  | 2 | 2 | Pasadena, Calif. | 19 | 13 | 5 | 1 | - | - | 2 |
| Toledo, Ohio | 75 | 63 | 9 | 1 | $\overline{-}$ | 2 | 2 | Portland, Oreg. | 229 | 157 | 44 | 21 | 6 | 1 | 18 |
| Youngstown, Ohio | 53 | 40 | 8 | 2 | 2 | 1 | 2 | Sacramento, Calif. | 192 | 133 | 41 | 11 | 1 | 6 | 26 |
| W.N. CENTRAL | 617 | 439 | 113 | 35 | 7 | 12 | 29 | San Diego, Calif. | 96 | 67 | 18 | 5 | 4 | 2 | 12 |
| Des Moines, lowa | 119 | 79 | 32 | 3 |  | 5 | 9 | San Francisco, Calif. | 94 | 64 | 17 | 10 | U | 2 | 14 |
| Duluth, Minn. | U | U | U | U | U | U | U | San Jose, Calif. | 20 | 12 | 5 | 3 | U | U | 1 |
| Kansas City, Kans. | 15 | 9 | 3 | 2 | 1 | - | 3 | Seattle, Wash. | 63 | 43 | 10 | 5 | 3 | 2 | 2 |
| Kansas City, Mo. | 109 | 75 | 12 | 7 | 3 | 1 | 3 | Spokane, Wash. | 43 | 35 | 1 | 3 | 2 | 2 | 3 |
| Lincoln, Nebr. | 17 | 12 | 4 | 1 | - | 1 | 8 | Tacoma, Wash. | 75 | 50 | 16 | 5 | - | 4 | 3 |
| Minneapolis, Minn. | 116 | 87 | 17 | 10 | 1 | 1 | 8 |  |  |  |  |  |  |  |  |
| Omaha, Nebr. | 54 | 39 | 12 | - | 2 | 1 | 5 | TOTAL | 10,057 ${ }^{\text {¹ }}$ | 6,991 | 1,873 | 729 | 198 | 241 | 618 |
| St. Louis, Mo. | 73 | 49 | 17 | 6 | - | 1 | - |  |  |  |  |  |  |  |  |
| St. Paul, Minn. | 65 | 49 | 9 | 5 |  | 2 | 4 |  |  |  |  |  |  |  |  |
| Wichita, Kans. | 49 | 40 | 7 | 1 | - | 1 | - |  |  |  |  |  |  |  |  |

${ }^{*}$ 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.
${ }^{\dagger}$ Preumonia 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.

## Abortion Surveillance - Continued

vide, information about characteristics (e.g., age or race) of women obtaining legal abortions (two states). To track efforts to prevent unintended pregnancy, each state needs an accurate assessment of abortion on an ongoing basis (including the number and characteristics of women obtaining legal abortions). Since 1992, most reporting areas have reported abortions by gestational age in weeks of gestation for abortions performed at $\leq 8$ weeks. As new medical methods are introduced and used for terminating pregnancies primarily at $\leq 8$ weeks' gestation, these data will continue to assist in monitoring trends in legal abortions (8-10).

Additional statistical and epidemiologic information about legal induced abortions is available from CDC's automated Reproductive Health Information line, telephone (888) 232-2306, which provides information by fax, by voice recordings, or through the mail; or from CDC's World-Wide Web site, http://www.cdc.gov.

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[^0]:    ${ }^{*}$ Northeast=Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; Midwest=Illinois, Indiana, lowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; South=Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; West=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

[^1]:    *Persons were considered to have asthma if they had had asthma diagnosed by a physician at some time in their life and had reported symptoms of asthma during the preceding 12 months.
    ${ }^{\dagger}$ Confidence interval.

