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Tetanus Surveillance — United States, 1995–1997

Postneonatal Mortality Surveillance — United States, 1980–1994

Abortion Surveillance — United States, 1995

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Contents

Reports Published in *CDC Surveillance Summaries* Since January 1, 1985

Subject	Responsible CIO/Agency*	Most Recent Report
Abortion	NCCDPHP	1998; Vol. 47, No. SS-2
AIDS/HIV		
Distribution by Racial/Ethnic Group	NCID	1988; Vol. 37, No. SS-3
Among Black & Hispanic Children & Women of Childbearing Age	NCEHIC	1990; Vol. 39, No. SS-3
Asthma	NCEH	1998; Vol. 47, No. SS-1
Behavioral Risk Factors	NCCDPHP	1997; Vol. 46, No. SS-3
Birth Defects		
B.D. Monitoring Program (see also Malformations)	NCEH	1993; Vol. 42, No. SS-1
Contribution of B.D. to Infant Mortality Among Minority Groups	NCEHIC	1990; Vol. 39, No. SS-3
Breast & Cervical Cancer	NCCDPHP	1992; Vol. 41, No. SS-2
Campylobacter	NCID	1988; Vol. 37, No. SS-2
Chancroid	NCPS	1992; Vol. 41, No. SS-3
Chlamydia	NCPS	1993; Vol. 42, No. SS-3
Cholera	NCID	1992; Vol. 41, No. SS-1
Chronic Fatigue Syndrome	NCID	1997; Vol. 46, No. SS-2
Congenital Malformations, Minority Groups	NCEHIC	1988; Vol. 37, No. SS-3
Contraception Practices	NCCDPHP	1992; Vol. 41, No. SS-4
Cytomegalovirus Disease, Congenital	NCID	1992; Vol. 41, No. SS-2
Dengue	NCID	1994; Vol. 43, No. SS-2
Dental Caries & Periodontal Disease Among Mexican-American Children	NCPS	1988; Vol. 37, No. SS-3
Developmental Disabilities	NCEH	1996; Vol. 45, No. SS-2
Diabetes Mellitus	NCCDPHP	1993; Vol. 42, No. SS-2
Dracunculiasis	NCID	1992; Vol. 41, No. SS-1
Ectopic Pregnancy	NCCDPHP	1993; Vol. 42, No. SS-6
Elderly, Hospitalizations Among	NCCDPHP	1991; Vol. 40, No. SS-1
Endometrial & Ovarian Cancers	EPO, NCCDPHP	1986; Vol. 35, No. 2SS
Escherichia coli O157	NCID	1991; Vol. 40, No. SS-1
Evacuation Camps	EPO	1992; Vol. 41, No. SS-4
Family Planning Services at Title X Clinics	NCCDPHP	1995; Vol. 44, No. SS-2
Foodborne Disease	NCID	1996; Vol. 45, No. SS-5
Gonorrhea & Syphilis, Teenagers	NCPS	1993; Vol. 42, No. SS-3
Hazardous Substances Emergency Events	ATSDR	1994; Vol. 43, No. SS-2
Health Surveillance Systems	IHPO	1992; Vol. 41, No. SS-4
Hepatitis	NCID	1985; Vol. 34, No. 1SS
Homicide	NCEHIC	1992; Vol. 41, No. SS-3
Homicides, Black Males	NCEHIC	1988; Vol. 37, No. SS-1
Hysterectomy	NCCDPHP	1997; Vol. 46, No. SS-4
Infant Mortality (see also National Infant Mortality; Birth Defects; Postneonatal Mortality)	NCEHIC	1990; Vol. 39, No. SS-3
Influenza	NCID	1997; Vol. 46, No. SS-1
Injury		
Death Rates, Blacks & Whites	NCEHIC	1988; Vol. 37, No. SS-3
Drownings	NCEHIC	1988; Vol. 37, No. SS-1
Falls, Deaths	NCEHIC	1988; Vol. 37, No. SS-1
Firearm-Related Deaths, Unintentional	NCEHIC	1988; Vol. 37, No. SS-1

*Abbreviations

ATSDR	Agency for Toxic Substances and Disease Registry
CIO	Centers/Institute/Offices
EPO	Epidemiology Program Office
IHPO	International Health Program Office
NCCDPHP	National Center for Chronic Disease Prevention and Health Promotion
NCEH	National Center for Environmental Health
NCEHIC	National Center for Environmental Health and Injury Control
NCID	National Center for Infectious Diseases
NCIPC	National Center for Injury Prevention and Control
NCPS	National Center for Prevention Services
NIOSH	National Institute for Occupational Safety and Health
NIP	National Immunization Program

Reports Published in *CDC Surveillance Summaries* Since January 1, 1985 — Continued

Subject	Responsible CIO/Agency*	Most Recent Report
Head & Neck	NCIPC	1993; Vol. 42, No. SS-5
In Developing Countries	NCEHIC	1992; Vol. 41, No. SS-1
In the Home, Persons <15 Years of Age	NCEHIC	1988; Vol. 37, No. SS-1
Motor Vehicle-Related Deaths	NCEHIC	1988; Vol. 37, No. SS-1
Objectives of Injury Control, State & Local	NCEHIC	1988; Vol. 37, No. SS-1
Objectives of Injury Control, National	NCEHIC	1988; Vol. 37, No. SS-1
Residential Fires, Deaths	NCEHIC	1988; Vol. 37, No. SS-1
Tap Water Scalds	NCEHIC	1988; Vol. 37, No. SS-1
Lead Poisoning, Childhood	NCEHIC	1990; Vol. 39, No. SS-4
Low Birth Weight	NCCDPHP	1990; Vol. 39, No. SS-3
Malaria	NCID	1997; Vol. 46, No. SS-2
Measles	NCPS	1992; Vol. 41, No. SS-6
Meningococcal Disease	NCID	1993; Vol. 42, No. SS-2
Mining	NIOSH	1986; Vol. 35, No. 2SS
Mumps	NIP	1995; Vol. 44, No. SS-3
National Infant Mortality (see also Infant Mortality; Birth Defects)	NCCDPHP	1989; Vol. 38, No. SS-3
Neisseria gonorrhoeae, Antimicrobial Resistance in	NCPS	1993; Vol. 42, No. SS-3
Neural Tube Defects	NCEH	1995; Vol. 44, No. SS-4
Nosocomial Infection	NCID	1986; Vol. 35, No. 1SS
Occupational Injuries/Disease		
Asthma	NIOSH	1994; Vol. 43, No. SS-1
Hazards, Occupational	NIOSH	1985; Vol. 34, No. 2SS
In Meatpacking Industry	NIOSH	1985; Vol. 34, No. 1SS
Silicosis	NIOSH	1993; Vol. 42, No. SS-5
State Activities	NIOSH	1987; Vol. 36, No. SS-2
Parasites, Intestinal	NCID	1991; Vol. 40, No. SS-4
Pediatric Nutrition	NCCDPHP	1992; Vol. 41, No. SS-7
Pertussis	NCPS	1992; Vol. 41, No. SS-8
Plague	NCID	1985; Vol. 34, No. 2SS
Plague, American Indians	NCID	1988; Vol. 37, No. SS-3
Poliomyelitis	NCPS	1992; Vol. 41, No. SS-1
Postneonatal Mortality	NCCDPHP	1998; Vol. 47, No. SS-2
Pregnancy Nutrition	NCCDPHP	1992; Vol. 41, No. SS-7
Pregnancy-Related Mortality	NCCDPHP	1997; Vol. 46, No. SS-4
Pregnancy, Teenage	NCCDPHP	1993; Vol. 42, No. SS-6
Rabies	NCID	1989; Vol. 38, No. SS-1
Racial/Ethnic Minority Groups	Various	1990; Vol. 39, No. SS-3
Respiratory Disease	NCEHIC	1992; Vol. 41, No. SS-4
Rotavirus	NCID	1992; Vol. 41, No. SS-3
Salmonella	NCID	1988; Vol. 37, No. SS-2
Sexually Transmitted Diseases in Italy	NCPS	1992; Vol. 41, No. SS-1
Silicosis		1997; Vol. 46, No. SS-1
Smoking	NCCDPHP	1990; Vol. 39, No. SS-3
Smoking-Attributable Mortality	NCCDPHP	1994; Vol. 43, No. SS-1
Tobacco Control Laws, State	NCCDPHP	1995; Vol. 44, No. SS-6
Tobacco-Use Behaviors	NCCDPHP	1994; Vol. 43, No. SS-3
Spina Bifida	NCEH	1996; Vol. 45, No. SS-2
Streptococcal Disease (Group B)	NCID	1992; Vol. 41, No. SS-6
Sudden Unexplained Death Syndrome Among Southeast Asian Refugees	NCEHIC, NCPS	1987; Vol. 36, No. 1SS
Suicides, Persons 15–24 Years of Age	NCEHIC	1988; Vol. 37, No. SS-1
Syphilis, Congenital	NCPS	1993; Vol. 42, No. SS-6
Syphilis, Primary & Secondary	NCPS	1993; Vol. 42, No. SS-3
Tetanus	NIP	1998; Vol. 47, No. SS-2
Trichinosis	NCID	1991; Vol. 40, No. SS-3
Tuberculosis	NCPS	1991; Vol. 40, No. SS-3
Waterborne Disease Outbreaks	NCID	1996; Vol. 45, No. SS-1
Years of Potential Life Lost	EPO	1992; Vol. 41, No. SS-6
Youth Risk Behaviors	NCCDPHP	1996; Vol. 45, No. SS-4
Youth Risk Behaviors, College Students	NCCDPHP	1997; Vol. 46, No. SS-6

Tetanus Surveillance — United States, 1995–1997

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Abstract

Problem/Conditions: Despite widespread availability of a safe and effective vaccine against tetanus, 124 cases of the disease were reported during 1995–1997. Only 13% of patients reported having received a primary series of tetanus toxoid (TT) before disease onset. Of patients with known illness outcome, the case-fatality ratio was 11%.

Reporting Period Covered: 1995–1997.

Description of System: Physician-diagnosed cases of tetanus are reported by state and local health departments to CDC's National Notifiable Diseases Surveillance System. In addition, since 1965, supplemental clinical and epidemiologic information for cases has been provided to CDC's National Immunization Program.

Results: From 1995 through 1997, a total of 124 cases of tetanus were reported from 33 states and the District of Columbia, accounting for an average annual incidence of 0.15 cases per 1,000,000 population. Sixty percent of patients were aged 20–59 years; 35% were aged ≥60 years; and 5% were aged <20 years, including one case of neonatal tetanus. For adults aged ≥60 years, the increased risk for tetanus was nearly sevenfold that for persons aged 5–19 years and twofold that for persons aged 20–59 years. The case-fatality ratio varied from 2.3% for persons aged 20–39 years to 16% for persons aged 40–59 years and to 18% for persons aged ≥60 years. Only 13% of patients reported having received a primary series of TT before disease onset. Previous vaccination status was directly related to severity of disease, with the case-fatality ratio ranging from 6% for patients who had received one to two doses to 15% for patients who were unvaccinated. No deaths occurred among the 16 patients who previously had received three or more doses. Tetanus occurred following an acute injury in 77% of patients, but only 41% sought medical care for their injury. All patients who sought care were eligible for TT as part of wound prophylaxis, but only 39% received it. Tetanus in injecting-drug users (IDUs) with no known acute injury comprised 11% of all cases, compared with 3.6% during 1991–1994. None of the IDU-associated tetanus cases occurred among persons who were known to have been vaccinated. Sixty-nine percent of IDU-associated tetanus cases were reported from California, and 77% of these cases occurred in heroin users.

Interpretation: Tetanus remains a severe disease that primarily affects unvaccinated or inadequately vaccinated persons. Adults aged ≥60 years continue to be at highest risk for tetanus and for severe disease. However, the overall incidence of tetanus has decreased slightly since the late 1980s and early 1990s, from 0.20 to 0.15, a result primarily of a decreased incidence among persons aged ≥60 and <20 years.

Actions Taken: Tetanus is preventable through both routine vaccination and appropriate wound management. In addition to decennial booster doses of diphtheria and tetanus toxoids during adult life, the Advisory Committee on Immunization Practices (ACIP) recommends vaccination visits for adolescents at age 11–12 years and for adults at age 50 years to enable health-care providers to review vaccination histories and administer any needed vaccine. Every contact with the health-care system, particularly among older adults and IDUs, should be used to review and update vaccination status as needed.

INTRODUCTION

The reported incidence of tetanus morbidity and mortality in the United States has declined substantially since the mid-1940s, when tetanus toxoid became universally available (*1*). This decline has resulted from a) widespread use of tetanus toxoid-containing vaccines (TT) for vaccination of infants and children (e.g., as diphtheria and tetanus toxoids and pertussis vaccine [DTP] or as diphtheria and tetanus toxoids for adult use [Td]), b) use of TT and tetanus immune globulin (TIG) for postexposure prophylaxis in wound treatment, and c) improved wound care management. In addition, increased rural to urban migration (*2*), with consequent decreased exposure to tetanus spores, may have contributed to the decline in tetanus mortality noted during the first half of the century.

Vaccination coverage with TT among school-aged children has improved substantially with the adoption and implementation of state immunization requirements. Forty-nine of the 50 states and the District of Columbia have passed legislation requiring that children be vaccinated for tetanus before admission to school (*3*), and >96% of school-aged children have received three or more doses of DTP by the time they begin school (*4*). In addition, among children aged 19–35 months, national vaccination coverage with three or more doses of DTP has increased significantly ($p<0.05$), from 83% in 1992 to 95% in 1996 (*5*).

National surveillance for tetanus is conducted to monitor the epidemiology of the disease and to identify high-risk populations. In this report, we describe the epidemiology of tetanus in the United States from 1995 through 1997 and update tetanus morbidity and mortality trends from 1947 to 1997.

METHODS

Tetanus Surveillance

National tetanus surveillance relies on reporting of physician-diagnosed cases to state and local health departments. The diagnosis of tetanus is based on the clinical judgment of the attending physician because a laboratory test for definitive diagnosis of tetanus is not routinely available. In 1990, the Council of State and Territorial Epidemiologists and CDC adopted the following clinical case definition for public health surveillance for tetanus: "Acute onset of hypertonia and/or painful muscular contractions (usually of the muscles of the jaw and neck) and generalized muscle spasms without other apparent medical cause (as reported by a health professional)" (*6*).

State health departments report cases of tetanus on a weekly basis to CDC's National Notifiable Diseases Surveillance System (NNDSS). CDC publishes the number of tetanus cases reported by each state to NNDSS on a weekly basis and in an annual summary (*1*). In addition, since 1965, state health departments have reported supplemental clinical and epidemiologic information for cases to CDC's National Immunization Program. This supplemental reporting system provides CDC with information about the clinical history, presence and nature of any associated risk factors, vaccination status of the patient, wound care, and clinical management for each tetanus case (*7*). A summary of this additional information is published approximately every 2–4 years (*8–12*).

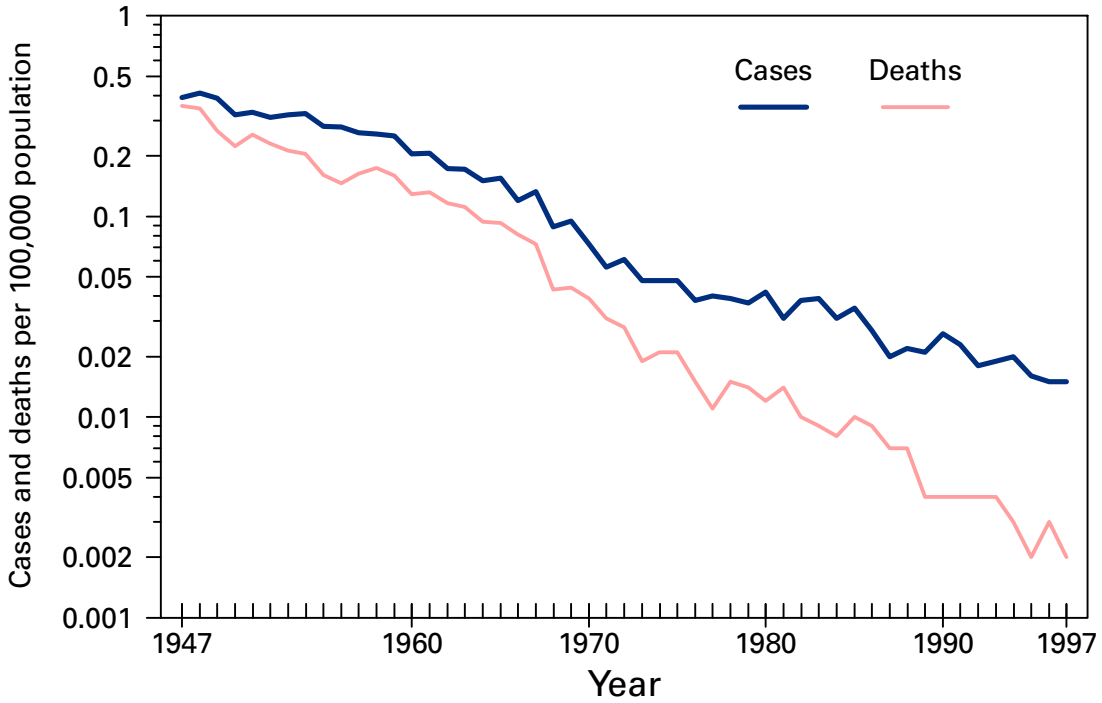
RESULTS

Long-Term Trends

During 1995–1997, a total of 124 tetanus cases with onset during this period (i.e., 40* cases in 1995, 36 in 1996, and 48 in 1997) were reported to NNDSS. The annual average for this period was 41 cases, which is the lowest annual average ever reported since national tetanus surveillance began in 1947 (Figure 1) and is lower than the average of 50 cases reported from 1991 through 1994 (*12*). The incidence rate of 0.15 cases per million population represents a slight decline from the rate of 0.2 cases

*One case with onset in 1994 was reported in 1995; this case was included in a previous surveillance summary (*12*).

FIGURE 1. Tetanus morbidity and mortality rates, by year — United States, 1947–1997



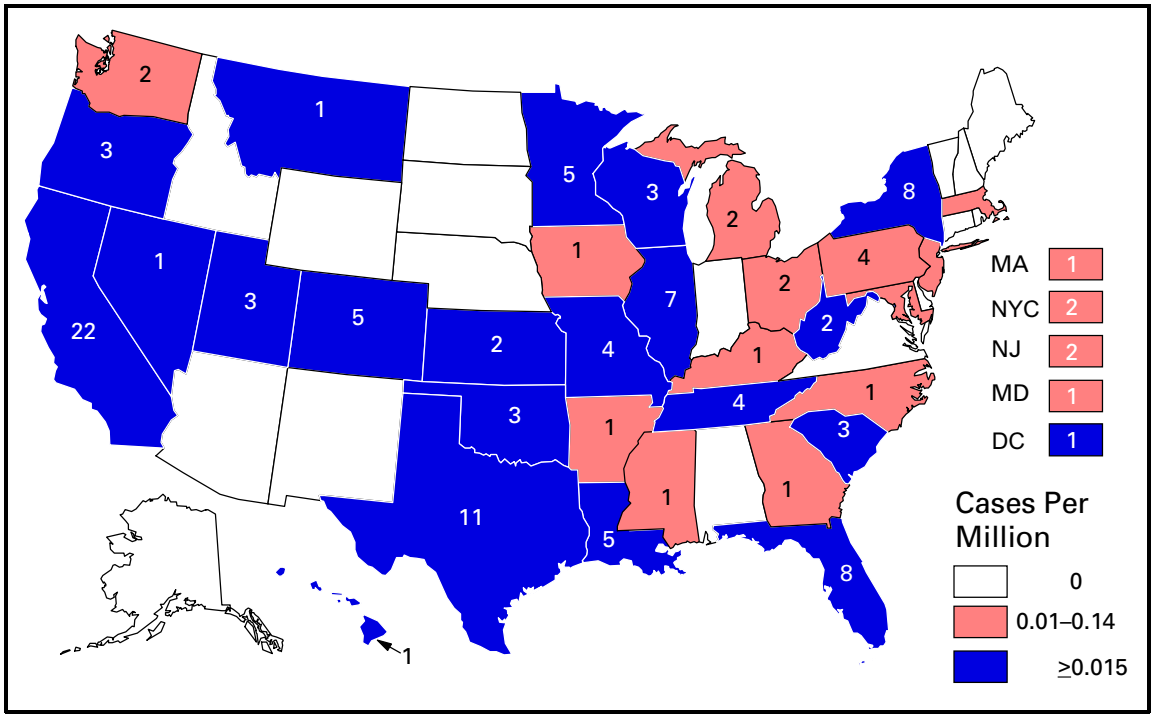
per million population reported from 1987 through 1994 (*8–12*) and a 96% decrease from the 3.9 cases per million population reported for 1947. The overall case-fatality ratio also has declined, from 91% in 1947 to 24% during 1989–1994 and to 11% during 1995–1997.

Epidemiology

At least one case of tetanus was reported by each of 33 states, the District of Columbia, and New York City during 1995–1997 (Figure 2), and tetanus cases were reported all 3 years by 10 states (California, Colorado, Florida, Illinois, Louisiana, Minnesota, New York, Pennsylvania, Tennessee, and Texas). Of the 17 states with no reported cases, seven (41%) were located in the Rocky Mountain and West North Central regions. Tetanus incidence in these regions has historically been low (*8–12*). An additional five states with no reported cases (29%) were located in New England.

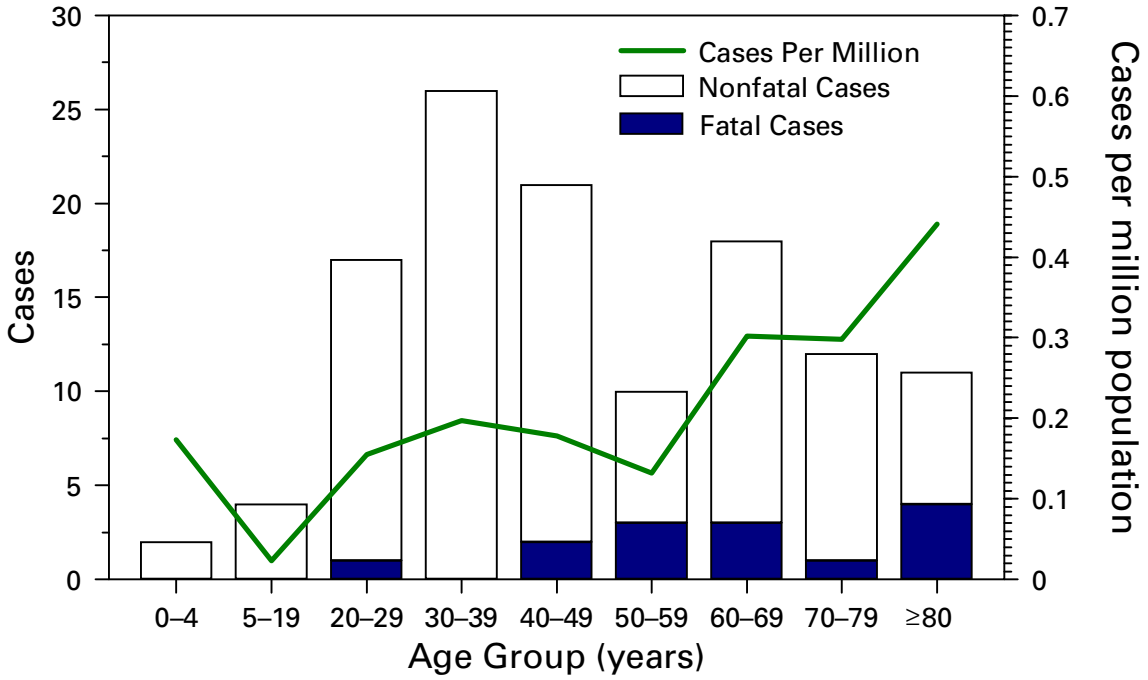
Data on age were reported for all 124 patients. Of these, 44 (35%) were aged ≥60 years; 74 (60%) were aged 20–59 years; and six (5%) were aged <20 years, including one case of neonatal tetanus and four patients aged 1–14 years (Figure 3). In contrast, during 1991–1994, 54% were aged ≥60 years (an annual average of 25 cases) (*12*), and 41% were aged 20–59 years. During 1995–1997, the average annual incidence among persons aged ≥60 years was 0.33 cases per million population, a more than 12-fold increased risk compared with that for persons aged 5–19 years (0.026 cases per million population), and a nearly twofold increased risk compared with that for persons aged 20–59 years (0.17 cases per million population) (Figure 3).

FIGURE 2. Reported number of tetanus cases* and average annual incidence rates, by state — United States, 1995–1997



*Cases were reported from 33 states, the District of Columbia, and New York City.

FIGURE 3. Reported number of tetanus cases, average annual incidence rates, and survival status of patients, by age group — United States, 1995–1997



Data on sex were reported for all 124 patients; data on race and ethnicity were reported for 120 (97%) of the 124 patients. Of the 124 cases, 74 (60%) were male. The female-to-male ratio among patients aged 20–59 years was 0.42; among patients aged ≥60 years, the ratio was 1.75. For persons aged 20–59 years, the incidence among males (0.24 cases per million population) was 2.4 times greater than that among females (0.10 cases per million population). For persons aged ≥60 years, incidence among males (0.28 cases per million population) was similar to that among females (0.37 cases per million population). Incidence among whites was 0.15 cases per million population; among Hispanics, 0.27; and among blacks, 0.09.

Supplemental clinical and epidemiologic information was provided for 123 (99%) of the 124 reported tetanus cases. One case of neonatal tetanus was reported in an infant who was delivered in 1995 in a hospital where standard aseptic practices were used. The mother had immigrated from Mexico 8 years before delivery and had previously received only one tetanus vaccination in Mexico at age 12 years. Since moving to the United States in 1987, she had given birth to two other children in a hospital, and the index pregnancy included five routine visits for prenatal care during the 6 weeks before delivery. The family's home in the United States was near a pasture where cattle grazed. The infant recovered fully after a 2-month hospitalization (*13*).

The youngest non-neonatal tetanus case occurred in an unvaccinated boy aged 3½ years who had been stung by an insect. Because of their religious beliefs, his parents initially refused medical care for the tetanus and treated the child with herbal tea and carrot juice. The child had generalized tetanus that required mechanical ventilation; he recovered after a 24-day hospitalization.

Previous Vaccination Status

Sixteen (13%) of the 122 non-neonatal patients with supplemental data were reported to have received at least a primary series (i.e., three or more doses) of TT before onset of illness (Table 1), including two (40%) of the five non-neonatal patients aged <20 years. Three (60%) of the non-neonatal patients aged <20 years were unvaccinated because of their parents' religious objections. The fourth case occurred in a boy aged 14 years who was bitten by a dog and who had received his last dose 2 years previously. This patient did not seek medical care for his injury and was later hospitalized with tetanus for 2 days. He did not require mechanical ventilation and subsequently recovered. The fifth case occurred in a boy aged 15 years who was in a moped crash; the interval since his last dose was 11 years. The patient sought medical attention and received TT within 6 hours of his injury; he was hospitalized 4 days and recovered without sequelae.

Of the 14 (11%) patients aged ≥20 years who were known to have received a primary series, six reported receipt of the last booster dose ≤10 years before onset of illness and two within 5 years before onset of illness.

Case-Fatality Ratio

Fourteen deaths occurred among 122 patients with known outcome, representing a case-fatality ratio of 11%. All tetanus-related deaths occurred among patients aged ≥25 years. The case-fatality ratio varied from 2.3% among patients aged 20–39 years to 16% among patients aged 40–59 years and to 18% among patients aged ≥60 years. Previous vaccination status was directly related to disease severity: the case-fatality ratio ranged from 6% for patients who had received one to two doses of TT to 15% for patients who were unvaccinated. No deaths occurred among the 16 patients who previously had received three or more doses (Table 1), and only one patient required mechanical ventilation. Of these 16 patients, nine had generalized tetanus, four had localized tetanus, and one had cephalic tetanus. For two cases, the type of tetanus was unknown.

TABLE 1. Tetanus toxoid vaccination status and deaths among persons with reported tetanus, by vaccination status — United States, 1995–1997

Vaccination status	No.	(%)	No. deaths
Unknown	66	(53.7)	9
0 doses	27	(21.5)	4
1 dose	11	(9.1)	0
2 doses	4	(3.3)	1
3 doses	4	(3.3)	0
≥4 doses	12	(9.1)	0
Total	**124***	**(100.0)**	**14**

*Outcome was unknown for two patients.

Type of Injury, Wound Treatment, and Prophylaxis

An acute injury sustained before onset of illness was identified for 93 (77%) of the 120 tetanus cases with known injury status. Of these cases, 46 (49%) occurred after puncture wounds, the most frequent type of injury. Of the 33 patients for whom the circumstance of the puncture wound was known, 13 (39%) had stepped on a nail. Other puncture wounds resulted from self-performed body piercing (one case), self-performed tattooing (one case), animal bites, and splinters. The case associated with body piercing occurred in a woman aged 27 years who pierced her umbilicus at home with a sterile 16-gauge needle. The other most frequently reported types of acute injury were 20 (22%) lacerations and 11 (12%) abrasions. Nine (10%) of the 93 patients with an acute injury also reported injecting-drug use (IDU). An additional three patients had an acute injury related to surgery performed 4–8 days before onset of illness; none of these patients were known to have been vaccinated for tetanus. These patients included a woman aged 63 years who underwent a hemorrhoidal banding procedure, a man aged 41 years who had an implant inserted in his back, and a man aged 32 years who had knee surgery. All three patients were administered TIG therapeutically and recovered.

The site of the antecedent acute injury was a lower extremity in 43 (46%) patients, an upper extremity in 33 (35%) patients, and the head or trunk in 11 (12%) patients. The injury site was not specified for six patients. The environment in which the antecedent injury occurred was reported for 85 patients. Of these patients, 20 (24%) were injured while at home; 13 (15%) while indoors, other than at home; 33 (39%) while performing outdoor farming or gardening activities; and 19 (22%) while engaged in other outdoor activities. The median incubation period was 6 days (range: 0–73 days) for the 92 non-neonatal cases with an acute injury for which dates of injury and illness onset were known. For 90 (98%) of these cases, the incubation period was ≤30 days.

Information regarding medical care was reported for 88 patients who became ill with tetanus after sustaining an acute injury. Of these patients, 36 (41%) obtained medical care for their injury, and all were eligible to receive Td prophylaxis for wound management. TT was administered as prophylaxis to only 14 patients (i.e., 39% of those who obtained medical care), 10 (71%) of whom received toxoid within 24 hours after the injury. The remaining 22 patients were eligible for Td prophylaxis but did not receive it as recommended by the Advisory Committee on Immunization Practices (ACIP). Of the 13 (43%) patients who sought medical care and whose wounds were debrided, only three received the TIG indicated as part of wound prophylaxis.

Twenty-nine non-neonatal cases unrelated to acute injury were associated with underlying medical conditions, including chronic wounds or IDU. Two patients had breast tissue necrosis secondary to breast cancer. Three patients had diabetes, two of whom were insulin-dependent. Thirteen (43%) of the patients without an acute injury were known to be IDUs (one of whom also had insulin-dependent diabetes), representing 11% of all tetanus cases. The median age of patients with IDU-associated tetanus was 43 years (range: 24–60 years); 11 (85%) were male. Vaccination history was known for three (23%) of the 13 IDU-associated patients, all of whom were unvaccinated. The overall case-fatality ratio among IDU-associated cases was 15%. Nine (69%) of the 13 IDU-associated cases were reported from California. Of these cases, eight (89%) were Hispanic, seven (78%) were male, and three (33%) were aged 20–29

years. Although information on the types of drugs used is not routinely collected on IDU-associated tetanus cases, seven of the patients with tetanus from California were identified as heroin users (*14*).

Clinical Features and Treatment

The type of tetanus was reported for 100 (82%) of the 123 cases with supplemental information. Of these cases, 81 (81%) were generalized; 13 (13%), localized; and six (6%), cephalic. Therapeutic TIG administration for treatment of clinical tetanus was reported for 108 (88%) patients, and the exact dosage of TIG was specified for 80 (74%) patients. The median TIG dosage used therapeutically was 3,000 IU; 75% of the patients received 1,000–4,000 IU of TIG. The interval between onset of illness and TIG administration was known for 102 (94%) of the patients who received TIG; TIG was administered to 35 (34%) of these patients <24 hours after onset of illness and to 40 (40%) patients 1–4 days after onset. The case-fatality ratio for patients who received therapeutic treatment within 24 hours was 9%, compared with 10% for those who received treatment >1 day after onset of illness. Information about illness outcome was reported for 107 (99%) patients who received TIG; 11 (10%) of these patients died. Two (20%) of the 10 patients who did not receive TIG died.

Length of hospitalization was reported for 98 (79%) patients; the median duration was 11 days (range: 0–79 days). Of the 96 patients for whom the use of assisted ventilation was reported, 46 (48%) received ventilation. Eighteen percent of those who required ventilation died, compared with 6% of those who did not require ventilation.

DISCUSSION

Tetanus remains a severe disease occurring primarily among persons who are unvaccinated or inadequately vaccinated. Adults aged ≥60 years continue to be at highest risk for tetanus and for severe disease. However, the overall incidence of tetanus has decreased slightly since the late 1980s and early 1990s, from 0.20 to 0.15 cases per million, a result primarily of a decreased incidence among persons aged ≥60 and <20 years. In addition, for the first time since 1973 (*15*), patients aged 20–59 years have accounted for a greater proportion of cases (60%) than those aged ≥60 years, with most (52%) of these cases in the 20–49 year age group. This change in age distribution has resulted from both an increase in the average annual number of cases among persons aged 20–59 years and a decrease in the average annual number of cases among persons aged ≥60 and <20 years (*12*).

Older adults are at highest risk for tetanus because of the low prevalence of immunity to tetanus in this population. Data obtained from a national population-based serologic survey conducted during 1988–1991 indicate that the prevalence of immunity to tetanus in the United States is lower in older age groups, from >80% among persons aged 6–39 years to 28% among persons aged ≥70 years (*16*). The decreased incidence among older adults during the 1990s may be in part related to increases in tetanus vaccination among persons aged ≥60 years. The National Health Interview Survey, a national probability sample, ascertained a moderate increase in tetanus vaccination rates among older adults; in 1991, 27% of persons aged ≥65 years reported that they had received a tetanus vaccination during the preceding 10 years. By 1995,

this figure had increased to 36% (CDC, unpublished data). Although this increase in tetanus vaccination does not entirely explain the twofold decreased incidence in adults aged ≥70 years, it suggests increased compliance with current tetanus vaccination recommendations for adults (*17*). Nonetheless, to further reduce the tetanus burden among older adults, improved compliance with these recommendations is needed to increase population immunity.

The disproportionate number of tetanus cases in the 20–59 year age group is in part related to an increased number of cases among IDUs, particularly among Hispanics in California. Among patients aged 20–59 years, IDUs comprised 27% of cases and 14% of cases with no acute injury. Overall, IDUs comprised 18% of all cases; IDUs with no acute injury comprised 11% of all cases. In contrast, from 1982 through 1994, the overall proportion of IDU-associated cases ranged from 2.1% to 4.5% (*8–12*)*. The increase in the number of IDU-associated tetanus cases is related to an increase in cases reported from California; although California has reported most (59%) of these cases in the United States since 1987, the number of IDU-associated cases reported from California has increased steadily since the 1990s, particularly in recent years (*14*). A disproportionate number of IDU-associated cases was last observed in the United States among cases reported during 1970–1971 (18).

IDUs, particularly heroin users, have previously been reported to be at high risk for tetanus both in the United States and elsewhere (*19–24*). The high risk among IDUs is related to both increased exposure and susceptibility, including: a) the high prevalence of abscesses, which favor anaerobic conditions for bacterial growth, secondary to nonsterile injection practices (*25*); b) subcutaneous injection ("skin popping") (*19,20,22*); c) contamination of the drug supply (*20,21*); and d) low prevalence of immunity (*19,24*). The increased number of cases among Hispanic IDUs may be related to both low prevalence of immunity to tetanus and exposure to contaminated heroin. A national population-based seroprevalence survey conducted during 1988–1991 identified ethnic differences in tetanus immunity. Only 58% of Mexican-Americans (the predominant Hispanic population in the Western region [*26*]) had protective levels of tetanus antibodies, compared with 73% of non-Hispanic whites and 68% of non-Hispanic blacks (*16*).

Most of the heroin supplied to the Southwest is available in the resinous form called "black tar" (*27,28*); the use of black tar heroin may be increasing in this region (*29*). A recent increase in cases of wound botulism (an anaerobic bacterial infection caused by *Clostridium botulinum*) associated with injecting black tar heroin has also been reported among drug users in California (*29*). Whether the disproportionate number of IDU-associated cases from California is because of an increase in black tar heroin use remains unclear and requires further investigation (*14*). Among IDUs for whom drug cessation strategies have not been successful, strategies to prevent cases of tetanus among IDUs, include a) use of clean needles and sterile injection technique (*30*) and b) assessment and updating of vaccination status as needed during every contact with the medical-care system. ACIP recognizes that IDUs are at increased risk for tetanus and recommends that they be kept up-to-date with Td vaccinations (*31*).

*During 1991–1994, although six of the seven IDU-associated cases were initially reported as having an acute injury, further investigation revealed that the only known injury was ongoing drug use.

The case of neonatal tetanus reported in 1995 was the first reported since 1989 (*32*). Although nearly all tetanus cases in the United States occur in adults, most reported tetanus cases worldwide occur in neonates, with an estimated 490,000 deaths worldwide attributed to neonatal tetanus in 1994 (33). The goal of worldwide neonatal tetanus elimination was adopted by the World Health Assembly in 1989 (*34*). This goal has been defined as less than one case per 1,000 live births in the presence of a functional surveillance system. The key strategies are a) achievement and maintenance of high vaccination coverage levels among women of childbearing age in high-risk areas and b) promotion of clean delivery and cord-care practices (*35*). The two most recent neonatal tetanus cases in the United States occurred among infants born to immigrants in the United States in 1989 (*32*) and 1995 (*13*). The elimination of neonatal tetanus in the United States can ultimately only be achieved through improved worldwide coverage with at least two doses of TT among girls and women of childbearing age.

National health objectives for the year 2000 include a disease-elimination objective of no tetanus cases among persons aged <25 years. Three of the 12 cases among persons aged <25 years were among children who had received no vaccines because their parents had religious or philosophic objections to vaccination. Tetanus is not a communicable disease, and the organism is ubiquitous in the environment; unlike other vaccine-preventable diseases, there is no herd immunity to tetanus. As long as any child remains susceptible to tetanus, cases of tetanus among children in the United States can continue to occur.

The number of cases derived from passive reporting by physicians to local and state health departments underestimates the true incidence of tetanus in the United States. Completeness of reporting for tetanus mortality has been estimated at 40%, while completeness of reporting for tetanus morbidity may be lower (*36*). Although tetanus mortality reporting is incomplete, reported tetanus deaths are representative of all tetanus deaths (*36*). Because fatal cases are more likely to be reported than nonfatal ones, possible changes in reporting practices do not appear to explain the decreased number of reported cases among older adults, who are more likely to have severe disease.

Tetanus remains a clinical diagnosis because confirmatory laboratory tests are not available for routine use. Isolation of the organism from wounds is neither sensitive nor specific: anaerobic cultures of tissues or aspirates usually are not positive, and the organism might be grown from wounds in the absence of clinical signs and symptoms of disease (*37–39*).

Tetanus is preventable through both routine vaccination and appropriate wound management. Vaccination with a primary series of three doses of TT-containing vaccine and booster doses of Td every 10 years are highly effective in preventing tetanus (*40*). During 1995–1997, only 13% of patients were known to have completed a primary series with TT before onset of tetanus, and only 47% of these had been vaccinated during the 10 years preceding onset of tetanus. In addition, nearly two thirds of patients who sought medical care following their injury did not receive prophylaxis as recommended by ACIP (Table 2).

ACIP recommends that persons be routinely scheduled for a vaccination visit at age 11–12 years (*41*) and age 50 years (*42*). Such visits enable health-care providers to a) review the patient's vaccination status, b) administer Td as indicated, and c) deter-

TABLE 2. Summarized recommendations for the use of tetanus prophylaxis in routine wound management — Advisory Committee on Immunization Practices (ACIP), 1991 (*17*)

History of adsorbed tetanus toxoid	Clean, minor wounds		All other wounds*	
	Td†	TIG§	Td	TIG
Unknown or <3 doses	Yes	No	Yes	Yes
≥3 doses¶	No**	No	No††	No

*Such as, but not limited to, wounds contaminated with dirt, feces, soil, or saliva; puncture wounds; avulsions; and wounds resulting from missiles, crushing, burns, or frostbite.
†For children aged <7 years the diphtheria and tetanus toxoids and acellular pertussis vaccines (DTaP) or the diphtheria and tetanus toxoids and whole-cell pertussis vaccines (DTP) — or pediatric diphtheria and tetanus toxoids (DT), if pertussis vaccine is contraindicated — is preferred to tetanus toxoid (TT) alone. For persons aged ≥7 years, the tetanus and diphtheria toxoids (Td) for adults is preferred to TT alone.
§TIG=tetanus immune globulin.
¶If only three doses of *fluid* toxoid have been received, a fourth dose of toxoid — preferably an adsorbed toxoid — should be administered.
**Yes, if >10 years have elapsed since the last dose.
††Yes, if >5 years have elapsed since the last dose. More frequent boosters are not needed and can accentuate side effects.

mine whether a patient needs other vaccinations (e.g., influenza and pneumococcal vaccinations). Because many patients with tetanus did not have an acute injury and only 41% of those who did have an acute injury sought medical care, every contact with the health-care system, particularly among the elderly and IDUs, should be used to review and update vaccination status as needed.

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Postneonatal Mortality Surveillance — United States, 1980–1994

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Abstract

Problem/Condition: This report contains public health surveillance data that describe trends in postneonatal mortality (PNM) and that update information published in 1991.

Reporting Period Covered: 1980–1994.

Description of System: National death certificate data characterizing PNM were reported by hospital physicians, coroners, and medical examiners. Data for 1980–1994 were compiled by the National Center for Health Statistics (NCHS) and obtained from NCHS public-use mortality tapes.

Results: The PNM rate per 1,000 live births declined 29.8% from 4.1 in 1980 to 2.9 in 1994 (31.7% decline among white infants and 25.8% among black). Most of the decline resulted from reduced mortality from infections and sudden infant death syndrome (SIDS). The PNM rate for blacks remained steady at 2.1/1,000 live births during 1985–1988 and gradually increased to 2.4 by 1994. Autopsy rates for cases of SIDS increased from 82% to approximately 95% and did not differ among black infants and white infants. The decline of PNM rates for birth defects was greater for white infants than for black infants. The racial gap in PNM rates widened regionally during the study period, except in the South and the Northeast where ratios remained stable. In 1994, the largest gap persisted in the north-central region followed by the West and Northeast.

Interpretation: In 1994 as in 1980, PNM remained an important contributor to infant mortality, but nearly half of these deaths are caused by potentially preventable causes such as SIDS, infections, and injuries. The use of interventions for SIDS, birth defects, infections, and injuries can help reduce PNM and narrow the associated racial gap.

Actions Taken: This surveillance information, which will be distributed to administrators of state maternal and child health programs and to community-based organizations nationwide, will be useful in planning infant mortality reduction programs and to target PNM prevention efforts.

INTRODUCTION

Postneonatal mortality (PNM) — deaths among infants aged 28–364 days — contributes substantially to infant mortality — deaths among infants aged 0–364 days. PNM declined dramatically during 1945–1950 and 1965–1970, and more slowly at

other times (*1*). Medical advances in the treatment and prevention of infectious diseases after World War II and improvements in socioenvironmental conditions during the 1960s facilitated these periods of decline in PNM (*2,3,4*). PNM declined more slowly in the 1970s, and among 20 industrialized countries, the U.S. ranking in infant mortality worsened from eighth place in 1970 to sixteenth in 1980 (*2,3,5,6*).

This report updates trends in PNM by cause of death, race, and geographic region. The purpose is to examine recent trends for which PNM prevention and reduction strategies can be planned and to assist in assessing progress toward achieving the national health objective (*7*) of no more than 2.5 postneonatal deaths per 1,000 live births among white infants and no more than 4.0 among black infants.

METHODS

Using data from public-use mortality tapes compiled by NCHS for 1980–1994, PNM rates were calculated by age at death, race, underlying cause of death, completed autopsy status, and region of residence. The data were also used to evaluate trends in neonatal mortality (NM) — deaths among infants aged 0–27 days — to assess the relative importance of PNM and NM to overall infant mortality.

Cause-of-death statistics are based on the underlying cause of death reported on the death certificate by the attending physician, medical examiner, or coroner, as specified by the World Health Organization. All causes of PNM were examined, defined by codes 0010–9899 of the *International Classification of Diseases, Ninth Revision*, (ICD-9) (*8*) for SIDS, congenital anomalies (birth defects), infections, injuries, perinatal conditions, ill-defined conditions, and other underlying causes of death. Causes of death were grouped by using a modification of the ICD cause-of-death groupings of the 1980 National Infant Mortality Surveillance (*9*) (See Appendix A). Denominator data for live births by race, region of residence, and geographic residence status for each year during 1980–1994 were obtained from published NCHS birth certificate data. PNM rates were calculated by dividing the number of PNM deaths by the number of births for a given year. The average percent change in the rate per year was derived from the slopes of fitted regression lines on the logarithms of rates to examine the extent of any slowdowns. Data were analyzed by using the computer software package Statistical Analysis System 6.12 (SAS Institute, Inc., Cary, North Carolina).

Because race reflects different distributions of several risk factors for infant health and is useful for identifying groups at greatest risk for infant death (*10*), this analysis examines race-specific mortality rates. For PNM rates, numerators were tabulated by race of infant and denominators (live-born infants) by race of mother. However, these analyses were limited to blacks and whites because information on maternal race was incomplete for other groups (*11,12*). Relative risk ratios were determined by dividing PNM rates for black infants by PNM rates for white infants.

RESULTS

During 1980–1994, a total of 205,541 postneonatal deaths occurred; 138,006 (67.1%) of these were among whites and 60,289 (29.3%) among blacks (Table 1). The overall PNM rate per 1,000 live births declined by 29.8% from 4.1 in 1980 to 2.9 in 1994 (31.7%

decline among white infants and 25.8% among black infants). During the study period, PNM among white infants declined more rapidly (2.4% per year) than among black infants (1.5% per year). During 1980–1990, the PNM rate declined 17.1%, and during 1990–1994, it declined an additional 14.7%. The PNM ratio between blacks and whites remained steady at 2.1/1,000 live births during 1985–1988 and gradually increased to 2.4 by 1994. Recently available final data for 1995 indicate a further 6.9% decline in PNM compared with the 1994 rate (8.3% among white infants and 5.4% among black infants).

Neonatal Mortality

The NM rate declined more than the PNM rate during 1980–1994. For whites, NM declined 43.2% from 7.4/1,000 live births to 4.2, and PNM declined 31.4% from 3.5/1,000 live births to 2.4 (Figure 1). This decline resulted in a 13% increase (from 32.0% in 1980 to 36.1% in 1994) in the percentage of infant deaths occurring during the postneonatal period among whites. For blacks, NM declined 30.1% (from 14.6/1,000 live births to 10.2), and PNM declined 25.8% (from 7.6/1,000 live births to 5.6) (Figure 2). Little change occurred in the relative proportion of NM and PNM among black infants.

Cause-Specific PNM

SIDS was the leading cause of postneonatal deaths among whites and blacks during 1980–1994 and accounted for 33% of PNM in 1994 (Table 2). Among white infants, the second leading cause of death was birth defects, followed by infections and inju-

FIGURE 1. Infant mortality among whites by age at death — United States, 1980–1994

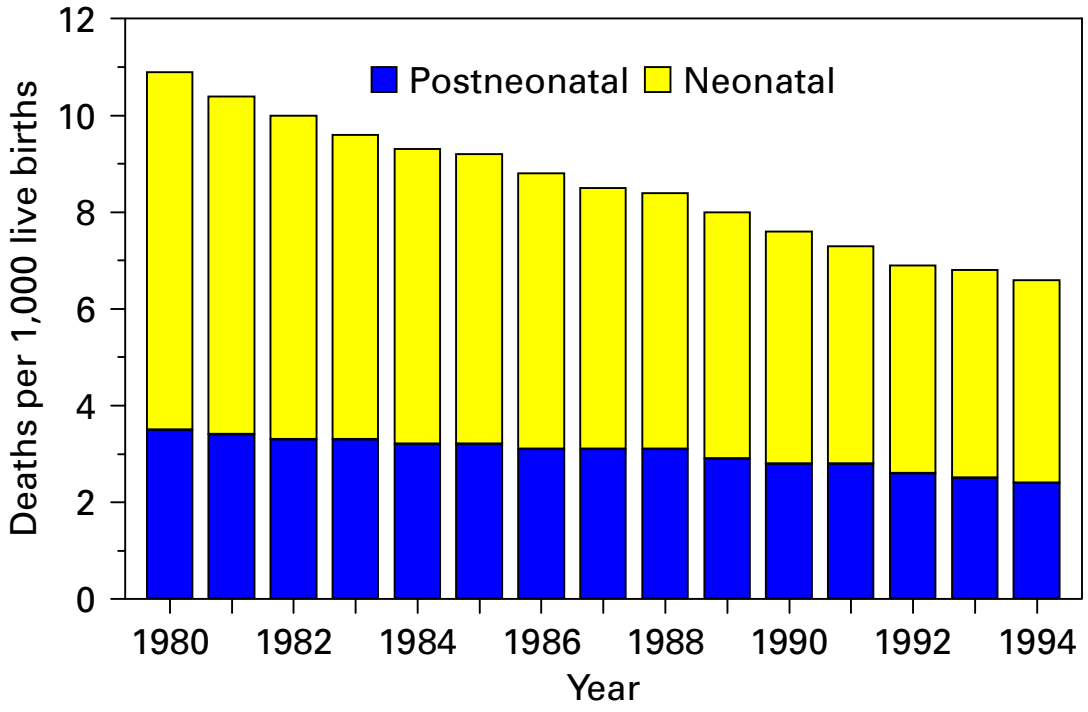


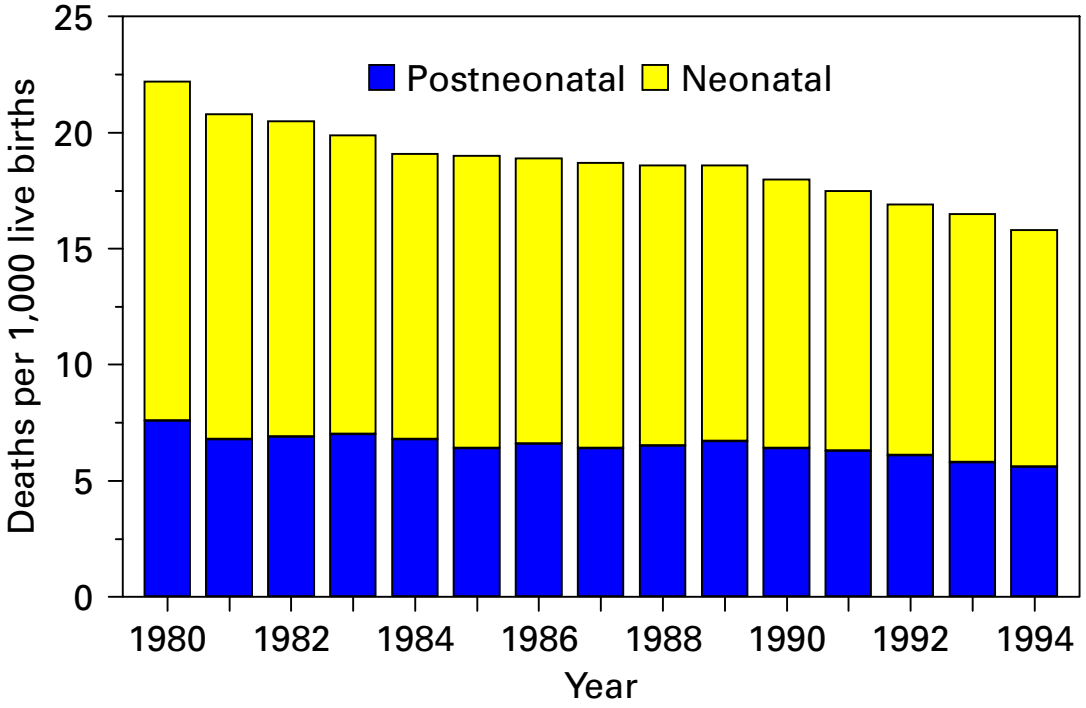
TABLE 1. Number and rate of postneonatal mortality by race — United States, 1980–1994

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Total
								Number of deaths								
Whites	10,194	9,885	9,700	9,698	9,550	9,631	9,308	9,362	9,579	9,366	9,132	8,959	8,249	7,989	7,404	**138,006**
Blacks	4,300	3,857	3,898	3,965	3,879	3,723	3,907	3,941	4,145	4,506	4,385	4,317	4,052	3,842	3,572	**60,289**
All	14,908	14,183	14,066	14,120	13,889	13,851	13,679	13,781	14,220	14,487	14,042	13,788	12,779	12,289	11,459	**205,541**
								Rate per 1,000 live births								
Whites	3.5	3.4	3.3	3.3	3.2	3.2	3.1	3.1	3.1	2.9	2.8	2.8	2.6	2.5	2.4	**3.0**
Blacks	7.6	6.8	6.9	7.0	6.8	6.4	6.6	6.4	6.5	6.7	6.4	6.3	6.0	5.8	5.6	**6.5**
All	4.1	3.9	3.8	3.9	3.8	3.7	3.6	3.6	3.6	3.6	3.4	3.4	3.1	3.1	2.9	**3.6**
								Ratio								
Ratio, Blacks: Whites	2.2	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.3	2.3	2.3	2.3	2.3	2.4	**2.2**

TABLE 2. Postneonatal mortality rate by race and cause of death — United States, 1980 and 1994

	White					Black				
	1980		1994			1980		1994		
Cause of death	Rate per 100,000 live births	Percent	Rate per 100,000 live births	Percent	Percent change per year	Rate per 100,000 live births	Percent	Rate per 100,000 live births	Percent	Percent change per year
Sudden infant death syndrome	117.4	33.8	79.8	37.0	–2.0	266.9	35.3	180.9	32.2	–1.8
Congenital anomalies	67.1	19.3	46.2	19.5	–2.6	82.6	10.9	61.3	10.9	–1.2
Infections	41.9	12.1	27.3	11.5	–3.5	124.8	16.5	87.8	15.6	–2.2
Injuries	30.7	8.8	22.2	9.4	–1.6	69.0	9.1	58.7	10.5	–0.3
Perinatal conditions	19.4	5.6	12.5	5.3	–3.3	50.3	6.7	53.9	9.6	+0.5
Ill-defined conditions	9.1	2.6	12.6	5.3	+2.8	28.3	3.7	41.2	7.3	+3.2
Others	61.6	17.7	36.7	15.5	–3.7	135.0	17.8	74.5	13.8	–3.8
Total	**347.0**	**100.0**	**237.0**	**100.0**	**–2.4**	**757.0**	**100.0**	**561.0**	**100.0**	**–1.5**

FIGURE 2. Infant mortality among blacks by age at death — United States, 1980–1994



ries. The largest average annual percent reduction among leading causes of deaths for white infants was observed for infections (3.5%) and perinatal conditions (3.3%). However, postneonatal deaths among whites caused by ill-defined conditions, which contributed less than 5% to these deaths, increased at an annual rate of 2.8% from 9.1/100,000 live births in 1980 to 12.6/100,000 live births in 1994.

Among blacks, the second-leading cause of PNM in 1980 was infections, followed by birth defects, and the greatest annual average reduction in PNM among blacks was observed for infections (2.2%). The PNM rates for ill-defined and perinatal conditions increased among blacks during 1980–1994.

All cause-specific PNM rates were higher for black infants than white infants during the study period. Except for SIDS, birth defects, and other causes of death, PNM cause-specific ratios between black infants and white infants increased during the study period. The greatest increases in rate ratios were observed for deaths caused by perinatal conditions (2.6 times greater for blacks than for whites in 1980 and 4.3 times greater in 1994) and injuries (2.2 times greater for blacks than for whites in 1980 and 2.6 times greater in 1994). For SIDS, the relative risk for black infants was 2.3 times greater than for white infants in 1980; it declined to 1.8 by 1985 and gradually increased to 2.3 by 1994.

Regional PNM

During 1980–1994, PNM rates declined in all geographic regions of the United States (Table 3). Among white infants, PNM rates in 1980 were highest in the West, followed by the South, north-central region, and Northeast. By 1994, the regional dif-

ferences had virtually disappeared. The greatest percent reduction in PNM among whites during the study period occurred in the West.

In 1980, PNM rates among black infants were highest in the north-central region, followed by the West. Rates were similar in the South and Northeast. The highest regional rate of postneonatal deaths among black infants in 1994 was in the north-central region, followed by the West and Northeast. During the study period, the greatest percent reduction in PNM among black infants occurred in the South. In 1980, the largest gap in PNM rates between black infants and white infants was in the north-central region, followed by the Northeast. In 1994, the largest gap persisted in the north-central region, followed by the West and Northeast. Except for the South and the Northeast, where ratios remained stable, the racial gap widened regionally during the study period.

Sudden Infant Death Syndrome

PNM attributable to SIDS declined similarly among white infants and black infants (32.0% versus 32.2%) but differed in the timing of decline. Among whites, SIDS mortality declined 28% during 1990–1994, but little decline occurred before 1990. Among blacks, SIDS mortality declined 18% during 1990–1994, but before 1990, primarily 1980–1985, it had declined 17%.

During the study period, PNM attributable to SIDS declined in all regions among both white infants and black infants (Table 4). In 1980, the highest SIDS rate among white infants was observed in the West, followed by the north-central region and the South. In 1994, the highest SIDS rate among white infants was observed in the West followed by the Northeast and north-central region. The greatest reduction in PNM attributable to SIDS among whites during the study period was in the West, followed by the Northeast and north-central regions. Among black infants, the highest SIDS rate in 1980 and 1994 was in the north-central region, followed by the West and Northeast. The greatest reduction in PNM attributable to SIDS among black infants was observed in the Northeast, followed by the West and South.

During 1980–1988, the relative risk for black infants for PNM attributable to SIDS declined from 2.2 to 2.1 times greater than for white infants. During 1989–1994, the relative risk increased gradually to 2.4 times greater than for whites. The relative risk for blacks in 1980 was greatest in the Northeast (3.2 times greater than for whites), followed by the north-central region (2.9), South (2.2), and West (2.0). In 1994, the regional relative risk for black infants remained fairly stable, except in the West where it increased from 2.0 to 2.5.

Autopsy rates for SIDS cases increased nationally among both black infants and white infants. Among white infants, the autopsy rate of SIDS cases increased to approximately 95% during the study period; in 1980, the rates were higher than 81%, except in the South (70%). In 1994, regional autopsy rates of SIDS cases among white infants were higher than 96%, except in the South (91%). Among black infants, regional rates in 1980 were higher than 93%, except in the South (64%). By 1994, the rate in the South was 95%, and in all other regions, the rate had increased to approximately 98%.

TABLE 3. Postneonatal mortality rate by region and race — United States, 1980 and 1994

Region	White			Black			Black-to-white ratio	
	Rate per 1,000 live births		Percent change	Rate per 1,000 live births		Percent change		
	1980	1994	1980–1994	1980	1994	1980–1994	1980	1994
Northeast	2.9	2.4	–17.2	7.2	5.6	–22.2	2.5	2.3
North-central	3.4	2.4	–29.4	8.7	6.7	–23.0	2.6	2.8
South	3.6	2.5	–30.6	7.2	5.1	–29.2	2.0	2.0
West	3.8	2.5	–34.2	7.6	6.2	–18.4	2.0	2.5

TABLE 4. Postneonatal mortality rates for sudden infant death syndrome as underlying cause of death, by region and race — United States, 1980 and 1994

Region	White					Black				
	1980		1994		Percent change in rate 1980–1994	1980		1994		Percent change in rate 1980–1994
	Rate per 100,000 live births	Autopsy percent	Rate per 100,000 live births	Autopsy percent		Rate per 100,000 live births	Autopsy percent	Rate per 100,000 live births	Autopsy percent	
Northeast	86.4	86.4	57.4	97.3	–33.6	280.5	95.9	163.3	99.0	–41.8
North-central	117.6	81.8	86.1	96.7	–26.8	345.6	93.9	242.8	98.1	–29.7
South	103.3	70.2	82.4	91.4	–20.2	223.0	64.3	155.1	95.9	–30.5
West	162.2	93.6	91.3	96.6	–43.7	330.3	99.4	229.4	99.2	–30.5
Total	**117.4**	**83.0**	**79.8**	**95.5**	**–32.0**	**266.9**	**88.4**	**180.9**	**98.0**	**–32.2**

Birth Defects

PNM related to birth defects declined among white infants and black infants during the study period (Table 5). Approximately half of these deaths was attributable to cardiovascular defects. Cardiovascular, central nervous system (CNS), and chromosomal defects accounted for approximately three fourths of these deaths.

The decline in PNM related to birth defects was greater for white infants (30%) than black infants (20%). Of the leading causes of birth defects, the rate of decline was most rapid for CNS defects, which was greater for white infants than for black infants. Although gastrointestinal defects accounted for less than 6% of all defects, the rate declined more rapidly than for all other defects among both white infants (8.8% per year) and among black infants (7.7% per year).

For all years, the relative risk for PNM from birth defects was higher for black infants than white infants, and it increased from 1.2 times greater in 1980 to 1.4 in 1994. The cause-specific relative risk for black infants increased for CNS defects (from 1.3 times greater to 1.6), cardiovascular defects (from 1.2 times greater to 1.3), and chromosomal defects (from 1.2 times greater to 1.3).

Infections

PNM caused by infections declined substantially during the study period (Table 6). PNM caused by respiratory infections accounted for nearly half of these deaths. Among both white infants and black infants, the leading cause of PNM attributable to infections during 1980–1981 was respiratory infections, followed by CNS infections and septicemia. During 1993–1994, septicemia was the second-leading infection-related cause of PNM among white infants and gastrointestinal infections, the third leading cause; for black infants, CNS infections were the second leading cause of infection-related PNM and gastrointestinal infections, the third-leading cause.

The rate of decline in infection-related PNM was greatest for CNS infections (10.7% per year for whites and 8.6% per year for blacks). The proportion of PNM caused by respiratory infections remained stable for white infants and decreased by 2.2% for black infants. The black-to-white-rate ratio for PNM caused by infections increased from 2.8 to 3.0 times greater for black infants than for whites; the rate ratio for respiratory infections narrowed (from 3.1 to 2.6 times greater for black infants than for whites), whereas that for CNS infections nearly tripled (from 2.4 to 7.0 times greater for black infants than for whites).

Injuries

The leading category of injury-related PNM during 1980–1994 was unintentional injuries. Suffocation, the leading cause, accounted for nearly one third of injury-related PNM (Table 7).

The rate of PNM attributable to intentional injury (homicide) increased by 36% among whites and 51% among blacks. In fact, the greatest annual average percent increase in PNM caused by injuries during 1980–1994, was in the rate of homicides (3.2% for whites and 3.8% for blacks). Because of this steady rise in mortality from homicide, the relative proportions of unintentional injuries decreased from 1980–1981 to 1993–1994 (Table 7). During 1993–1994, homicide displaced motor vehicle crashes

TABLE 5. Postneonatal mortality rate for birth defects as underlying cause of death, by type of defect and race — United States, 1980–1981 and 1993–1994

Type of birth defect	White					Black				
	1980–1981		1993–1994			1980–1981		1993–1994		
	Rate per 100,000 live births	Percent	Rate per 100,000 live births	Percent	Percent change per year	Rate per 100,000 live births	Percent	Rate per 100,000 live births	Percent	Percent change per year
Cardiovascular	36.7	57.7	25.1	54.6	–2.7	41.9	51.9	34.7	53.6	–1.2
Central nervous system	9.9	15.0	5.2	11.2	–5.1	12.9	16.0	7.6	11.7	–3.4
Musculoskeletal	2.2	3.3	1.9	4.1	–0.9	2.5	3.1	2.9	4.4	+0.1
Respiratory	1.6	2.4	1.9	4.1	+1.6	3.0	3.7	2.4	3.7	–0.9
Gastrointestinal	3.9	5.9	1.2	2.7	–8.8	5.3	6.6	1.7	2.6	–7.7
Chromosomal	7.0	10.6	6.6	14.4	–0.5	8.6	10.7	10.3	16.0	+1.6
Other	4.6	6.9	3.8	8.2	–1.3	6.4	8.0	4.3	6.7	–1.6
Total	**66.0**	**100.0**	**46.0**	**100.0**	**–2.6**	**81.0**	**100.0**	**65.0**	**100.0**	**–1.2**

TABLE 6. Postneonatal mortality rate for infections as underlying cause of death, by type of infection and race — United States, 1980–1981 and 1993–1994

Type of infection	White					Black				
	1980–1981		1993–1994			1980–1981		1993–1994		
	Rate per 100,000 live births	Percent	Rate per 100,000 live births	Percent	Percent change per year	Rate per 100,000 live births	Percent	Rate per 100,000 live births	Percent	Percent change per year
Respiratory	18.4	44.0	11.6	43.8	–3.3	56.7	48.9	30.4	38.1	–4.3
Central nervous system	8.8	21.1	2.1	7.8	–10.7	21.1	18.2	14.8	18.6	–8.6
Septicemia	5.5	13.2	4.5	17.1	–2.6	16.9	14.6	12.3	15.4	–2.2
Gastrointestinal	2.8	6.7	2.4	9.2	–2.1	10.5	9.1	12.7	15.8	–0.4
Other	6.3	15.0	5.8	22.0	–0.2	10.7	9.2	20.2	25.3	+6.9
Total	**42.0**	**100.0**	**27.0**	**100.0**	**–3.5**	**116.0**	**100.0**	**80.0**	**100.0**	**–2.4**

TABLE 7. Postneonatal mortality rate for injury as cause of death, by type of injury and race, United States, 1980–1981 and 1993–1994

	White					Black				
	1980–1981		1993–1994			1980–1981		1993–1994		
Type of injury	Rate per 100,000 live births	Percent*	Rate per 100,000 live births	Percent*	Percent change per year	Rate per 100,000 live births	Percent*	Rate per 100,000 live births	Percent*	Percent change per year
Unintentional										
Suffocation	8.6	30.3	7.5	33.2	–1.8	19.9	31.8	16.3	28.1	–0.4
Motor vehicle crash	6.1	21.5	3.8	16.8	–3.3	5.3	8.5	7.2	12.4	+2.7
Fire	2.9	10.2	2.0	8.8	–2.5	9.2	14.7	5.8	9.9	–4.7
Drowning	2.0	7.2	1.5	6.7	–2.2	3.0	4.8	2.9	4.9	+1.7
Falls	1.1	3.7	0.4	1.6	–7.6	2.3	3.7	0.7	1.2	–11.7
Poisoning	0.4	1.3	0.3	1.1	–1.7	0.8	1.3	0.8	1.3	–2.0
Other	2.4	8.6	1.5	6.5	–3.0	6.0	9.6	3.9	6.3	–3.9
Total	**23.5**	**82.8**	**17.0**	**75.2**	**–2.3**	**46.5**	**74.4**	**37.6**	**64.9**	**–1.1**
Intentional										
Homicide	3.6	12.5	4.9	21.9	+3.2	11.3	18.1	17.1	29.9	+3.8
All others	**1.3**	**4.7**	**0.7**	**3.3**	**–3.5**	**4.7**	**7.5**	**3.2**	**5.6**	**–4.7**
Total	**28.4**	**100.0**	**22.6**	**100.0**	**–1.6**	**62.5**	**100.0**	**57.9**	**100.0**	**–0.4**

*Percentages for each variable might not add up to total because of rounding.

as the second leading cause of injury-related PNM among whites and accounted for nearly one fourth of these deaths. In 1993–1994, homicide was the leading cause of injury-related PNM among black infants and accounted for nearly one third of these deaths. Suffocation and motor vehicle crashes among blacks were the second and third most important causes of injury.

PNM rates caused by injuries declined per year during 1980–1994, at a greater rate for white infants (1.6%) than black infants (0.4%). The proportion of postneonatal deaths attributable to injuries also declined for both whites and blacks.

Of the leading causes of postneonatal injury-related deaths, the greatest rate of decline during the study period occurred in motor vehicle crashes among both whites and blacks. Except for motor vehicle crashes during 1980–1981, black infants were at excess risk for all causes of injury-related PNM during the study period, and that excess risk increased by 14% during 1980–1994. During this period, the rate ratio for blacks to whites approximately doubled for motor vehicle crashes (from 0.86 to 1.9 times greater for blacks than for whites in 1994), decreased for deaths attributable to fire (from 3.1 to 2.9), and decreased for falls (from 2.1 to 1.8).

DISCUSSION

The decline in PNM during the 1980s was similar to that of the previous decade but not as great as the decline that occurred during the 1960s. During 1960–1970, the annual rate declined by 32.9% (*13*). Rates then declined more slowly during 1970–1980, declining by only 16.3% (*2,6*). During 1980–1990, the rate declined by 17.1%, and during 1990–1994, it declined by 14.7%. Almost 42% of the decline during the study period (1980–1994) occurred from 1990 to 1994.

The rate of decline in PNM was greater and more rapid for white infants than black infants. However, among white infants, PNM declined slower than NM, and the proportion of postneonatal deaths among whites was greater than among blacks. NM and PNM declined similarly among blacks during 1980–1994, and their relative proportions remained constant. Compared with white infants, the rate of decline caused by birth defects, infections, injuries, and perinatal conditions was slower for black infants.

Improvements in PNM during 1915–1970 have been attributed to improved sanitation, introduction of antibiotics, improved nutrition, and reduced infectious disease-related mortality (*1,3*). Risk markers for PNM include environmental factors (e.g., socioeconomic conditions, demographic factors, and availability and use of health care [*1,2,6,14–17*]). An association between poverty and infant mortality has also been described (*18–22*). However, to explore these factors in detail, a surveillance system that includes information on socioeconomic indicators and other potential risk factors is needed (*1,6,15*). The mortality data used in this report are limited by the absence of data on factors known to affect infant survival (e.g., socioeconomic status, maternal education, parity, and early use of prenatal care). Moreover, the magnitude of the association between PNM and socioeconomic indicators may vary over time (*17*), perhaps because of the importance of economic deprivation (22,23). Among industrialized countries in Europe, higher infant mortality rates are associated with large income disparities between the rich and the poor (*23,24*).

PNM attributable to SIDS decreased by 32% among black infants and white infants during 1980–1994, and most of this decline occurred after 1990. However, the twofold

difference in SIDS mortality between blacks and whites increased further. Autopsy rates increased for both groups during this period and remained only slightly higher for black infants in 1994 (98.0% versus 95.5%). Thus, racial differences and trends in autopsy rates account for neither the higher SIDS mortality among black infants nor the important mortality decline during the 1990s for both races. No evidence suggests that more efficient use has occurred of information from autopsies of black infants (i.e., apparently, the information from the autopsies does not account for the reduction in the rate) or that low birth weight or demographic risk factors have decreased among blacks. The decline in SIDS mortality among black infants may be attributable in part to decreased prevalence of smoking among black women during pregnancy during 1989–1994 (*25*). A reduction in the population of infants sleeping prone has lowered SIDS rates internationally (*26*). Side and supine positioning of infants has increased across socioeconomic groups and may account for the more rapid decline of SIDS during the 1990s (*27*).

Birth defects remain the leading cause of infant mortality in the United States. During 1980–1994, PNM caused by birth defects decreased, and the magnitude of the decline for white infants was one-and-a-half times that of black infants (30% versus 20%). Improved infant survival, the increased use of folic acid, and increased prenatal diagnosis may have reduced the proportion of postneonatal deaths caused by birth defects. Infant mortality because of cardiovascular birth defects is higher in nonmetropolitan than metropolitan areas (*28*); thus, increased access to care may reduce the number of these deaths. Population-based surveillance for birth defects will continue to provide survival, etiologic, and health services data (*29*).

During 1980–1994, PNM caused by infections declined among white infants and black infants by approximately 30%. However, nearly 16% of postneonatal deaths among black infants was attributable to infections in 1994, and infectious diseases remained the second leading cause of PNM among black infants during the period. Because advances in infectious disease control resulted in dramatic reductions in infant mortality during the first half of this century (*2,3,4*) and infections persist as a leading cause of PNM in the 1990s, the prevention of infectious diseases warrants renewed attention.

PNM attributable to most causes of injury declined among white infants and black infants during the 1980s; but PNM associated with motor vehicle crashes persisted during 1980–1994 despite high rates of recommended automobile passenger-restraint use in several metropolitan areas (*30*). Moreover, PNM caused by motor vehicle crashes decreased for white infants but increased for black infants during the period. Possible explanations of this paradox include a population shift from urban to less accessible suburban settings that has resulted in an increased number of crashes (*31*); increased child occupant fatalities during rush hours, which reflect changes in the transport of young children to and from day care settings (32); and an increase in the number of vehicle miles traveled for persons of low socioeconomic status (*32,33*). Although the rate of PNM caused by fire for black infants remained at approximately 2.5 times that of white infants in 1994, the relative risk of fire-related PNM decreased by nearly two thirds during the study period.

Postneonatal homicide increased steadily as a cause of postneonatal death during 1980–1994 among white infants and black infants. In 1992, the rate of homicide among black infants was approximately 2.5 times that of white infants. A previous study sug-

gests that when the rate is adjusted for socioeconomic status, this racial gap narrows (*34*). Poverty, as a positive predictor of metropolitan homicide, has been previously described (*34,35,36*). Strategies to improve adverse living conditions may also reduce these postneonatal deaths.

In conclusion, PNM remains an important contributor to infant mortality, but nearly half of these deaths are caused by potentially preventable causes such as SIDS, infections, and injuries. In 1993, the year 2000 national health objective for PNM was achieved for white infants; however, these data suggest that the objective for black infants is unlikely to be met. Prevention strategies to further reduce PNM should include increasing access to comprehensive prenatal and pediatric care and scheduled immunizations; promoting smoke-free environments; promoting the supine sleeping position for infants; encouraging breast feeding; and advocating the use of recommended automobile passenger restraints and residential fire alarms. Further evaluation of the influence of socioeconomic status, environmental exposures, and health-care access and use are needed for planning effective prevention strategies.

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APPENDIX A

TABLE A-1. Broad groupings of International Classification of Diseases (9th revision) Codes for underlying cause of death used in this surveillance summary (*8*).

Perinatal conditions	760.0–779.9
Congenital anomalies	740.0–759.9
Infections	001.0–139.9
	320.0–326.9
	360.0–360.1
	372.0
	373.1–373.2
	373.5–373.6
	380.1–380.2
	382.0–383.9
	420.0–422.9
	460.0–466.1
	475.0
	478.2
	478.7
	480.0–487.9
	490.0
	510.0–510.9
	513.0–513.9
	056.6–567.9
	572.0–572.1
	573.1–573.2
	577.0
	590.0–590.9
	595.0
	680.0–686.9
	711.0–711.9
	728.0
	730.0–730.9
	790.7–790.8
Injury	E800.0–E969.9
	E980.0–E989.9
Ill-defined	780.0–797.9
	798.1–799.9
Sudden infant death syndrome	798.0–798.0
Other	Remainder

TABLE A-2. Detailed groupings of International Classification of Diseases (9th revision) Codes for Selected underlying causes of death used in this surveillance summary (*8*).

Injuries (E800.0–E969.9, E980.0–E989.9)		**Infections, cont'd.**	
Unintentional		Respiratory	460.0–466.1
Motor vehicle	810.0–825.9		478.2
Poisoning	850.0–869.9		478.7
Falls	880.0–888.9		480.0–487.9
Fire	890.0–899.9		490.0–490.9
Drowning	910.0–910.9		510.0–510.9
Suffocation, obstructive	911.0–912.9		513.0–513.9
Suffocation, mechanical	913.0–913.9		010.0–012.9
Other unintentional	800.0–807.9		031.0
	826.0–849.9		033.0–033.9
	870.0–879.9		034.0
	900.0–909.9		039.1
	914.0–949.9		055.1
Intentional			130.4
Homicide	960.0–969.9	Gastrointestinal	566.0–567.9
All Others	980.0–989.9		572.0–572.1
.			573.1–573.2
Birth defects (7400–7599)			577.0
Central nervous system	740.0–742.9		001.0–009.9
Cardiovascular	745.0–747.9		014.0
Respiratory	748.0–748.9		039.2
Gastrointerstinal	749.0–751.9		070.0–070.9
Genitourinary	752.0–753.9		127.0–127.9
Musculoskeletal	754.0–756.9	Septicemia	038.0–038.9
Chromosomal	758.0–758.9	Other	360.0–360.1
Other anomalies	Remainder		372.0
	of 740.0–759.9		373.1–373.2
			380.1–380.2
Infections			382.0–383.9
Central nervous system	320.0–326.9		420.0–422.9
	013.0–013.9		590.0–590.9
	036.0–036.1		595.0
	045.0–049.9		614.4
	053.0–053.1		680.0–686.9
	054.3		711.0–711.9
	055.0		728.0
	056.0–056.0		730.0–730.9
	062.0–064.9		790.7–790.8
	072.1–072.2		
	130.0		

Abortion Surveillance — United States, 1995

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Abstract

Condition: Since 1990 (i.e., the year in which the number of abortions was highest), the annual number of abortions in the United States has decreased by 15%.

Reporting Period Covered: This report summarizes and reviews information reported to CDC regarding legal induced abortions obtained in the United States during 1995.

Description of System: For each year since 1969, CDC has compiled abortion data received from 52 reporting areas: 50 states, the District of Columbia, and New York City.

Results: In 1995, a total of 1,210,883 legal abortions were reported to CDC, representing a 4.5% decrease from the number reported for 1994. The abortion ratio was 311 legal induced abortions per 1,000 live births, and the abortion rate was 20 per 1,000 women aged 15–44 years, the lowest ratio and rate recorded since 1975. Women who were undergoing an abortion were more likely to be young, white, and unmarried; most were obtaining an abortion for the first time. Approximately half of all abortions (54%) were performed at ≤8 weeks of gestation, and approximately 88% were performed before 13 weeks. Approximately 16% of abortions were performed at the earliest weeks of gestation (≤6 weeks), approximately 17% at 7 weeks of gestation, and approximately 21% at 8 weeks of gestation. Few abortions were provided after 15 weeks of gestation — approximately 4% of abortions were obtained at 16–20 weeks, and 1.4% were obtained at ≥21 weeks. Younger women (i.e., women aged ≤24 years) were more likely to obtain abortions later in pregnancy than were older women.

Interpretation: Since 1990, the number of abortions has declined each year. Since 1987, the abortion-to-live–birth ratio has declined; in 1995, it was the lowest recorded since 1975. This decrease in the abortion ratio reflects a trend that a lower proportion of pregnant women obtain induced abortion.

Actions Taken: The number and characteristics of women who obtain abortions in the United States should continue to be monitored so that trends in induced abortion can be assessed, efforts to prevent unintended pregnancy can be evaluated, and the preventable causes of morbidity and mortality associated with abortions can be identified and reduced.

INTRODUCTION

In 1969, CDC began abortion surveillance to document the number and characteristics of women obtaining legal induced abortions, to monitor unintended pregnancy, and to assist efforts to identify and reduce preventable causes of morbidity and mortality associated with abortions. This report is based on abortion data for 1995 provided to CDC's National Center for Chronic Disease Prevention and Health Promotion, Division of Reproductive Health.

METHODS

For 1995, CDC compiled data from 52 reporting areas: 50 states, the District of Columbia, and New York City. The total number of legal induced abortions was available from all reporting areas; however, not all of these areas collected information regarding the characteristics of women who obtained abortions.

The availability of information about characteristics of women who obtained an abortion in 1995 varied by state. Most states (42 states, the District of Columbia, and New York City) collected and reported abortion data by age of the woman, whereas only 21 states, the District of Columbia, and New York City collected and reported adequate abortion data by Hispanic ethnicity. In the "Results" section of this report, all of the percentage data for each characteristic represent known characteristics without redistribution of the unknowns. States were excluded from the analysis if data regarding a given characteristic were unknown for >15% of women (Tables 3–13).

For 48 reporting areas, data concerning the number and characteristics of women obtaining legal induced abortions were provided by the central health agency*; for the other four areas, data were provided from hospitals and other medical facilities. Because information concerning the residence of women who obtained abortions was not available from some states, the procedures were reported by the state in which they were performed. However, for two reporting areas (i.e., District of Columbia and Wisconsin) occurrence data were unavailable.

For analysis by age, women who obtained legal induced abortions were grouped by 5-year age groups. Both ratios (i.e., the number of abortions per 1,000 live births per year) and rates (the number of abortions per 1,000 women per year) are presented by age group in this report. Ratios were calculated by using the number of live births provided by each state's central health agency (except where noted), and rates were calculated by using the number of women reported in special unpublished tabulations provided by the U.S. Bureau of the Census. Because almost all (94%) abortions among women aged <15 years in 1988 (the most recent year for which exact age data were available) occurred among those aged 13–14 years (*1*), the population of women aged 13–14 years was used as the denominator for calculating abortion rates for women aged <15 years. Rates for women aged ≥40 years were based on the number of women aged 40–44 years, whereas rates for all women who obtained abortions were based on the population of women aged 15–44 years.

Race was categorized by three groups (i.e., a] white, b] black, and c] all other races) or two groups (i.e., a] white and b] black and all other races). "Other" races included

*Includes state health departments and the health departments of New York City and the District of Columbia.

Asian/Pacific Islander, American Indian, Alaska Native, and women classified as "other" race.

In 1990, data regarding Hispanic ethnicity were first available on abortion reports submitted to CDC by central health agencies. As in previous reports, Hispanic ethnicity and race were evaluated separately, and rates and ratios are presented by Hispanic ethnicity and race.

Marital status was reported as either married (which included women who were married or separated) or unmarried (which usually included those who were never married, divorced, or widowed). Reporting of marital status differed somewhat by state, particularly for the data used as denominators to calculate abortion ratios by marital status; therefore, abortion ratios by marital status should be interpreted cautiously.

Most areas (38 of 40) that reported adequate data on week of gestation at the time of abortion also reported procedures obtained at ≤6, 7, and 8 weeks of gestation. Gestational age (in weeks) at the time of abortion was reported by most areas from estimates derived from the time elapsed since the woman's last menstrual period. In 18 states in 1995, gestational age was reported on the basis of the physician's estimate for each reported abortion or when information regarding the last menstrual period was missing or illogical. Physician's estimates for gestational age also could have included information from the clinical examination, as well as the time elapsed since the last menstrual period.

RESULTS

In 1995, a total of 1,210,883 legal induced abortions were reported to CDC, representing a 4.5% decrease from the number reported for 1994 (*2*) (Table 1). In contrast, from 1970 through 1982, the reported number of legal abortions in the United States had increased every year (Table 2; Figure 1); the largest percentage increase occurred from 1970 to 1971. From 1976 through 1982, the annual increase declined and reached a low of 0.2% during 1980–1981 and during 1981–1982. From 1983 through 1990, the number of abortions increased again, although moderately (≤5% from year to year). However, since 1990, the annual number of abortions has decreased each year.

The national legal induced abortion ratio increased from 1970 to 1980, peaked at 364 per 1,000 live births in 1984, and began to decline steadily in 1987, from 356 per 1,000 to 311 per 1,000 in 1995 (Figure 1; Table 2). The national legal induced abortion rate increased from five abortions per 1,000 women aged 15–44 years in 1970 to 25 per 1,000 in 1980. From 1981 through 1992, the rate remained stable at 23–24 abortions per 1,000 women, then declined to 22 in 1993, to 21 in 1994, and to 20 in 1995.

In 1995, as in previous years, most legal induced abortions were performed in California, New York City, Texas, and Florida; the fewest were performed in Wyoming, Idaho, South Dakota, and North Dakota (Table 3) (*2*). For women whose state of residence was known, approximately 92% had obtained the abortion within the state in which they resided. The percentage of abortions obtained by out-of-state residents ranged from approximately 53% in the District of Columbia to <1% in Hawaii. For 1995, nine reporting areas could not provide data concerning abortions obtained by out-of-state residents.

Women aged 20–24 years obtained approximately one third (32%) of all abortions; women aged <15 years obtained <1% of all abortions (Table 4). Abortion ratios were highest for the youngest women (i.e., 667 abortions per 1,000 live births for women aged <15 years and 399 per 1,000 for women aged 15–19 years) and for the oldest women (387 per 1,000 live births for women aged ≥40 years). The ratio was lowest for women aged 30–34 years (165 per 1,000 live births) (Figure 2; Table 4). Among adolescents, the abortion ratio was highest for those aged <15 years and lowest for those aged 19 years (Table 5).

In contrast to abortion ratios, abortion rates were highest for women aged 20–24 years (37 abortions per 1,000 women) and lowest for women at the reproductive-age extremes (i.e., two per 1,000 women aged <15 years and two per 1,000 women aged ≥40 years) (Table 4).

For women in most age groups, the abortion ratio increased from 1974 through the early 1980s and declined thereafter, particularly for the youngest and oldest reproductive-aged women (Figure 3). Abortion ratios for women aged <15 years have been and remain higher than those for the other age groups. From 1994 to 1995, the abortion ratio decreased for women aged <15 and 15–19 years and was the lowest ever recorded for these age groups. The abortion ratio for women aged 20–34 years (i.e., the group with the highest fertility rate) (*3*) has remained stable since the mid-1980s.

During 1995, approximately 53% of reported legal induced abortions were obtained at ≤8 weeks of gestation, and approximately 86% were obtained at <13 weeks (Table 6). Approximately 15% of abortions were performed at the earliest weeks of gestation (≤6 weeks), approximately 17% at 7 weeks, and approximately 21% at 8 weeks (Table 7). Few abortions were provided after 15 weeks of gestation — approximately 4% of abortions were obtained at 16–20 weeks, and 1.4% were obtained at ≥21 weeks (Figure 4; Table 6).

Almost all (98%) abortions were performed by curettage and <1% by intrauterine saline or prostaglandin instillation (Table 8). Hysterectomy and hysterotomy were used in only a few cases: <0.01% of abortions were performed by using these methods.

Approximately 58% of women who obtained legal induced abortions were white (Table 9). The abortion ratio for black women was 534 per 1,000 live births; this was approximately 2.5 times the ratio for white women (204 per 1,000 live births). The abortion ratio (335 per 1,000 live births) for women of other races was approximately 1.6 times the ratio for white women. In addition, the abortion rate for black women (31 per 1,000) was approximately 2.5 times the rate for white women (12 per 1,000 women).

Twenty-one states, the District of Columbia, and New York City* reported data concerning the Hispanic ethnicity of women who obtained legal induced abortions (Table 10). The percentage of abortions obtained by Hispanic women in these reporting areas ranged from <1% in several states to approximately 44% in New Mexico. For Hispanic women in these reporting areas, the abortion ratio was 265 per 1,000 live births — slightly lower than the ratio for non-Hispanics in the same areas (280 per 1,000). However, the abortion rate per 1,000 Hispanic women (20 per 1,000 women) was greater than the rate per 1,000 non-Hispanic women (15 per 1,000).

*After excluding states for which data was unknown for >15% of women who obtained an abortion.

Seventy-nine percent of women who obtained abortions were unmarried (Table 11). The abortion ratio for unmarried women was approximately nine times the ratio for married women (650 versus 76 abortions per 1,000 live births).

Approximately 45% of women who obtained legal induced abortions had had no previous live births, and approximately 89% had had two or fewer previous live births (Table 12). The abortion ratio was highest for women who had had three previous live births and lowest for women who had had one previous live birth.

In 1995, of women who obtained an abortion, 54% of women obtained an abortion for the first time. Approximately 17% of women had had at least two previous abortions (Table 13).

The age distribution of women who obtained a legal abortion differed slightly by race (Table 14). However, for women of black or other races, the percentage who were aged <15 years, although small (1.1%), was nearly twice the percentage for white women (0.6%). The percentage of women of black or other races who were unmarried (83%) also was slightly higher than the percentage of white women (78%). Few differences were found by age and Hispanic ethnicity (Table 15). Of those women who had obtained an abortion, a slightly higher percentage of non-Hispanic women were unmarried in comparison with Hispanic women.

Most (approximately 86%) women who obtained an abortion had their procedure during the first 12 weeks of pregnancy; however, adolescents (i.e., women aged ≤19 years) were more likely than older women to obtain abortions later in pregnancy (Tables 16 and 17). The percentage of women who obtained an abortion early in pregnancy (i.e., at ≤8 weeks of gestation) increased with age, and the percentage who obtained an abortion late in pregnancy (at ≥16 weeks of gestation) decreased with age for women up to 25–29 years of age and remained stable for women in older age groups (Figure 5; Table 16). Black women were more likely to obtain an abortion later in pregnancy than were white women or women of other races (Tables 16 and 17). Of all women who obtained an abortion, Hispanic women were slightly more likely than non-Hispanic women to have had an abortion at ≤8 weeks of gestation and less likely to have had an abortion late in pregnancy (≥21 weeks), the overall differences between Hispanic and non-Hispanic women in the timing of abortions were minimal (Table 16).

More than 99% of abortions at ≤12 weeks of gestation were performed by using curettage (primarily suction procedures) (Table 18). After 12 weeks of gestation, the most frequently used procedure also was curettage, although it usually was reported as dilatation and evacuation (D&E). Intrauterine instillations involved the use of saline or prostaglandin; these procedures were used primarily at ≥16 weeks of gestation.

DISCUSSION

Since 1990 (i.e., the year in which the number of abortions was highest), the annual number of abortions in the United States has decreased by 15% (Table 2) (*2,4*). In 1995, the national abortion-to-live–birth ratio was the lowest recorded since 1975 (*5*). The abortion ratio had increased steadily from 1970 through 1980, decreased slightly during 1981–1983, increased to its highest level in 1984, then remained fairly stable until 1987, before beginning to decline each subsequent year (Table 2; Figure 1). The decreasing abortion ratio resulted from a lower proportion of pregnant women who

had obtained an abortion in recent years. Factors that may contribute to this effect include attitudinal changes concerning abortion and/or carrying unplanned pregnancies to term and the decreased number of unintended pregnancies in recent years (*6*).

In addition, in 1995, the national abortion rate was the lowest recorded since 1975 (*5*). This decline in the abortion rate probably reflects the decreasing rate of unintended pregnancies; reduced access to abortion services; and changes in contraceptive practices, including an increased use of contraception, particularly an increased use of condoms among young women (*6–9*). In this report, the induced abortion rate in the United States was higher than rates reported for Australia and Western European countries and lower than rates reported for China, Cuba, Eastern European countries, and the Newly Independent States of the former Soviet Union (*10*). Also, a recent study from Canada for 1995 reported a legal induced abortion rate that was approximately 26% lower than the rate in the United States (15.5 abortions per 1,000 women aged 15–44 years versus 21 per 1,000, respectively) and an abortion-to-live–birth ratio approximately 12% lower than the ratio in the United States (282 per 1,000 live births versus 321 per 1,000, respectively) (11). Abortion and birth rates for teenagers are higher in the United States than in most Western European countries and some Eastern European countries (*12*).

As in previous years, the abortion ratio in 1995 varied substantially by age (*2*). Although the ratio was highest for adolescents, the percentage of legal induced abortions obtained by women aged ≤19 years has decreased since the mid-1980s (i.e., from 26% in 1984 to 22% in 1990 and to 20% in 1992) and has remained at that level (*4,13*). Since 1980, the abortion ratio has declined for most age groups — particularly for those at the age extremes — women aged ≤19 years and ≥35 years. In 1995, the abortion ratio for adolescents (i.e., aged <15 and 15–19 years) was the lowest ratio CDC had ever recorded for these age groups. Other studies have indicated a decrease in teenage pregnancies from 1992 to 1995 and a decrease in teenage birth rates from 1994 to 1995 (*3,14*).

Several factors may have influenced this decline in the abortion ratios among adolescents. First, teenage pregnancies decreased; therefore, abortions decreased. Second, the age distribution of reproductive-aged women obtaining abortions shifted from younger women to older, less fertile women (*15*). Third, access to abortion services changed (*7–8*), and abortion laws that affect adolescents (e.g., parental consent or notification laws and mandatory waiting periods) have undergone continual change (*16–18*).

In 1995, as in previous years, the abortion ratio for black women was approximately twice the ratio for white women; this differential has increased since 1986. In addition, the abortion rate for black women was approximately 2.5 times the rate for white women. Race-specific differences in legal induced abortion ratios and rates may reflect differences in factors such as socioeconomic status, contraceptive use, incidence of unintended pregnancies, and access to family-planning and contraceptive services.

The abortion-to-live–birth ratio for Hispanic women during 1995 was slightly lower than that for non-Hispanic women. Other published reports indicate that pregnant Hispanic women are less likely than pregnant non-Hispanic women to obtain an abortion (*19*). However, the abortion rate per 1,000 Hispanic women was higher than the rate for non-Hispanic women, which is consistent with several other studies (*19–20*). For

women in all age groups, fertility was higher for Hispanic than for non-Hispanic women (*3*).

In 1995, a total of 36 states, including the District of Columbia and New York City, reported Hispanic ethnicity of women who obtained abortions. Because of concerns regarding the completeness of such information (>15% unknown data) regarding Hispanic ethnicity in some states, data from only 21 states, the District of Columbia, and New York City were evaluated to determine the number and percentage of abortions obtained by women of Hispanic ethnicity in 1995. These geographical areas represent approximately 38% of all reproductive-aged Hispanic women in the United States in 1995 (CDC, unpublished data). One published report of a study that used abortion data obtained from CDC also suggests that the number of Hispanics obtaining abortions may be underestimated (*20*). Thus, the number, ratio, and rate of abortions for Hispanic women in this report might not be representative of the overall Hispanic population in the United States (i.e., these data might reflect utilization of abortion services only in the areas included in this analysis).

Since 1980, the percentage distribution of abortions by gestational age has been stable, with slight percentage increases toward the earliest and latest gestational ages and slight percentage decreases for abortions performed at 8, 9–10, and 11–12 weeks. Since 1990, there has been an increase in the percentage of abortions performed at the early weeks of gestation (i.e., ≤6 and 7 weeks). Recently, there has been an increased interest in surveillance for abortions performed late in pregnancy (i.e., ≥21 weeks) (*21*).

Since 1992, most reporting areas have reported abortions by gestational age, in weeks of gestation, for abortions performed at ≤6, 7, and 8 weeks (*2*). These data will assist in monitoring trends in legal abortions as new medical (nonsurgical) methods of terminating pregnancy are implemented because these new methods are used primarily to terminate pregnancies at ≤8 weeks of gestation (*22–25*). During 1994–1995, approximately 2,000 women in the United States aged >18 years participated in clinical trials testing mifepristone, a medication used for medical (nonsurgical) abortion (*26*). This medication has not yet been fully approved by the Food and Drug Administration for use and distribution in the United States (Population Council, personal communication, 1998). However, other medications (e.g., methotrexate and misoprostol) are currently being used to perform early medical (nonsurgical) abortions (*24–25*).

In this and previous reports, age was inversely associated with timing of abortion (2,27,28). As in previous years, younger women were more likely to obtain an abortion later in gestation than were older women.

From 1972 to 1995, the percentage of abortions performed by curettage (which includes D&E) increased from 89% to 99% (Table 1), and the percentage of abortions performed by intrauterine instillation and by hysterectomy and hysterotomy declined sharply (from 10% to 0.5% and from 0.6% to <0.01%, respectively). From 1974 through 1995, the percentage of second-trimester abortions performed by D&E increased from 31% to 94%; the percentage of second-trimester abortions performed by intrauterine instillation decreased from 57% to 4% (*29*). The continued reliance on D&E probably has resulted from the lower risk for complications associated with the procedure (*30,31*).

The numbers, ratios, and rates of abortion from this analysis are conservative estimates because the numbers of legal abortions reported to CDC for 1995 were

probably lower than the numbers actually performed. Totals provided by central health agencies may be lower than those obtained by direct surveys of abortion providers (*32*). For example, the total number of abortions reported to CDC for 1992 was approximately 11% lower than that reported for 1992* by The Alan Guttmacher Institute, a private organization that directly contacts abortion providers to obtain information concerning the total number of abortions performed (*8*). In addition, not all states collected and/or reported information (e.g., age, race, and gestational age) concerning women obtaining a legal induced abortion during 1995; therefore, the numbers, percentages, rates, and ratios derived from this analysis may not be representative of all women who obtained abortions in that year.

Despite these limitations, findings from ongoing national surveillance for legal induced abortion are used for several purposes. First, data from abortion surveillance are used to identify characteristics of women at high risk for unintended pregnancy. Second, ongoing annual surveillance is essential to monitor trends in the number, ratio, and rate of abortions in the United States. Third, statistics on the number of pregnancies ending in abortion are used in conjunction with birth and fetal death statistics to estimate pregnancy rates (e.g., pregnancy rates among teenagers) (*1*) and other outcome rates (e.g., the rate of ectopic pregnancies per 1,000 pregnancies). Fourth, abortion and pregnancy rates can be used to evaluate the effectiveness of family-planning programs and programs for preventing unintended pregnancy. Fifth, ongoing surveillance provides data for assessing changes in clinical practice patterns related to abortion (e.g., longitudinal changes in the types of procedures and trends in gestational age at the time of abortion). Finally, abortion data are used as the denominator in calculating abortion morbidity and mortality rates (*2*).

Induced abortions usually are linked to unintended pregnancies, which often occur despite use of contraception (*20,33,34*). In 1995, data from the National Survey of Family Growth (NSFG) indicated that approximately 31% of live births were associated with unintended pregnancy (i.e., either mistimed or unwanted at conception) (*6*). Unintended pregnancy is not a problem just for adolescents, unmarried women, or for poor women; it is a pervasive public health problem that spans all groups of women (*6*).

In a study of abortion patients conducted during 1994 and 1995, researchers found that 58% of patients reported that they "currently used" contraception during the month of their last menstrual period; however, their use of contraception may have been inconsistent or incorrect (*20*). Researchers conducting the most recent NSFG have estimated that in 1995, approximately 29% of U.S. women who used oral contraceptives as their only contraception and who had intercourse during the 3 months before their NSFG interview reported that they missed a birth control pill one or more times during the 3 months. In addition, approximately 33% of U.S. women who were using only coitus-dependent contraceptive methods† during the 3 months before the interview used these methods inconsistently (*6*). Therefore, education regarding improved contraceptive use and practices, as well as access to and education regarding safe, effective, and low-cost contraception and family-planning services, may help re-

*The most recent year for which The Alan Guttmacher Institute reported data.

†Coitus-dependent contraceptive methods include male or female condoms, diaphragm, sponge, cream, jelly, or other methods that must be used at the time intercourse occurs.

duce the incidence of unintended pregnancy and, therefore, may reduce the use of legal induced abortion in the United States (*35,36*).

Recently passed welfare-reform legislation — the Personal Responsibility and Work Opportunity Reconciliation Act of 1996* — has increased the interest in accurate state-based surveillance for induced abortion. In addition, some states have recently instituted programs that emphasize the prevention of unintended pregnancy, particularly among adolescents. To help guide these efforts, an ongoing, accurate assessment of induced abortion is needed in all states to determine the number and characteristics of women who obtain these procedures.

Additional statistical and epidemiologic information about legal induced abortions is available from CDC's automated Reproductive Health Information System. This system provides information by fax, voice recordings, or mail; telephone (888) 232-2306. Copies of *MMWR* reports containing statistical and epidemiologic information about abortions also can be obtained through the CDC World-Wide Web site at (http://www.cdc.gov).

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*Section 103 of P.L. 104-193 provides for additional welfare funding for as many as five states if a) the birth rate of infants to unwed mothers is decreased and b) the rate of induced pregnancy terminations is less than the rate for 1995 (the baseline year).

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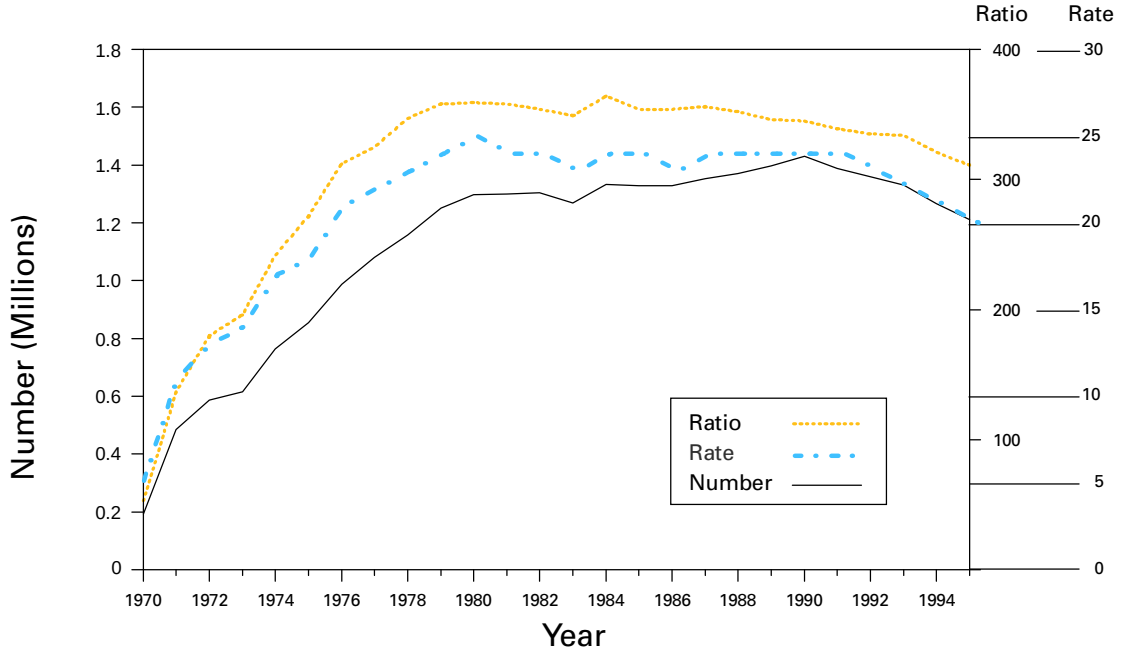
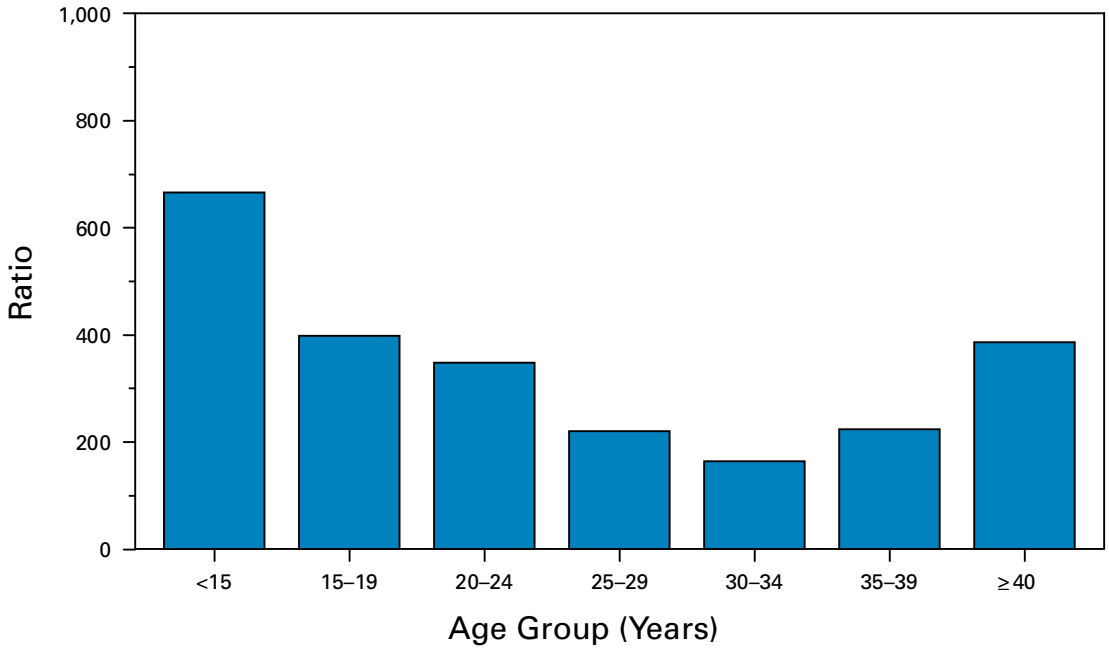
FIGURE 1. Number, ratio,* and rate† of legal abortions performed, by year — United States, 1970–1995



*Number of abortions per 1,000 live births.
†Number of abortions per 1,000 women aged 15–44 years.

FIGURE 2. Abortion ratio,* by age group of women who obtained a legal abortion — United States, 1995



*Number of abortions per 1,000 live births.

TABLE 1. Characteristics of women who obtained legal abortions — United States, selected years, 1972–1995

Characteristic	1972	1973	1976	1980	1985	1990	1991	1992	1993	1994	1995
Reported no. of legal abortions	586,760	615,831	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
	Percent distribution*										
Residence											
In-state	56.2	74.8	90.0	92.6	92.4	91.8	91.6	92.0	91.4	91.5	91.7
Out-of-state	43.8	25.2	10.0	7.4	7.6	8.2	8.4	8.0	8.6	8.5	8.3
Age (yrs)											
≤19	32.6	32.7	32.1	29.2	26.3	22.4	21.0	20.1	20.0	20.2	20.1
20–24	32.5	32.0	33.3	35.5	34.7	33.2	34.4	34.5	34.4	33.5	32.5
≥25	34.9	35.3	34.6	35.3	39.0	44.4	44.6	45.4	45.6	46.3	47.4
Race											
White	77.0	72.5	66.6	69.9	66.7	64.8	63.8	61.5	60.9	60.5	59.5
Black	23.0†	27.5†	33.4†	30.1†	29.8	31.8	32.5	33.9	34.9	34.7	35.0
Other§	—	—	—	—	3.5	3.4	3.7	4.6	4.2	4.8	5.5
Hispanic origin											
Hispanic	—	—	—	—	—	9.8	13.5	15.2	14.7	14.5	15.4
Non-Hispanic	—	—	—	—	—	90.2	86.5	84.8	85.3	85.5	84.6
Marital status											
Married	29.7	27.4	24.6	23.1	19.3	21.7	21.4	20.8	20.4	19.9	20.3
Unmarried	70.3	72.6	75.4	76.9	80.7	78.3	78.6	79.2	79.6	80.1	79.7
No. of live births¶											
0	49.4	48.6	47.7	58.4	56.3	49.2	47.8	45.9	46.3	46.2	45.2
1	18.2	18.8	20.7	19.4	21.6	24.4	25.3	25.9	26.0	25.9	26.5
2	13.3	14.2	15.4	13.7	14.5	16.9	17.5	18.0	17.8	17.8	18.0
3	8.7	8.7	8.3	5.3	5.1	6.1	6.4	6.7	6.6	6.7	6.8
≥4	10.4	9.7	7.9	3.2	2.5	3.4	3.0	3.5	3.3	3.4	3.5
Type of procedure											
Curettage	88.6	88.4	92.8	95.5	97.5	98.8	98.9	98.9	99.0	99.1	98.9
Suction curettage	65.2	74.9	82.6	89.8	94.6	96.0	97.3	97.0	96.4	96.5	96.6
Sharp curettage	23.4	13.5	10.2	5.7	2.9	2.8	1.6	1.9	2.6	2.6	2.3
Intrauterine instillation	10.4	10.4	6.0	3.1	1.7	0.8	0.7	0.7	0.6	0.5	0.5
Other**	1.0	1.2	1.2	1.4	0.8	0.4	0.4	0.4	0.4	0.4	0.6
Weeks of gestation											
≤8	34.0	36.1	47.0	51.7	50.3	51.6	52.3	52.1	52.3	53.7	54.0
≤6	—	—	—	—	—	—	—	14.3††	14.7§§	15.7¶¶	15.7***
7	—	—	—	—	—	—	—	15.6††	16.2§§	16.5¶¶	17.1***
8	—	—	—	—	—	—	—	22.2††	21.6§§	21.6¶¶	21.2***
9–10	30.7	29.4	28.1	26.2	26.6	25.3	25.1	24.2	24.4	23.5	23.1
11–12	17.5	17.9	14.4	12.2	12.5	11.7	11.5	12.0	11.6	10.9	10.9
13–15	8.4	6.9	4.5	5.1	5.9	6.4	6.1	6.0	6.3	6.3	6.3
16–20	8.2	8.0	5.1	3.9	3.9	4.0	3.9	4.2	4.1	4.3	4.3
≥21	1.2	1.7	0.9	0.9	0.8	1.0	1.1	1.5	1.3	1.3	1.4

* Based on known values in data from all areas reporting a given characteristic with no more than 15% unknowns. The number of areas reporting a given characteristic varied. For 1995, the number of areas included for residence was 43; age, 44; race, 36; ethnicity, 23; marital status, 33; number of live births, 37; type of procedure, 40; and weeks of gestation, 40.
† Reported as black and other races.
§ Includes all other races.
¶ For 1972–1976, data indicate number of living children.
** Includes hysterotomy and hysterectomy.
†† Data are for 36 of 39 areas reporting weeks of gestation.
§§ Data are for 38 of 41 areas reporting weeks of gestation.
¶¶ Data are for 38 of 40 areas reporting weeks of gestation.
*** Data are for 38 of 40 areas reporting weeks of gestation.
—Not available.

TABLE 2. Number, ratio,* and rate† of legal abortions and source of reporting, by year — United States, 1970–1995

Year	Total no. of legal abortions	Ratio	Rate	No. of areas reporting	
				Central health agency§	Hospitals/ Facilities¶
1970	193,491	52	5	18	7
1971	485,816	137	11	19	7
1972	586,760	180	13	21	8
1973	615,831	196	14	26	26
1974	763,476	242	17	37	15
1975	854,853	272	18	39	13
1976	988,267	312	21	41	11
1977	1,079,430	325	22	46	6
1978	1,157,776	347	23	48	4
1979	1,251,921	358	24	47	5
1980	1,297,606	359	25	47	5
1981	1,300,760	358	24	46	6
1982	1,303,980	354	24	46	6
1983	1,268,987	349	23	46	6
1984	1,333,521	364	24	44	8
1985	1,328,570	354	24	44	8
1986	1,328,112	354	23	43	9
1987	1,353,671	356	24	45	7
1988	1,371,285	352	24	45	7
1989	1,396,658	346	24	45	7
1990	1,429,577	345	24	46	6
1991	1,388,937	339	24	47	5
1992	1,359,145	335	23	47	5
1993	1,330,414	334	22	47	5
1994	1,267,415	321	21	47	5
1995	1,210,883	311	20	48	4

*Number of abortions per 1,000 live births.
†Number of abortions per 1,000 women aged 15–44 years.
§Abortion data reported by central health agencies, which include state health departments and the health departments of New York City and the District of Columbia.
¶Abortion data reported by hospitals and/or other medical facilities in state.

TABLE 3. Reported number,* ratio,† and rate§ of legal abortions and percentage of abortions obtained by out-of-state residents,¶ by state of occurrence — United States, 1995

State	Total no. of legal abortions	Ratio	Rate	Percentage of legal abortions obtained by out-of-state residents
Alabama	14,221	236	15	12.3
Alaska	1,897	187	14	—
Arizona	11,933	165	13	1.8
Arkansas	5,757	164	9	8.6
California	289,987**	526	40	—
Colorado	9,384	173	14	8.9
Connecticut	11,325	255††	16	3.7
Delaware	4,295	419	26	—
Dist. of Columbia	14,131	—§§	—¶¶	53.3
Florida	74,749	396	26	—
Georgia	35,178	313	20	9.5
Hawaii	5,533	298	21	0.4
Idaho	970	54	4	6.8
Illinois	54,092	291††	20	—
Indiana	12,382	149	9	3.8
Iowa	5,899***	160	10	—
Kansas	10,767	290	19	42.5
Kentucky	7,438	143	8	22.3
Louisiana	11,491	175	11	—
Maine	2,819	203	10	3.0
Maryland	16,204	224††	14	8.8
Massachusetts	29,097	357	21	5.6
Michigan	31,091	232	14	4.3
Minnesota	14,017	222	13	9.1
Mississippi	3,563	86	6	3.5
Missouri	11,203	154	9	11.3
Montana	2,674	242	14	16.8
Nebraska	4,838	208	13	20.5
Nevada	6,942	279	21	11.0
New Hampshire	2,771***	189††	10	—
New Jersey	32,947	287	19	2.0
New Mexico	4,811	179	13	4.9
New York	139,686	525	34	—
City	95,205†††	785	—	4.8§§§
State	44,481	307	—	5.1§§§
North Carolina	33,420	329	20	11.6
North Dakota	1,334	157	10	30.4
Ohio	36,950	240	15	7.8
Oklahoma	7,985***	175††	11	—
Oregon	14,079	330	20	11.4
Pennsylvania	39,050	259	15	4.8
Rhode Island	5,707	447††	26	20.1
South Carolina	9,984	196	12	6.9
South Dakota	1,070	102	7	19.2
Tennessee	18,023	246	15	17.9
Texas	87,308	271	20	4.6
Utah	3,705	94	8	11.4

TABLE 3. Reported number,* ratio,† and rate§ of legal abortions and percentage of abortions obtained by out-of-state residents,¶ by state of occurrence — United States, 1995 — Continued

State	Total no. of legal abortions	Ratio	Rate	Percentage of legal abortions obtained by out-of-state residents
Vermont	2,169	320	16	22.9
Virginia	25,302	277	15	5.7
Washington	25,075	325	20	5.0
West Virginia	2,666	126	7	13.1
Wisconsin	12,782	189	11	5.1
Wyoming	182	29	2	7.7
Total	**1,210,883**	**311**	**20**	**8.3**

*Abortion data reported by central health agencies unless otherwise specified.
†Abortions per 1,000 live births (live-birth data reported by central health agencies unless otherwise specified).
§Abortions per 1,000 women aged 15–44 years. The number of women in this age group was obtained from the U.S. Department of Commerce, Bureau of the Census (special unpublished tabulations).
¶Based on number of abortions for which residence of women was known.
**CDC estimate.
††Number of live births obtained from CDC's National Center for Health Statistics (*3*).
§§>1,000 abortions per 1,000 live births.
¶¶>100 abortions per 1,000 women aged 15–44 years.
***Reported by hospitals and/or other medical facilities in state.
†††Reported by the New York City Department of Health.
§§§Percentage based on number reported as "out-of-reporting area."
—Not available.

TABLE 4. Reported legal abortions, by age of women who obtained an abortion and state of occurrence — selected states,* United States, 1995

State	Age group (yrs)																	
	<15		15–19		20–24		25–29		30–34		35–39		≥40		Unknown		Total†	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Alabama	190	1.3	3,046	21.4	5,158	36.3	2,803	19.7	1,726	12.1	986	6.9	287	2.0	25	0.2	14,221	100.0
Arizona	83	0.7	2,245	18.8	3,736	31.3	2,602	21.8	1,629	13.7	912	7.6	262	2.2	464	3.9	11,933	100.0
Arkansas	72	1.3	1,339	23.3	2,018	35.1	1,069	18.6	727	12.6	389	6.8	104	1.8	39	0.7	5,757	100.0
Colorado	57	0.6	2,107	22.5	2,930	31.2	1,899	20.2	1,299	13.8	806	8.6	243	2.6	43	0.5	9,384	100.0
Connecticut	83	0.7	2,443	21.6	3,538	31.2	2,526	22.3	1,540	13.6	825	7.3	257	2.3	113	1.0	11,325	100.0
Dist. of Columbia§	46	0.7	1,170	18.2	2,245	35.0	1,512	23.5	881	13.7	376	5.9	106	1.7	86	1.3	6,422	100.0
Georgia	439	1.2	6,717	19.1	11,553	32.8	7,981	22.7	4,945	14.1	2,597	7.4	725	2.1	221	0.6	35,178	100.0
Hawaii	56	1.0	1,154	20.9	1,691	30.6	1,175	21.2	817	14.8	469	8.5	168	3.0	3	0.1	5,533	100.0
Idaho	8	0.8	244	25.2	278	28.7	173	17.8	142	14.6	105	10.8	20	2.1	0	0.0	970	100.0
Indiana	113	0.9	2,558	20.7	4,412	35.6	2,561	20.7	1,557	12.6	898	7.3	249	2.0	34	0.3	12,382	100.0
Kansas	161	1.5	2,581	24.0	3,411	31.7	2,102	19.5	1,381	12.8	839	7.8	268	2.5	24	0.2	10,767	100.0
Kentucky	84	1.1	1,765	23.7	2,599	34.9	1,426	19.2	859	11.5	494	6.6	165	2.2	46	0.6	7,438	100.0
Louisiana	141	1.2	2,333	20.3	3,895	33.9	2,428	21.1	1,468	12.8	936	8.1	237	2.1	53	0.5	11,491	100.0
Maine	19	0.7	661	23.4	888	31.5	564	20.0	352	12.5	240	8.5	66	2.3	29	1.0	2,819	100.0
Maryland	164	1.0	3,236	20.0	5,093	31.4	3,779	23.3	2,454	15.1	1,158	7.1	320	2.0	0	0.0	16,204	100.0
Massachusetts	142	0.5	4,382	15.1	8,571	29.5	6,445	22.2	4,440	15.3	2,584	8.9	854	2.9	1,679	5.8	29,097	100.0
Michigan	241	0.8	6,397	20.6	10,383	33.4	6,734	21.7	4,134	13.3	2,459	7.9	679	2.2	64	0.2	31,091	100.0
Minnesota	76	0.5	2,478	17.7	4,474	31.9	3,229	23.0	2,041	14.6	1,229	8.8	366	2.6	124	0.9	14,017	100.0
Mississippi	62	1.7	756	21.2	1,285	36.1	757	21.2	409	11.5	225	6.3	66	1.9	3	0.1	3,563	100.0
Missouri	128	1.1	2,168	19.4	3,657	32.6	2,350	21.0	1,625	14.5	963	8.6	299	2.7	13	0.1	11,203	100.0
Montana	20	0.7	663	24.8	817	30.6	478	17.9	348	13.0	270	10.1	77	2.9	1	0.0	2,674	100.0
Nebraska	30	0.6	1,040	21.5	1,652	34.1	1,001	20.7	622	12.9	367	7.6	115	2.4	11	0.2	4,838	100.0
Nevada	42	0.6	1,168	16.8	1,932	27.8	1,671	24.1	1,187	17.1	663	9.6	191	2.8	88	1.3	6,942	100.0
New Jersey	191	0.6	5,534	16.8	10,661	32.4	8,008	24.3	4,833	14.7	2,739	8.3	854	2.6	127	0.4	32,947	100.0
New Mexico	46	1.0	1,046	21.7	1,510	31.4	977	20.3	666	13.8	404	8.4	140	2.9	22	0.5	4,811	100.0
New York	983	0.7	25,810	18.5	41,892	30.0	33,163	23.7	21,940	15.7	11,862	8.5	3,486	2.5	550	0.4	139,686	100.0
City	669	0.7	16,481	17.3	27,678	29.1	23,571	24.8	15,699	16.5	8,351	8.8	2,432	2.6	324	0.3	95,205	100.0
State	314	0.7	9,329	21.0	14,214	32.0	9,592	21.6	6,241	14.0	3,511	7.9	1,054	2.4	226	0.5	44,481	100.0
North Carolina	348	1.0	7,241	21.7	11,511	34.4	6,916	20.7	3,910	11.7	2,227	6.7	648	1.9	619	1.9	33,420	100.0
North Dakota	5	0.4	339	25.4	469	35.2	230	17.2	147	11.0	110	8.2	32	2.4	2	0.1	1,334	100.0
Ohio	195	0.5	6,604	17.9	12,742	34.5	8,514	23.0	4,880	13.2	2,906	7.9	945	2.6	164	0.4	36,950	100.0
Oregon	100	0.7	3,000	21.3	4,332	30.8	3,134	22.3	1,964	13.9	1,139	8.1	383	2.7	27	0.2	14,079	100.0
Pennsylvania	375	1.0	7,297	18.7	12,797	32.8	8,778	22.5	5,500	14.1	3,355	8.6	948	2.4	0	0.0	39,050	100.0
Rhode Island	33	0.6	1,075	18.8	1,880	32.9	1,250	21.9	829	14.5	503	8.8	136	2.4	1	0.0	5,707	100.0
South Carolina	101	1.0	2,119	21.2	3,406	34.1	2,182	21.9	1,278	12.8	698	7.0	199	2.0	1	0.0	9,984	100.0
South Dakota	7	0.7	291	27.2	308	28.8	201	18.8	129	12.1	91	8.5	43	4.0	0	0.0	1,070	100.0
Tennessee	193	1.1	3,662	20.3	6,337	35.2	3,827	21.2	2,321	12.9	1,303	7.2	372	2.1	8	0.0	18,023	100.0
Texas	406	0.5	15,622	17.9	29,085	33.3	20,361	23.3	12,301	14.1	7,031	8.1	2,267	2.6	235	0.3	87,308	100.0

TABLE 4. Reported legal abortions, by age of women who obtained an abortion and state of occurrence — selected states,* United States, 1995 — Continued

	Age group (yrs)																	
	<15		15–19		20–24		25–29		30–34		35–39		≥40		Unknown		Total†	
State	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Utah	15	0.4	691	18.7	1,176	31.7	872	23.5	530	14.3	312	8.4	97	2.6	12	0.3	3,705	100.0
Vermont	20	0.9	509	23.5	675	31.1	426	19.6	281	13.0	193	8.9	64	3.0	1	0.0	2,169	100.0
Virginia	185	0.7	4,835	19.1	7,947	31.4	5,685	22.5	3,818	15.1	2,094	8.3	640	2.5	98	0.4	25,302	100.0
Washington	174	0.7	5,001	19.9	7,656	30.5	5,574	22.2	3,798	15.1	2,108	8.4	742	3.0	22	0.1	25,075	100.0
West Virginia	26	1.0	649	24.3	935	35.1	512	19.2	334	12.5	155	5.8	55	2.1	0	0.0	2,666	100.0
Wisconsin§	89	0.7	2,271	18.7	4,060	33.5	2,733	22.5	1,652	13.6	1,015	8.4	312	2.6	0	0.0	12,132	100.0
Wyoming	0	0.0	37	20.3	58	31.9	36	19.8	21	11.5	17	9.3	11	6.0	2	1.1	182	100.0
Total	**5,949**	**0.8**	**146,284**	**19.2**	**245,653**	**32.3**	**170,644**	**22.4**	**107,715**	**14.2**	**61,052**	**8.0**	**18,498**	**2.4**	**5,054**	**0.7**	**760,849**	**100.0**
Ratio¶	667		399		349		221		165		224		387				267	
Rate**	2		22		37		24		13		7		2				16	

* Data from 42 states, the District of Columbia, and New York City.
† Percentages may not add to 100.0 because of rounding.
§ Includes residents only.
¶ Calculated as the number of legal abortions obtained by women in a given age group per 1,000 live births to women in the same age group for these states. For each state, data for women of unknown age were distributed according to the known age distribution for that state.
** Calculated as the number of legal abortions obtained by women in a given age group per 1,000 women of the same age group for these states. For each state, data for women of unknown age were distributed according to the known age distribution for that state.

TABLE 5. Reported legal abortions obtained by adolescents, by known age and state of occurrence — selected states,* United States, 1995

State	Age (yrs) <15 No.	%	15 No.	%	16 No.	%	17 No.	%	18 No.	%	19 No.	%	Total† No.	%
Alabama	190	5.9	284	8.8	422	13.0	489	15.1	883	27.3	968	29.9	3,236	100.0
Arizona	83	3.6	154	6.6	301	12.9	435	18.7	651	28.0	704	30.2	2,328	100.0
Arkansas	72	5.1	111	7.9	196	13.9	231	16.4	424	30.0	377	26.7	1,411	100.0
Colorado	57	2.6	154	7.1	363	16.8	485	22.4	552	25.5	553	25.6	2,164	100.0
Connecticut	83	3.3	196	7.8	351	13.9	538	21.3	635	25.1	723	28.6	2,526	100.0
Georgia	439	6.1	678	9.5	960	13.4	1,216	17.0	1,870	26.1	1,993	27.9	7,156	100.0
Hawaii	56	4.6	83	6.9	151	12.5	253	20.9	296	24.5	371	30.7	1,210	100.0
Idaho	8	3.2	19	7.5	30	11.9	39	15.5	81	32.1	75	29.8	252	100.0
Indiana	113	4.2	222	8.3	333	12.5	393	14.7	780	29.2	830	31.1	2,671	100.0
Kansas	161	5.9	245	8.9	355	12.9	544	19.8	735	26.8	702	25.6	2,742	100.0
Kentucky	84	4.5	164	8.9	243	13.1	303	16.4	514	27.8	541	29.3	1,849	100.0
Louisiana	141	5.7	216	8.7	321	13.0	366	14.8	690	27.9	740	29.9	2,474	100.0
Maine	19	2.8	51	7.5	99	14.6	142	20.9	163	24.0	206	30.3	680	100.0
Maryland	164	4.8	283	8.3	428	12.6	646	19.0	910	26.8	969	28.5	3,400	100.0
Massachusetts	142	3.1	299	6.6	489	10.8	780	17.2	1,301	28.8	1,513	33.4	4,524	100.0
Michigan	241	3.6	501	7.5	877	13.2	1,179	17.8	1,884	28.4	1,956	29.5	6,638	100.0
Minnesota	76	3.0	178	7.0	299	11.7	458	17.9	718	28.1	825	32.3	2,554	100.0
Mississippi	62	7.6	66	8.1	110	13.4	121	14.8	199	24.3	260	31.8	818	100.0
Missouri	128	5.6	210	9.1	263	11.5	329	14.3	693	30.2	673	29.3	2,296	100.0
Montana	20	2.9	47	6.9	98	14.3	146	21.4	162	23.7	210	30.7	683	100.0
Nebraska	30	2.8	70	6.5	140	13.1	187	17.5	301	28.1	342	32.0	1,070	100.0
Nevada	42	3.5	90	7.4	177	14.6	267	22.1	316	26.1	318	26.3	1,210	100.0
New Jersey	191	3.3	393	6.9	711	12.4	1,079	18.8	1,592	27.8	1,759	30.7	5,725	100.0
New Mexico	46	4.2	72	6.6	133	12.2	210	19.2	316	28.9	315	28.8	1,092	100.0
New York	983	3.7	1,881	7.0	3,600	13.4	5,310	19.8	7,107	26.5	7,912	29.5	26,793	100.0
City	669	3.9	1,264	7.4	2,332	13.6	3,403	19.8	4,459	26.0	5,023	29.3	17,150	100.0
State	314	3.3	617	6.4	1,268	13.1	1,907	19.8	2,648	27.5	2,889	30.0	9,643	100.0
North Carolina	348	4.6	581	7.7	1,034	13.6	1,501	19.8	1,918	25.3	2,207	29.1	7,589	100.0
North Dakota	5	1.5	18	5.2	41	11.9	61	17.7	106	30.8	113	32.8	344	100.0
Ohio	195	2.9	481	7.1	866	12.7	1,235	18.2	1,777	26.1	2,245	33.0	6,799	100.0
Oregon	100	3.2	234	7.5	422	13.6	619	20.0	857	27.6	868	28.0	3,100	100.0
Pennsylvania	375	4.9	609	7.9	909	11.8	1,136	14.8	2,256	29.4	2,387	31.1	7,672	100.0
Rhode Island	33	3.0	72	6.5	107	9.7	170	15.3	343	31.0	383	34.6	1,108	100.0
South Carolina	101	4.5	169	7.6	261	11.8	457	20.6	628	28.3	604	27.2	2,220	100.0
South Dakota	7	2.3	21	7.0	41	13.8	68	22.8	90	30.2	71	23.8	298	100.0
Tennessee	193	5.0	326	8.5	465	12.1	541	14.0	1,129	29.3	1,201	31.2	3,855	100.0
Texas	406	2.5	958	6.0	1,891	11.8	3,071	19.2	4,331	27.0	5,371	33.5	16,028	100.0

TABLE 5. Reported legal abortions obtained by adolescents, by known age and state of occurrence — selected states,* United States, 1995 — Continued

State	Age (yrs) <15 No.	%	15 No.	%	16 No.	%	17 No.	%	18 No.	%	19 No.	%	Total† No.	%
Utah	15	2.1	47	6.7	83	11.8	102	14.4	202	28.6	257	36.4	706	100.0
Vermont	20	3.8	31	5.9	91	17.2	120	22.7	119	22.5	148	28.0	529	100.0
Virginia	185	3.7	351	7.0	647	12.9	955	19.0	1,441	28.7	1,441	28.7	5,020	100.0
Washington	174	3.4	401	7.7	765	14.8	1,075	20.8	1,333	25.8	1,427	27.6	5,175	100.0
West Virginia	26	3.9	47	7.0	95	14.1	132	19.6	177	26.2	198	29.3	675	100.0
Wisconsin§	89	3.8	169	7.2	334	14.2	399	16.9	629	26.7	740	31.4	2,360	100.0
Wyoming	0	0.0	4	10.8	6	16.2	6	16.2	12	32.4	9	24.3	37	100.0
Total	**5,903**	**3.9**	**11,186**	**7.4**	**19,508**	**12.9**	**27,794**	**18.4**	**41,121**	**27.2**	**45,505**	**30.1**	**151,017**	**100.0**

* Data from 42 states and New York City.
† Percentages may not add to 100.0 because of rounding.
§ Includes residents only.
¶ Calculated as the number of legal abortions obtained by women of a given age per 1,000 live births to women of the same age for these states. For each state, data for women of unknown age were distributed according to the known age distribution for that state.
** Calculated as the number of legal abortions obtained by women of a given age per 1,000 women of the same age for these states. For each state, data for women of unknown age were distributed according to the known age distribution for that state.

TABLE 6. Reported legal abortions, by weeks of gestation* and state of occurrence — selected states,† United States, 1995

State	Weeks of gestation ≤8 No.	≤8 %	9–10 No.	9–10 %	11–12 No.	11–12 %	13–15 No.	13–15 %	16–20 No.	16–20 %	≥21 No.	≥21 %	Unknown No.	Unknown %	Total§ No.	Total§ %
Alabama	7,249	51.0	3,345	23.5	1,507	10.6	1,346	9.5	563	4.0	86	0.6	125	0.9	14,221	100.0
Arizona¶	6,255	52.4	2,799	23.5	1,202	10.1	917	7.7	475	4.0	78	0.7	207	1.7	11,933	100.0
Arkansas	2,969	51.6	1,283	22.3	549	9.5	422	7.3	268	4.7	15	0.3	251	4.4	5,757	100.0
Colorado	2,732	29.1	3,595	38.3	1,639	17.5	845	9.0	421	4.5	118	1.3	34	0.4	9,384	100.0
Connecticut¶	6,034**	53.3	2,577**	22.8	1,215**	10.7	780	6.9	252	2.2	5	0.0	462	4.1	11,325	100.0
Georgia¶	16,141	45.9	8,856	25.2	4,424	12.6	2,350	6.7	2,043	5.8	1,230	3.5	134	0.4	35,178	100.0
Hawaii¶	2,736	49.4	1,384	25.0	609	11.0	286	5.2	303	5.5	82	1.5	133	2.4	5,533	100.0
Idaho	487	50.2	322	33.2	111	11.4	33	3.4	12	1.2	5	0.5	0	0.0	970	100.0
Indiana	8,128	65.6	2,545	20.6	1,085	8.8	260	2.1	137	1.1	2	0.0	225	1.8	12,382	100.0
Kansas¶	5,814	54.0	1,630	15.1	1,022	9.5	636	5.9	600	5.6	1,010	9.4	55	0.5	10,767	100.0
Kentucky	3,539	47.6	1,575	21.2	896	12.0	516	6.9	463	6.2	167	2.2	282	3.8	7,438	100.0
Louisiana	4,633	40.3	3,342	29.1	1,418	12.3	1,055	9.2	662	5.8	297	2.6	84	0.7	11,491	100.0
Maine¶	1,284	45.5	916	32.5	373	13.2	76	2.7	21	0.7	6	0.2	143	5.1	2,819	100.0
Maryland¶	8,958	55.3	4,110	25.4	1,913	11.8	865	5.3	354	2.2	4	0.0	0	0.0	16,204	100.0
Michigan	18,992	61.1	5,470	17.6	2,718	8.7	2,107	6.8	1,448	4.7	346	1.1	10	0.0	31,091	100.0
Minnesota¶	8,381	59.8	2,371	16.9	1,406	10.0	785	5.6	644	4.6	86	0.6	344	2.5	14,017	100.0
Mississippi	1,344	37.7	1,180	33.1	623	17.5	329	9.2	23	0.6	16	0.4	48	1.3	3,563	100.0
Missouri††	4,960	44.3	3,360	30.0	1,709	15.3	737	6.6	374	3.3	63	0.6	0	0.0	11,203	100.0
Montana¶	1,688	63.1	463	17.3	251	9.4	108	4.0	100	3.7	50	1.9	14	0.5	2,674	100.0
Nevada	4,122	59.4	1,276	18.4	823	11.9	341	4.9	285	4.1	1	0.0	94	1.4	6,942	100.0
New Jersey	17,129	52.0	6,269	19.0	2,140	6.5	3,334	10.1	3,100	9.4	672	2.0	303	0.9	32,947	100.0
New Mexico	2,546	52.9	707	14.7	367	7.6	300	6.2	266	5.5	25	0.5	600	12.5	4,811	100.0
New York	73,277	52.5	29,367	21.0	13,323	9.5	7,272	5.2	6,672	4.8	2,550	1.8	7,225	5.2	139,686	100.0
City	52,215	54.8	19,415	20.4	9,006	9.5	5,254	5.5	5,694	6.0	2,290	2.4	1,331	1.4	95,205	100.0
State	21,062	47.4	9,952	22.4	4,317	9.7	2,018	4.5	978	2.2	260	0.6	5,894	13.3	44,481	100.0
North Carolina	16,022	47.9	6,548	19.6	3,564	10.7	2,256	6.8	975	2.9	77	0.2	3,978	11.9	33,420	100.0
North Dakota¶	737	55.2	298	22.3	155	11.6	125	9.4	15	1.1	2	0.1	2	0.1	1,334	100.0
Oregon¶	8,204	58.3	2,941	20.9	1,255	8.9	757	5.4	605	4.3	258	1.8	59	0.4	14,079	100.0
Pennsylvania	19,289	49.4	10,191	26.1	4,862	12.5	2,615	6.7	1,759	4.5	332	0.9	2	0.0	39,050	100.0
Rhode Island	3,200	56.1	1,428	25.0	545	9.5	352	6.2	162	2.8	12	0.2	8	0.1	5,707	100.0
South Carolina	5,952	59.6	2,675	26.8	1,174	11.8	81	0.8	47	0.5	26	0.3	29	0.3	9,984	100.0
South Dakota	612	57.2	278	26.0	176	16.4	1	0.1	3	0.3	0	0.0	0	0.0	1,070	100.0
Tennessee¶	9,502	52.7	4,758	26.4	2,810	15.6	803	4.5	60	0.3	28	0.2	62	0.3	18,023	100.0
Texas¶	49,135	56.3	18,135	20.8	8,941	10.2	5,737	6.6	3,648	4.2	1,299	1.5	413	0.5	87,308	100.0

TABLE 6. Reported legal abortions, by weeks of gestation* and state of occurrence — selected states,† United States, 1995 — Continued

State	Weeks of gestation ≤8 No.	≤8 %	9–10 No.	9–10 %	11–12 No.	11–12 %	13–15 No.	13–15 %	16–20 No.	16–20 %	≥21 No.	≥21 %	Unknown No.	Unknown %	Total§ No.	Total§ %
Utah	2,381	64.3	767	20.7	241	6.5	153	4.1	150	4.0	0	0.0	13	0.4	3,705	100.0
Vermont	1,272	58.6	593	27.3	217	10.0	81	3.7	3	0.1	3	0.1	0	0.0	2,169	100.0
Virginia¶	15,237	60.2	6,513	25.7	2,521	10.0	364	1.4	356	1.4	97	0.4	214	0.8	25,302	100.0
Washington¶	12,724	50.7	6,038	24.1	2,769	11.0	1,765	7.0	1,186	4.7	494	2.0	99	0.4	25,075	100.0
West Virginia§§	621	23.3	1,067	40.0	599	22.5	276	10.4	88	3.3	15	0.6	0	0.0	2,666	100.0
Wisconsin¶¶	6,241	51.4	2,998	24.7	1,463	12.1	829	6.8	473	3.9	128	1.1	0	0.0	12,132	100.0
Wyoming§§	88	48.4	80	44.0	14	7.7	0	0.0	0	0.0	0	0.0	0	0.0	182	100.0
Total	**360,615**	**52.8**	**154,050**	**22.5**	**72,629**	**10.6**	**41,895**	**6.1**	**29,016**	**4.2**	**9,685**	**1.4**	**15,652**	**2.3**	**683,542**	**100.0**

* Data for legal abortions obtained at ≤8 weeks of gestation are presented in Table 7 by single weeks of gestation.
† Data from 39 states and New York City; excludes two areas where unknown gestational age is >15%.
§ Percentages may not add to 100.0 because of rounding.
¶ Weeks of gestation were based on physicians' estimate.
** Number obtained at ≤12 weeks of gestation was redistributed based on the national average.
†† Weeks of gestation were based on physicians' estimates only if date of last menstrual period was unknown or unreliable.
§§ Weeks of gestation were based on physicians' estimates only if date of last menstrual period was unknown.
¶¶ Includes residents only.

TABLE 7. Reported legal abortions obtained at ≤8 weeks of gestation, by known weeks of gestation and state of occurrence — selected states,* United States, 1995

State	Weeks of gestation ≤6 No.	≤6 %	7 No.	7 %	8 No.	8 %	Total obtained at ≤8 weeks of gestation† No.	Total obtained at ≤8 weeks of gestation† %
Alabama	2,638	18.6	2,486	17.5	2,125	14.9	7,249	51.0
Arizona§	880	7.4	2,549	21.4	2,826	23.7	6,255	52.4
Arkansas	903	15.7	1,134	19.7	932	16.2	2,969	51.6
Colorado	479	5.1	530	5.6	1,723	18.4	2,732	29.1
Georgia§	2,588	7.4	5,850	16.6	7,703	21.9	16,141	45.9
Hawaii§	386	7.0	939	17.0	1,411	25.5	2,736	49.4
Idaho	92	9.5	131	13.5	264	27.2	487	50.2
Indiana	3,547	28.6	2,347	19.0	2,234	18.0	8,128	65.6
Kansas§	2,149	20.0	2,115	19.6	1,550	14.4	5,814	54.0
Kentucky	1,232	16.6	1,139	15.3	1,168	15.7	3,539	47.6
Louisiana	764	6.6	1,217	10.6	2,652	23.1	4,633	40.3
Maine§	156	5.5	464	16.5	664	23.6	1,284	45.5
Maryland§	3,499	21.6	1,787	11.0	3,672	22.7	8,958	55.3
Michigan	7,862	25.3	5,711	18.4	5,419	17.4	18,992	61.1
Minnesota§	1,812	12.9	3,506	25.0	3,063	21.9	8,381	59.8
Mississippi	61	1.7	553	15.5	730	20.5	1,344	37.7
Missouri¶	826	7.4	1,771	15.8	2,363	21.1	4,960	44.3
Montana§	925	34.6	357	13.4	406	15.2	1,688	63.1
Nevada	576	8.3	1,872	27.0	1,674	24.1	4,122	59.4
New Jersey	6,176	18.7	4,093	12.4	6,860	20.8	17,129	52.0
New Mexico	1,019	21.2	977	20.3	550	11.4	2,546	52.9
New York	23,278	16.7	24,471	17.5	25,528	18.3	73,277	52.5
City	17,658	18.5	16,347	17.2	18,210	19.1	52,215	54.8
State	5,620	12.6	8,124	18.3	7,318	16.5	21,062	47.4
North Carolina	5,586	16.7	5,315	15.9	5,121	15.3	16,022	47.9
North Dakota§	84	6.3	394	29.5	259	19.4	737	55.2
Oregon§	1,609	11.4	3,046	21.6	3,549	25.2	8,204	58.3
Pennsylvania	4,345	11.1	5,157	13.2	9,787	25.1	19,289	49.4
Rhode Island	636	11.1	1,261	22.1	1,303	22.8	3,200	56.1
South Carolina	2,146	21.5	1,819	18.2	1,987	19.9	5,952	59.6
South Dakota	17	1.6	228	21.3	367	34.3	612	57.2
Tennessee§	2,166	12.0	3,058	17.0	4,278	23.7	9,502	52.7
Texas§	15,800	18.1	14,807	17.0	18,528	21.2	49,135	56.3

TABLE 7. Reported legal abortions obtained at ≤8 weeks of gestation, by known weeks of gestation and state of occurrence — selected states,* United States, 1995 — Continued

State	Weeks of gestation ≤6 No.	≤6 %	7 No.	7 %	8 No.	8 %	Total obtained at ≤8 weeks of gestation† No.	Total obtained at ≤8 weeks of gestation† %
Utah	1,235	33.3	602	16.2	544	14.7	2,381	64.3
Vermont	300	13.8	553	25.5	419	19.3	1,272	58.6
Virginia§	2,795	11.0	3,496	13.8	8,946	35.4	15,237	60.2
Washington§	2,507	10.0	4,795	19.1	5,422	21.6	12,724	50.7
West Virginia**	19	0.7	42	1.6	560	21.0	621	23.3
Wyoming**	11	6.0	25	13.7	52	28.6	88	48.4
Total	**101,104**	**15.3**	**110,597**	**16.8**	**136,639**	**20.7**	**348,340**	**52.8**

* Data from 37 states and New York City; excludes two areas where unknown gestational age was >15% and two states that were included in Table 6 but did not provide single weeks of gestation for abortions obtained at ≤8 weeks.
† Percentages may not add to total percentage obtained at ≤8 weeks because of rounding.
§ Weeks of gestation were based on physicians' estimate.
¶ Weeks of gestation were based on physicians' estimates only if date of last menstrual period was unknown or unreliable.
** Weeks of gestation were based on physicians' estimates only if date of last menstrual period was unknown.

TABLE 8. Reported legal abortions, by type of procedure and state of occurrence — selected states,* United States, 1995

State	Procedure																	
	Suction curettage		Sharp curettage		All curettage		Intrauterine saline instillation		Prostaglandin instillation		Hysterotomy/ Hysterectomy		Other†		Unknown		Total§	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Alabama	13,245¶	93.1	4	0.0	13,249	93.2	1	0.0	31	0.2	0	0.0	23	0.2	917	6.4	14,221	100.0
Arizona	10,972	91.9	0	0.0	10,972	91.9	0	0.0	0	0.0	0	0.0	0	0.0	961	8.1	11,933	100.0
Arkansas	5,161¶	89.6	583	10.1	5,744	99.8	0	0.0	9	0.2	1	0.0	3	0.1	0	0.0	5,757	100.0
Colorado	9,044¶	96.4	4	0.0	9,048	96.4	1	0.0	10	0.1	3	0.0	240	2.6	82	0.9	9,384	100.0
Connecticut	11,265	99.5	34	0.3	11,299	99.8	0	0.0	5	0.0	0	0.0	1	0.0	20	0.2	11,325	100.0
Dist. of Columbia**	6,417	99.9	0	0.0	6,417	99.9	2	0.0	0	0.0	0	0.0	3	0.0	0	0.0	6,422	100.0
Georgia	34,838¶	99.0	28	0.1	34,866	99.1	16	0.0	237	0.7	1	0.0	58	0.2	0	0.0	35,178	100.0
Hawaii	5,524	99.8	4	0.1	5,528	99.9	0	0.0	2	0.0	0	0.0	0	0.0	3	0.1	5,533	100.0
Idaho	962¶	99.2	0	0.0	962	99.2	0	0.0	8	0.8	0	0.0	0	0.0	0	0.0	970	100.0
Indiana	11,854	95.7	13	0.1	11,867	95.8	196	1.6	1	0.0	1	0.0	128	1.0	189	1.5	12,382	100.0
Kansas	9,768¶	90.7	184	1.7	9,952	92.4	0	0.0	1	0.0	1	0.0	389	3.6	424	3.9	10,767	100.0
Kentucky	7,153¶	96.2	55	0.7	7,208	96.9	1	0.0	0	0.0	0	0.0	1	0.0	228	3.1	7,438	100.0
Maine	2,755¶	97.7	10	0.4	2,765	98.1	0	0.0	0	0.0	0	0.0	6	0.2	48	1.7	2,819	100.0
Maryland	15,995	98.7	50	0.3	16,045	99.0	9	0.1	28	0.2	4	0.0	118	0.7	0	0.0	16,204	100.0
Massachusetts	27,908	95.9	221	0.8	28,129	96.7	154	0.5	582	2.0	0	0.0	232	0.8	0	0.0	29,097	100.0
Michigan	30,507	98.1	521	1.7	31,028	99.8	0	0.0	61	0.2	0	0.0	2	0.0	0	0.0	31,091	100.0
Minnesota	13,951¶	99.5	12	0.1	13,963	99.6	0	0.0	1	0.0	0	0.0	3	0.0	50	0.4	14,017	100.0
Mississippi	3,508¶	98.5	1	0.0	3,509	98.5	0	0.0	30	0.8	4	0.1	20	0.6	0	0.0	3,563	100.0
Missouri	11,175¶	99.8	3	0.0	11,178	99.8	0	0.0	9	0.1	0	0.0	11	0.1	5	0.0	11,203	100.0
Montana	2,670¶	99.9	2	0.1	2,672	99.9	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	2,674	100.0
Nebraska	4,831	92.6	380	7.3	5,211	99.9	0	0.0	0	0.0	0	0.0	5	0.1	2	0.0	5,218††	100.0
Nevada	6,801	98.0	0	0.0	6,801	98.0	1	0.0	0	0.0	0	0.0	0	0.0	140	2.0	6,942	100.0
New Jersey	20,466¶	62.1	12,040	36.5	32,506	98.7	275	0.8	76	0.2	16	0.0	10	0.0	64	0.2	32,947	100.0
New Mexico	4,766	99.1	45	0.9	4,811	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4,811	100.0
New York	135,087¶	96.7	1,877	1.3	136,964	98.1	565	0.4	296	0.2	1	0.0	892	0.6	968	0.7	139,686	100.0
City	92,207¶	96.9	1,478	1.6	93,685	98.4	550	0.6	150	0.2	1	0.0	403	0.4	416	0.4	95,205	100.0
State	42,880¶	96.4	399	0.9	43,279	97.3	15	0.0	146	0.3	—	—	489§§	1.1	552	1.2	44,481	100.0
North Carolina	31,229¶	93.4	17	0.1	31,246	93.5	137	0.4	54	0.2	5	0.0	299	0.9	1,679	5.0	33,420	100.0
North Dakota	1,327	99.5	0	0.0	1,327	99.5	0	0.0	4	0.3	0	0.0	0	0.0	3	0.2	1,334	100.0
Oregon	13,928¶	98.9	4	0.0	13,932	99.0	0	0.0	2	0.0	1	0.0	143	1.0	1	0.0	14,079	100.0
Pennsylvania	38,584¶	98.8	22	0.1	38,606	98.9	8	0.0	13	0.0	4	0.0	419	1.1	0	0.0	39,050	100.0
Rhode Island	5,665¶	99.3	14	0.2	5,679	99.5	7	0.1	6	0.1	1	0.0	10	0.2	4	0.1	5,707	100.0
South Carolina	9,924¶	99.4	2	0.0	9,926	99.4	0	0.0	31	0.3	1	0.0	25	0.3	1	0.0	9,984	100.0
South Dakota	1,065	99.5	0	0.0	1,065	99.5	0	0.0	0	0.0	0	0.0	5	0.5	0	0.0	1,070	100.0
Tennessee	17,953¶	99.6	13	0.1	17,966	99.7	1	0.0	45	0.2	0	0.0	9	0.0	2	0.0	18,023	100.0
Texas	85,993¶¶	98.5	—	—	85,993	98.5	—	—	241***	0.3	14	0.0	919†††	1.1	141	0.2	87,308	100.0

TABLE 8. Reported legal abortions, by type of procedure and state of occurrence — selected states,* United States, 1995 — Continued

State	Procedure																	
	Suction curettage		Sharp curettage		All curettage		Intrauterine saline instillation		Prostaglandin instillation		Hysterotomy/ Hysterectomy		Other†		Unknown		Total§	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Utah	3,691¶	99.6	9	0.2	3,700	99.9	0	0.0	0	0.0	0	0.0	1	0.0	4	0.1	3,705	100.0
Vermont	2,164¶	99.8	0	0.0	2,164	99.8	0	0.0	2	0.1	0	0.0	3	0.1	0	0.0	2,169	100.0
Virginia	24,946¶	98.6	42	0.2	24,988	98.8	13	0.1	80	0.3	2	0.0	86	0.3	133	0.5	25,302	100.0
Washington	24,943¶	99.5	15	0.1	24,958	99.5	3	0.0	61	0.2	2	0.0	36	0.1	15	0.1	25,075	100.0
Wyoming	182	100.0	0	0.0	182	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	182	100.0
Total	**668,217**	**95.7**	**16,209**	**2.3**	**684,426**	**98.1**	**1,392**	**0.2**	**1,926**	**0.3**	**62**	**0.0**	**4,100**	**0.6**	**6,084**	**0.9**	**697,990**	**100.0**

* Data from 38 states, the District of Columbia, and New York City; excludes two states where unknown type of procedure used was >15%.
† Includes instillation procedures not reported as a specific category and procedures reported as "other."
§ Percentages may not add to 100.0 because of rounding.
¶ Includes dilatation and evacuation procedures.
** Includes residents only.
†† Does not add to total abortions reported because of some reported combination procedures.
§§ Hysterotomy/hysterectomy included with "other."
¶¶ Includes all curettage.
*** Includes all chemical inductions.
††† Hysterectomy included with "other."
—Not reported.

TABLE 9. Reported legal abortions, by race of women who obtained an abortion and state of occurrence — selected states,* United States, 1995

	Race									
	White		Black		Other		Unknown		Total†	
State	No.	%	No.	%	No.	%	No.	%	No.	%
Alabama	7,425	52.2	6,425	45.2	201	1.4	170	1.2	14,221	100.0
Arizona	9,165	76.8	555	4.7	857	7.2	1,356	11.4	11,933	100.0
Arkansas	3,686	64.0	1,883	32.7	99	1.7	89	1.5	5,757	100.0
Dist. of Columbia§	1,171	18.2	4,813	74.9	416	6.5	22	0.3	6,422	100.0
Georgia	15,948	45.3	17,674	50.2	918	2.6	638	1.8	35,178	100.0
Hawaii	1,623	29.3	149	2.7	3,447	62.3	314	5.7	5,533	100.0
Idaho	920	94.8	5	0.5	45	4.6	0	0.0	970	100.0
Indiana	8,881	71.7	2,936	23.7	196	1.6	369	3.0	12,382	100.0
Kansas	8,328	77.3	1,852	17.2	479	4.4	108	1.0	10,767	100.0
Kentucky	5,702	76.7	1,440	19.4	253	3.4	43	0.6	7,438	100.0
Louisiana	5,439	47.3	4,639¶	40.4	—	—	1,413	12.3	11,491	100.0
Maine	2,646	93.9	29	1.0	82	2.9	62	2.2	2,819	100.0
Maryland	7,013	43.3	7,916	48.9	1,085	6.7	190	1.2	16,204	100.0
Minnesota	10,808	77.1	1,658	11.8	1,229	8.8	322	2.3	14,017	100.0
Mississippi	1,288	36.1	2,239	62.8	35	1.0	1	0.0	3,563	100.0
Missouri	7,082	63.2	3,712	33.1	380	3.4	29	0.3	11,203	100.0
Montana	2,342	87.6	11	0.4	161	6.0	160	6.0	2,674	100.0
Nevada	5,711	82.3	525	7.6	372	5.4	334	4.8	6,942	100.0
New Jersey	11,751	35.7	15,165	46.0	4,872	14.8	1,159	3.5	32,947	100.0
New Mexico	4,218	87.7	121	2.5	472	9.8	0	0.0	4,811	100.0
New York City	36,641	38.5	50,312	52.8	4,358	4.6	3,894	4.1	95,205	100.0
North Carolina	17,915	53.6	13,339	39.9	1,537	4.6	629	1.9	33,420	100.0
North Dakota	1,187	89.0	25	1.9	121	9.1	1	0.1	1,334	100.0
Ohio	22,970	62.2	11,606	31.4	1,389	3.8	985	2.7	36,950	100.0
Oregon	12,267	87.1	719	5.1	881	6.3	212	1.5	14,079	100.0
Pennsylvania	23,074	59.1	14,676	37.6	1,264	3.2	36	0.1	39,050	100.0
Rhode Island	4,529	79.4	826	14.5	294	5.2	58	1.0	5,707	100.0
South Carolina	5,266	52.7	4,501	45.1	215	2.2	2	0.0	9,984	100.0
South Dakota	928	86.7	24	2.2	68	6.4	50	4.7	1,070	100.0
Tennessee	10,687	59.3	6,871	38.1	382	2.1	83	0.5	18,023	100.0
Texas	62,134	71.2	16,693	19.1	3,936	4.5	4,545	5.2	87,308	100.0
Utah	3,103	83.8	74	2.0	339	9.1	189	5.1	3,705	100.0
Vermont	2,120	97.7	19	0.9	29	1.3	1	0.0	2,169	100.0
Virginia	14,489	57.3	9,238	36.5	1,333	5.3	242	1.0	25,302	100.0
West Virginia	2,309	86.6	330	12.4	27	1.0	0	0.0	2,666	100.0
Wisconsin§	9,091	74.9	2,442	20.1	585**	4.8	14**	0.1	12,132	100.0
Total	**349,857**	**57.8**	**205,442**	**33.9**	**32,357**	**5.3**	**17,720**	**2.9**	**605,376**	**100.0**
Ratio††	204		534§§		335§§				266	
Rate¶¶	12		31***		25***				15	

*Data from 34 states, the District of Columbia, and New York City; excludes four states where unknown race was >15%.

†Percentages may not add to 100.0 because of rounding.

§Includes residents only.

¶Reported as black and "other" races.

**Women of some "other" races are included with "unknown."

††Calculated as the number of legal abortions obtained by women of a given race per 1,000 live births to women of the same race for these states. For each state, data for women of unknown race were distributed according to the known racial distribution for that state.

§§Ratios for black and "other" races exclude Louisiana because abortions for blacks and others were grouped together.

¶¶Calculated as the number of legal abortions obtained by women of a given race per 1,000 women aged 15–44 years of the same race for these states. For each state, data for women of unknown race were distributed according to the known racial distribution for that state. Rates exclude New York City because the number of women aged 15–44 years was unknown for this reporting area.

***Rates for black and "other" races exclude Louisiana because abortions for blacks and others were grouped together.

—Not reported.

TABLE 10. Reported legal abortions, by Hispanic ethnicity of women who obtained an abortion and state of occurrence — selected states,* United States, 1995

	Ethnicity							
	Hispanic		Non-Hispanic		Unknown		Total†	
State	No.	%	No.	%	No.	%	No.	%
Alabama	240	1.7	12,693	89.3	1,288	9.1	14,221	100.0
Arizona	2,472	20.7	8,105	67.9	1,356	11.4	11,933	100.0
Arkansas	74	1.3	5,418	94.1	265	4.6	5,757	100.0
Dist. of Columbia§	543	8.5	5,857	91.2	22	0.3	6,422	100.0
Georgia	574	1.6	33,556	95.4	1,048	3.0	35,178	100.0
Idaho	50	5.2	920	94.8	0	0.0	970	100.0
Kansas	394	3.7	9,768	90.7	605	5.6	10,767	100.0
Minnesota	319	2.3	13,376	95.4	322	2.3	14,017	100.0
Mississippi	17	0.5	3,491	98.0	55	1.5	3,563	100.0
Missouri	202	1.8	10,118	90.3	883	7.9	11,203	100.0
New Jersey	5,448	16.5	25,867	78.5	1,632	5.0	32,947	100.0
New Mexico	2,122	44.1	2,689	55.9	0	0.0	4,811	100.0
New York City	26,698	28.0	60,358	63.4	8,149	8.6	95,205	100.0
North Dakota	12	0.9	1,200	90.0	122	9.1	1,334	100.0
Ohio	497	1.3	35,468	96.0	985	2.7	36,950	100.0
Oregon	903	6.4	13,053	92.7	123	0.9	14,079	100.0
Pennsylvania	1,214	3.1	37,819	96.8	17	0.0	39,050	100.0
South Carolina	162	1.6	9,818	98.3	4	0.0	9,984	100.0
Tennessee	139	0.8	17,866	99.1	18	0.1	18,023	100.0
Texas	26,330	30.2	56,433	64.6	4,545	5.2	87,308	100.0
Utah	359	9.7	3,303	89.1	43	1.2	3,705	100.0
Vermont	8	0.4	2,157	99.4	4	0.2	2,169	100.0
Wisconsin§	481	4.0	11,651	96.0	0	0.0	12,132	100.0
Total	**69,258**	**14.7**	**380,984**	**80.8**	**21,486**	**4.6**	**471,728**	**100.0**
Ratio¶	265		280				277	
Rate**	20		15				15	

*Data from 21 states, the District of Columbia, and New York City; excludes 13 states where unknown ethnicity was >15%.

†Percentages may not add to 100.0 because of rounding.

§Includes residents only.

¶Calculated as the number of legal abortions obtained by women of a given ethnicity per 1,000 live births to women of the same ethnicity for these states. For each state, data for women of unknown ethnicity were distributed according to the known ethnicity distribution for that state.

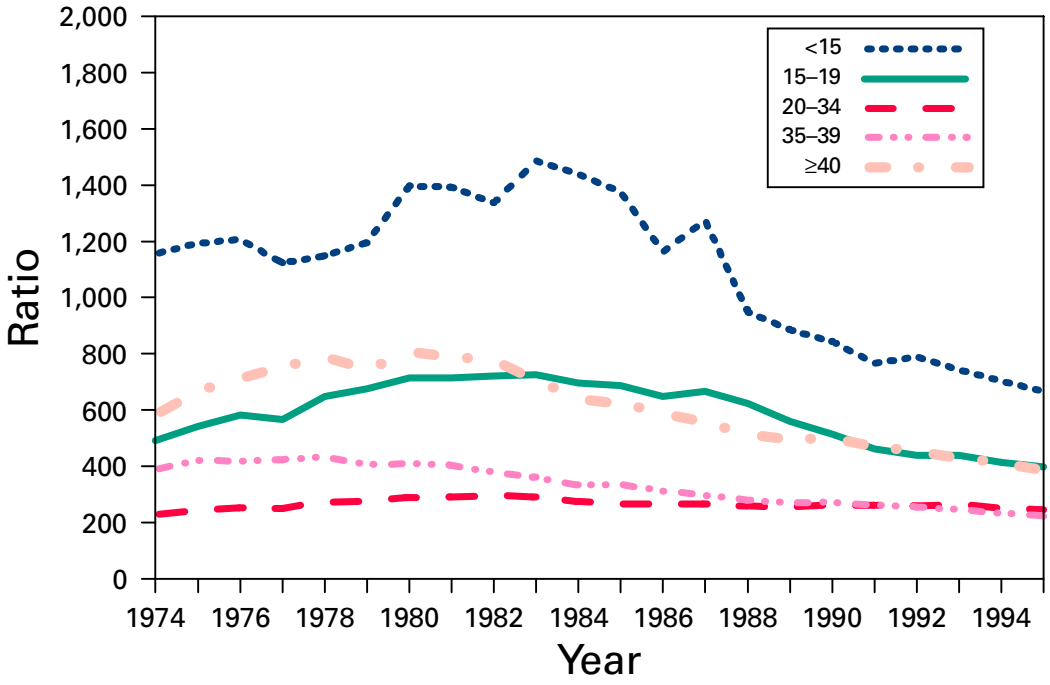
**Calculated as the number of legal abortions obtained by women of a given ethnicity per 1,000 women aged 15–44 years of the same ethnicity for these states. For each state, data for women of unknown ethnicity were distributed according to the known ethnicity distribution for that state. Rates exclude New York City because the number of women aged 15–44 years was unknown for this reporting area.

TABLE 11. Reported legal abortions, by marital status of women who obtained an abortion and state of occurrence — selected states,* United States, 1995

State	Marital status						Total¶	
	Married†		Unmarried§		Unknown			
	No.	%	No.	%	No.	%	No.	%
Alabama	2,281	16.0	11,871	83.5	69	0.5	14,221	100.0
Arkansas	1,165	20.2	4,526	78.6	66	1.1	5,757	100.0
Colorado	1,968	21.0	7,287	77.7	129	1.4	9,384	100.0
Georgia	6,352	18.1	28,642	81.4	184	0.5	35,178	100.0
Hawaii	1,057	19.1	4,465	80.7	11	0.2	5,533	100.0
Idaho	215	22.2	755	77.8	0	0.0	970	100.0
Indiana	2,011	16.2	9,630	77.8	741	6.0	12,382	100.0
Kansas	2,180	20.2	8,563	79.5	24	0.2	10,767	100.0
Kentucky	1,273	17.1	6,051	81.4	114	1.5	7,438	100.0
Maryland	3,017	18.6	12,768	78.8	419	2.6	16,204	100.0
Michigan	4,875	15.7	26,004	83.6	212	0.7	31,091	100.0
Minnesota	2,643	18.9	11,018	78.6	356	2.5	14,017	100.0
Mississippi	592	16.6	2,967	83.3	4	0.1	3,563	100.0
Missouri	2,279	20.3	8,732	77.9	192	1.7	11,203	100.0
Montana	481	18.0	2,073	77.5	120	4.5	2,674	100.0
Nevada	1,560	22.5	5,237	75.4	145	2.1	6,942	100.0
New Jersey	5,630	17.1	27,149	82.4	168	0.5	32,947	100.0
New Mexico	808	16.8	3,970	82.5	33	0.7	4,811	100.0
New York City	19,022	20.0	73,885	77.6	2,298	2.4	95,205	100.0
North Dakota	233	17.5	1,100	82.5	1	0.1	1,334	100.0
Ohio	6,391	17.3	29,640	80.2	919	2.5	36,950	100.0
Oregon	3,241	23.0	10,614	75.4	224	1.6	14,079	100.0
Pennsylvania	6,745	17.3	32,279	82.7	26	0.1	39,050	100.0
Rhode Island	1,176	20.6	4,463	78.2	68	1.2	5,707	100.0
South Carolina	1,867	18.7	8,114	81.3	3	0.0	9,984	100.0
South Dakota	217	20.3	848	79.3	5	0.5	1,070	100.0
Tennessee	3,442	19.1	14,506	80.5	75	0.4	18,023	100.0
Texas	19,758	22.6	63,162	72.3	4,388	5.0	87,308	100.0
Utah	1,444	39.0	2,261	61.0	0	0.0	3,705	100.0
Vermont	444	20.5	1,591	73.4	134	6.2	2,169	100.0
West Virginia	492	18.5	2,173	81.5	1	0.0	2,666	100.0
Wisconsin**	1,946††	16.0	10,143††	83.6	43	0.4	12,132	100.0
Wyoming	33	18.1	146	80.2	3	1.6	182	100.0
Total	**106,838**	**19.3**	**436,633**	**78.7**	**11,175**	**2.0**	**554,646**	**100.0**
Ratio§§	76		650				262	

* Data from 32 states and New York City; excludes seven states where unknown marital status was >15%.
† Includes married and separated.
§ Includes never married, divorced, and widowed women.
¶ Percentages may not add to 100.0 because of rounding.
** Includes residents only.
†† Women who were separated were reported as being unmarried.
§§ Calculated as the number of legal abortions obtained by women of a given marital status per 1,000 live births to women of the same marital status for these states. For each state, data regarding women of unknown marital status were distributed according to the known marital status distribution for that state.

FIGURE 3. Abortion ratio,* by age group† of women who obtained a legal abortion — United States, 1974–1995



*Number of abortions per 1,000 live births.
†In years.

FIGURE 4. Percentage of legal induced abortions, by known single weeks of gestation at the time of abortion — United States, 1995

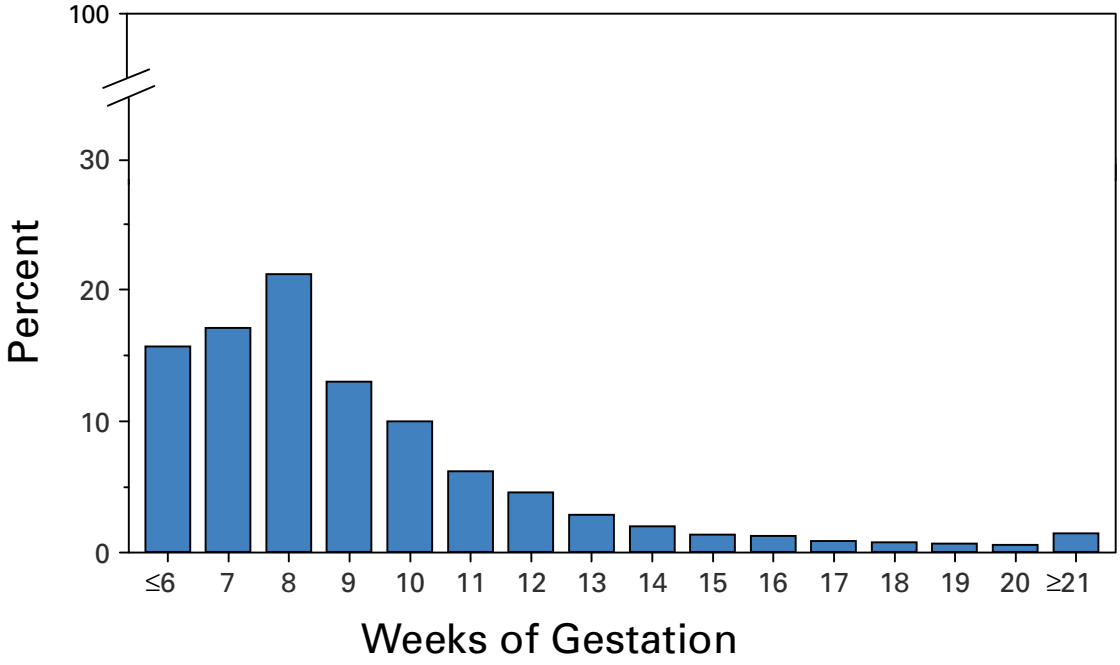


TABLE 12. Reported legal abortions, by number of previous live births and state of occurrence — selected states,* United States, 1995

	No. of previous live births													
	0		1		2		3		≥4		Unknown		Total†	
State	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Alabama	6,916	48.6	3,975	28.0	2,314	16.3	704	5.0	242	1.7	70	0.5	14,221	100.0
Arizona	5,545	46.5	2,882	24.2	2,145	18.0	884	7.4	319	2.7	158	1.3	11,933	100.0
Arkansas	2,590	45.0	1,667	29.0	974	16.9	336	5.8	164	2.8	26	0.5	5,757	100.0
Colorado	5,447	58.0	1,821	19.4	1,370	14.6	515	5.5	230	2.5	1	0.0	9,384	100.0
Georgia	16,861	47.9	9,574	27.2	5,802	16.5	1,978	5.6	855	2.4	108	0.3	35,178	100.0
Hawaii	2,872	51.9	1,230	22.2	874	15.8	348	6.3	191	3.5	18	0.3	5,533	100.0
Idaho	516	53.2	206	21.2	147	15.2	70	7.2	31	3.2	0	0.0	970	100.0
Indiana	5,498	44.4	3,359	27.1	2,303	18.6	805	6.5	337	2.7	80	0.6	12,382	100.0
Kansas	5,368	49.9	2,531	23.5	1,729	16.1	682	6.3	359	3.3	98	0.9	10,767	100.0
Maine	1,565	55.5	598	21.2	411	14.6	144	5.1	76	2.7	25	0.9	2,819	100.0
Maryland	7,201	44.4	4,615	28.5	2,847	17.6	1,048	6.5	493	3.0	0	0.0	16,204	100.0
Michigan	13,682	44.0	8,134	26.2	5,840	18.8	2,220	7.1	1,040	3.3	175	0.6	31,091	100.0
Minnesota	6,809	48.6	3,035	21.7	2,388	17.0	911	6.5	671	4.8	203	1.4	14,017	100.0
Mississippi	1,576	44.2	1,049	29.4	618	17.3	225	6.3	94	2.6	1	0.0	3,563	100.0
Missouri	4,906	43.8	2,970	26.5	2,127	19.0	796	7.1	404	3.6	0	0.0	11,203	100.0
Montana	1,501	56.1	528	19.7	408	15.3	167	6.2	70	2.6	0	0.0	2,674	100.0
Nebraska	2,430	50.2	1,040	21.5	807	16.7	383	7.9	178	3.7	0	0.0	4,838	100.0
Nevada	3,003	43.3	1,820	26.2	1,341	19.3	491	7.1	244	3.5	43	0.6	6,942	100.0
New Jersey	11,075	33.6	9,693	29.4	6,834	20.7	2,621	8.0	1,439	4.4	1,285	3.9	32,947	100.0
New Mexico	2,272	47.2	1,270	26.4	751	15.6	352	7.3	160	3.3	6	0.1	4,811	100.0
New York City	31,052	32.6	26,718	28.1	19,944	20.9	8,724	9.2	5,585	5.9	3,182	3.3	95,205	100.0
North Carolina	16,345	48.9	8,347	25.0	4,732	14.2	1,526	4.6	624	1.9	1,846	5.5	33,420	100.0
North Dakota	785	58.8	255	19.1	175	13.1	89	6.7	30	2.2	0	0.0	1,334	100.0
Ohio	16,788	45.4	9,905	26.8	6,749	18.3	2,434	6.6	1,066	2.9	8	0.0	36,950	100.0
Oregon	6,831	48.5	3,276	23.3	2,486	17.7	940	6.7	434	3.1	112	0.8	14,079	100.0
Pennsylvania	17,722	45.4	10,365	26.5	6,945	17.8	2,688	6.9	1,310	3.4	20	0.1	39,050	100.0
Rhode Island§	2,795	49.0	1,379	24.2	997	17.5	350	6.1	166	2.9	20	0.4	5,707	100.0
South Carolina	4,820	48.3	2,752	27.6	1,661	16.6	536	5.4	206	2.1	9	0.1	9,984	100.0
South Dakota§	571	53.4	227	21.2	154	14.4	79	7.4	38	3.6	1	0.1	1,070	100.0
Tennessee	8,036	44.6	5,347	29.7	3,169	17.6	1,031	5.7	429	2.4	11	0.1	18,023	100.0
Texas	42,024	48.1	22,209	25.4	14,766	16.9	5,467	6.3	2,771	3.2	71	0.1	87,308	100.0

TABLE 12. Reported legal abortions, by number of previous live births and state of occurrence — selected states,* United States, 1995 — Continued

State	No. of previous live births													
	0		1		2		3		≥4		Unknown		Total†	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Utah	1,619	43.7	910	24.6	708	19.1	280	7.6	171	4.6	17	0.5	3,705	100.0
Vermont	1,272	58.6	411	18.9	316	14.6	121	5.6	47	2.2	2	0.1	2,169	100.0
Virginia	12,655	50.0	6,240	24.7	3,875	15.3	1,348	5.3	531	2.1	653	2.6	25,302	100.0
Washington	12,201	48.7	5,890	23.5	4,433	17.7	1,644	6.6	832	3.3	75	0.3	25,075	100.0
West Virginia	1,306	49.0	763	28.6	418	15.7	133	5.0	46	1.7	0	0.0	2,666	100.0
Wyoming	71	39.0	50	27.5	42	23.1	12	6.6	7	3.8	0	0.0	182	100.0
Total	**284,526**	**44.6**	**167,041**	**26.2**	**113,600**	**17.8**	**43,082**	**6.7**	**21,890**	**3.4**	**8,324**	**1.3**	**638,463**	**100.0**
Ratio¶	286		221		309		310		239				269	

*Data from 36 states and New York City; excludes three states where number of unknown previous live births was >15%.
†Percentages may not add to 100.0 because of rounding.
§Indicates number of living children.
¶Calculated as the number of legal abortions obtained by women with a given number of previous live births per 1,000 live births to women with the same number of previous live births for these states. For each state, women whose number of previous live births was unknown were distributed according to the known number of previous live births for that state. Ratios exclude Maryland and Rhode Island because the number of previous live births was unknown for these reporting areas.

TABLE 13. Reported legal abortions, by number of previous legal induced abortions and state of occurrence — selected states,* United States, 1995

State	No. of previous induced abortions											
	0		1		2		≥3		Unknown		Total†	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Alabama	9,475	66.6	3,296	23.2	952	6.7	395	2.8	103	0.7	14,221	100.0
Arizona	7,185	60.2	3,179	26.6	1,067	8.9	322	2.7	180	1.5	11,933	100.0
Arkansas	3,759	65.3	1,443	25.1	351	6.1	156	2.7	48	0.8	5,757	100.0
Colorado	6,141	65.4	2,291	24.4	659	7.0	291	3.1	2	0.0	9,384	100.0
Georgia	20,151	57.3	9,662	27.5	3,390	9.6	1,776	5.0	199	0.6	35,178	100.0
Hawaii	1,813	32.8	2,052	37.1	991	17.9	658	11.9	19	0.3	5,533	100.0
Idaho	718	74.0	195	20.1	35	3.6	20	2.1	2	0.2	970	100.0
Indiana	7,864	63.5	3,051	24.6	941	7.6	418	3.4	108	0.9	12,382	100.0
Kansas	7,967	74.0	1,875	17.4	517	4.8	260	2.4	148	1.4	10,767	100.0
Maine	2,027	71.9	555	19.7	145	5.1	67	2.4	25	0.9	2,819	100.0
Maryland	5,903	36.4	5,550	34.3	2,998	18.5	1,753	10.8	0	0.0	16,204	100.0
Michigan	16,173	52.0	8,432	27.1	3,768	12.1	2,479	8.0	239	0.8	31,091	100.0
Minnesota	8,304	59.2	3,615	25.8	1,221	8.7	674	4.8	203	1.4	14,017	100.0
Mississippi	2,229	62.6	949	26.6	256	7.2	128	3.6	1	0.0	3,563	100.0
Missouri	6,710	59.9	3,054	27.3	955	8.5	484	4.3	0	0.0	11,203	100.0
Montana	1,767	66.1	637	23.8	187	7.0	82	3.1	1	0.0	2,674	100.0
Nebraska	2,266	46.8	1,607	33.2	567	11.7	363	7.5	35	0.7	4,838	100.0
Nevada	3,272	47.1	2,058	29.6	896	12.9	654	9.4	62	0.9	6,942	100.0
New Jersey	14,699	44.6	9,017	27.4	4,278	13.0	3,299	10.0	1,654	5.0	32,947	100.0
New Mexico	3,122	64.9	1,078	22.4	377	7.8	216	4.5	18	0.4	4,811	100.0
New York	57,555	41.2	36,517	26.1	20,351	14.6	17,340	12.4	7,923	5.7	139,686	100.0
City	35,282	37.1	27,201	28.6	16,450	17.3	15,012	15.8	1,260	1.3	95,205	100.0
State	22,273	50.1	9,316	20.9	3,901	8.8	2,328	5.2	6,663	15.0	44,481	100.0
North Carolina	19,831	59.3	8,671	25.9	2,702	8.1	1,079	3.2	1,137	3.4	33,420	100.0
North Dakota	960	72.0	266	19.9	78	5.8	29	2.2	1	0.1	1,334	100.0
Oregon	7,747	55.0	3,813	27.1	1,483	10.5	922	6.5	114	0.8	14,079	100.0
Pennsylvania	22,437	57.5	10,466	26.8	3,950	10.1	1,322	3.4	875	2.2	39,050	100.0
Rhode Island	3,256	57.1	1,540	27.0	531	9.3	333	5.8	47	0.8	5,707	100.0
South Carolina	6,320	63.3	2,575	25.8	780	7.8	309	3.1	0	0.0	9,984	100.0
South Dakota	769	71.9	234	21.9	41	3.8	21	2.0	5	0.5	1,070	100.0
Tennessee	10,347	57.4	4,893	27.1	1,790	9.9	978	5.4	15	0.1	18,023	100.0
Texas	54,626	62.6	22,165	25.4	6,997	8.0	3,395	3.9	125	0.1	87,308	100.0

TABLE 13. Reported legal abortions, by number of previous legal induced abortions and state of occurrence — selected states,* United States, 1995 — Continued

State	No. of previous induced abortions										Total†	
	0		1		2		≥3		Unknown			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Utah	2,327	62.8	880	23.8	310	8.4	173	4.7	15	0.4	3,705	100.0
Vermont	1,331	61.4	546	25.2	178	8.2	113	5.2	1	0.0	2,169	100.0
Virginia	14,564	57.6	6,964	27.5	2,273	9.0	715	2.8	786	3.1	25,302	100.0
Washington	13,051	52.0	6,812	27.2	2,959	11.8	2,167	8.6	86	0.3	25,075	100.0
West Virginia	1,832	68.7	597	22.4	168	6.3	69	2.6	0	0.0	2,666	100.0
Wyoming	127	69.8	39	21.4	8	4.4	8	4.4	0	0.0	182	100.0
Total	**348,625**	**54.0**	**170,574**	**26.4**	**69,150**	**10.7**	**43,468**	**6.7**	**14,177**	**2.2**	**645,994**	**100.0**

* Data from 36 states and New York City; excludes four states where unknown number of previous induced abortions was >15%.
† Percentages may not add to 100.0 because of rounding.

TABLE 14. Reported legal abortions, by known race, age group, and marital status of women who obtained abortions — United States, 1995

Age group (yrs)/ Marital status	Race				Total	
	White		Black/Other			
	No.	%	No.	%	No.	%
Age group						
<15	2,180	0.6	2,555	1.1	4,735	0.8
15–19	69,180	19.9	42,203	18.2	111,383	19.2
20–24	111,646	32.2	77,220	33.3	188,866	32.6
25–29	75,816	21.8	55,333	23.9	131,149	22.7
30–34	49,181	14.2	32,911	14.2	82,092	14.2
35–39	29,793	8.6	16,771	7.2	46,564	8.0
≥40	9,383	2.7	4,631	2.0	14,014	2.4
Total*	**347,179**	**100.0**	**231,624**	**100.0**	**578,803**	**100.0**
Marital status						
Married	65,120	22.1	32,724	16.6	97,844	19.9
Unmarried	229,673	77.9	164,732	83.4	394,405	80.1
Total†	**294,793**	**100.0**	**197,456**	**100.0**	**492,249**	**100.0**

*Data from 34 states and New York City; excludes three states where unknown race was >15%. Percentages may not add to 100.0 because of rounding.
†Data from 29 states and New York City; excludes six states where unknown race or marital status was >15%.

TABLE 15. Reported legal abortions, by known Hispanic ethnicity, age group, and marital status of women who obtained abortions — United States, 1995

Age group (yrs)/ Marital status	Hispanic ethnicity				Total	
	Hispanic		Non-Hispanic			
	No.	%	No.	%	No.	%
Age group						
<15	457	0.7	3,007	0.8	3,464	0.8
15–19	12,770	18.7	70,265	18.8	83,035	18.8
20–24	23,248	34.0	120,840	32.3	144,088	32.6
25–29	16,194	23.7	85,562	22.9	101,756	23.0
30–34	9,563	14.0	53,674	14.4	63,237	14.3
35–39	4,787	7.0	31,080	8.3	35,867	8.1
≥40	1,375	2.0	9,462	2.5	10,837	2.5
Total*	**68,394**	**100.0**	**373,890**	**100.0**	**442,284**	**100.0**
Marital status						
Married	15,393	23.7	70,092	19.3	85,485	20.0
Unmarried	49,597	76.3	292,142	80.7	341,739	80.0
Total†	**64,990**	**100.0**	**362,234**	**100.0**	**427,224**	**100.0**

*Data from 21 states and New York City; excludes 12 states where unknown ethnicity was >15%. Percentages may not add to 100.0 because of rounding.
†Data from 20 states and New York City; excludes 11 states where unknown ethnicity or marital status was >15%.

TABLE 16. Reported legal abortions, by known weeks of gestation, age group, race, and Hispanic ethnicity of women who obtained abortions — United States, 1995

Age group (yrs)/ Race/Hispanic ethnicity	Weeks of gestation												Total*	
	≤8		9–10		11–12		13–15		16–20		≥21			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Age group														
<15	1,901	35.8	1,250	23.5	808	15.2	610	11.5	494	9.3	252	4.7	5,315	100.0
15–19	56,790	44.5	31,691	24.8	17,342	13.6	10,971	8.6	7,905	6.2	3,015	2.4	127,714	100.0
20–24	111,453	52.5	50,256	23.7	24,295	11.5	14,012	6.6	9,242	4.4	2,888	1.4	212,146	100.0
25–29	85,256	57.9	32,691	22.2	14,495	9.8	7,916	5.4	5,308	3.6	1,628	1.1	147,294	100.0
30–34	55,508	59.5	20,438	21.9	8,465	9.1	4,491	4.8	3,222	3.5	1,109	1.2	93,233	100.0
35–39	32,220	61.1	11,344	21.5	4,471	8.5	2,292	4.3	1,866	3.5	578	1.1	52,771	100.0
≥40	9,977	62.8	3,218	20.3	1,260	7.9	645	4.1	594	3.7	181	1.1	15,875	100.0
Total†	**353,105**	**54.0**	**150,888**	**23.1**	**71,136**	**10.9**	**40,937**	**6.3**	**28,631**	**4.4**	**9,651**	**1.5**	**654,348**	**100.0**
Race														
White	182,303	56.9	71,482	22.3	32,316	10.1	17,736	5.5	12,270	3.8	4,350	1.4	320,457	100.0
Black	89,872	48.3	45,712	24.6	23,541	12.7	13,771	7.4	9,999	5.4	3,177	1.7	186,072	100.0
Other	18,059	60.4	6,014	20.1	2,398	8.0	1,662	5.6	1,390	4.6	391	1.3	29,914	100.0
Total§	**290,234**	**54.1**	**123,208**	**23.0**	**58,255**	**10.9**	**33,169**	**6.2**	**23,659**	**4.4**	**7,918**	**1.5**	**536,443**	**100.0**
Hispanic ethnicity														
Hispanic	37,493	55.6	14,838	22.0	6,759	10.0	4,536	6.7	3,086	4.6	753	1.1	67,465	100.0
Non-Hispanic	180,582	53.6	76,001	22.6	36,344	10.8	21,660	6.4	16,002	4.8	6,157	1.8	336,746	100.0
Total¶	**218,075**	**54.0**	**90,839**	**22.5**	**43,103**	**10.7**	**26,196**	**6.5**	**19,088**	**4.7**	**6,910**	**1.7**	**404,211**	**100.0**

* Percentages may not add to 100.0 because of rounding.
† Data from 38 states and New York City; excludes one state where unknown gestational age was >15%.
§ Data from 33 states and New York City; excludes four states where unknown gestational age or race was >15%.
¶ Data from 20 states and New York City; excludes 13 states where unknown ethnicity was >15%.

TABLE 17. Reported legal abortions obtained at ≤8 weeks of gestation,* by known weeks of gestation, age group, race, and Hispanic ethnicity of women who obtained abortions — United States, 1995

Age group (yrs)/ Race/Hispanic ethnicity	Weeks of gestation						Total obtained at ≤8 wks of gestation*	
	≤6		7		8			
	No.	%†	No.	%†	No.	%†	No.	%
Age group								
<15	467	8.9	557	10.7	842	16.1	1,866	35.7
15–19	14,421	11.5	17,328	13.8	24,045	19.2	55,794	44.5
20–24	30,892	14.8	34,651	16.7	43,883	21.1	109,426	52.6
25–29	25,076	17.3	26,875	18.6	31,848	22.0	83,799	58.0
30–34	16,729	18.3	17,455	19.1	20,395	22.3	54,579	59.6
35–39	9,791	18.9	10,086	19.5	11,747	22.7	31,624	61.1
≥40	3,293	21.2	3,122	20.1	3,361	21.6	9,776	62.8
Total†	**100,669**	**15.7**	**110,074**	**17.1**	**136,121**	**21.2**	**346,864**	**54.0**
Race								
White	51,659	16.6	56,902	18.3	68,856	22.1	177,417	57.0
Black	24,199	13.2	26,417	14.4	38,212	20.8	88,828	48.4
Other	5,743	19.6	5,639	19.2	6,373	21.7	17,755	60.5
Total§	**81,601**	**15.6**	**88,958**	**17.0**	**113,441**	**21.6**	**284,000**	**54.2**
Hispanic ethnicity								
Hispanic	10,924	16.3	11,884	17.7	14,448	21.6	37,256	55.6
Non-Hispanic	50,253	15.5	55,953	17.2	68,372	21.0	174,578	53.7
Total¶	**61,177**	**15.6**	**67,837**	**17.3**	**82,820**	**21.1**	**211,834**	**54.0**

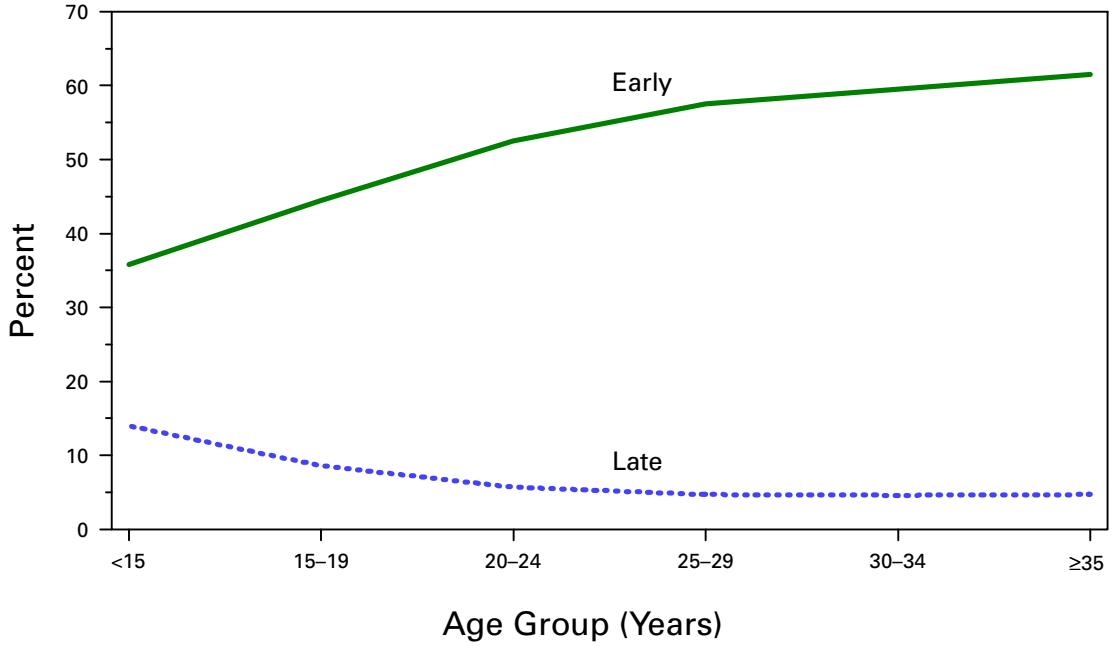
* Percentages were calculated using total number of abortions obtained at all known weeks of gestation. Percentages may not add to the total percentage obtained at ≤8 weeks because of rounding.
† Data from 37 states and New York City; excludes one state where unknown gestational age was >15%.
§ Data from 32 states and New York City; excludes three states where unknown gestational age or race was >15%.
¶ Data from 19 states and New York City; excludes 12 states where unknown gestational age or ethnicity was >15%.

TABLE 18. Reported legal abortions, by known weeks of gestation and type of procedure — United States, 1995

Type of procedure	Weeks of gestation ≤8 No.	≤8 %	9–10 No.	9–10 %	11–12 No.	11–12 %	13–15 No.	13–15 %	16–20 No.	16–20 %	≥21 No.	≥21 %	Total No.	Total %
Curettage (suction or sharp)*	338,825	99.6	142,724	99.9	67,223	99.7	38,238	99.0	24,778	90.4	7,230	81.6	619,018	99.0
Intrauterine saline instillation	35	0.0†	14	0.0†	13	0.0†	114	0.3	836	3.0	172	1.9	1,184	0.2
Intrauterine prostaglandin instillation	74	0.0†	14	0.0†	17	0.0†	86	0.2	639	2.3	443	5.0	1,273	0.2
Hysterotomy/ Hysterectomy	8	0.0†	13	0.0†	4	0.0†	7	0.0†	9	0.0†	3	0.0†	44	0.0†
Other§	1,167	0.3	128	0.1	135	0.2	189	0.5	1,149	4.2	1,014	11.4	3,782	0.6
Total¶	**340,109**	**100.0**	**142,893**	**100.0**	**67,392**	**100.0**	**38,634**	**100.0**	**27,411**	**100.0**	**8,862**	**100.0**	**625,301**	**100.0**

* Includes dilatation and evacuation.
† <0.05%.
§ Includes instillation procedures not reported as a specific category and procedures reported as "other."
¶ Data from 35 states and New York City; excludes two states where unknown gestational age or type of procedure was >15%. Percentages may not add to 100.0 because of rounding.

FIGURE 5. Percentage of women who obtained early* or late† abortions, by age group of women — United States, 1995



*≤8 weeks of gestation.
†≥16 weeks of gestation.

State and Territorial Epidemiologists and Laboratory Directors

State and Territorial Epidemiologists and Laboratory Directors are acknowledged for their contributions to *CDC Surveillance Summaries*. The epidemiologists listed below were in the positions shown as of June 1998, and the laboratory directors listed below were in the positions shown as of June 1998.

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