CENTERS FOR DISEASE CONTROL

February 5, 1982 / Vol. 31 / No. 4

MMWR

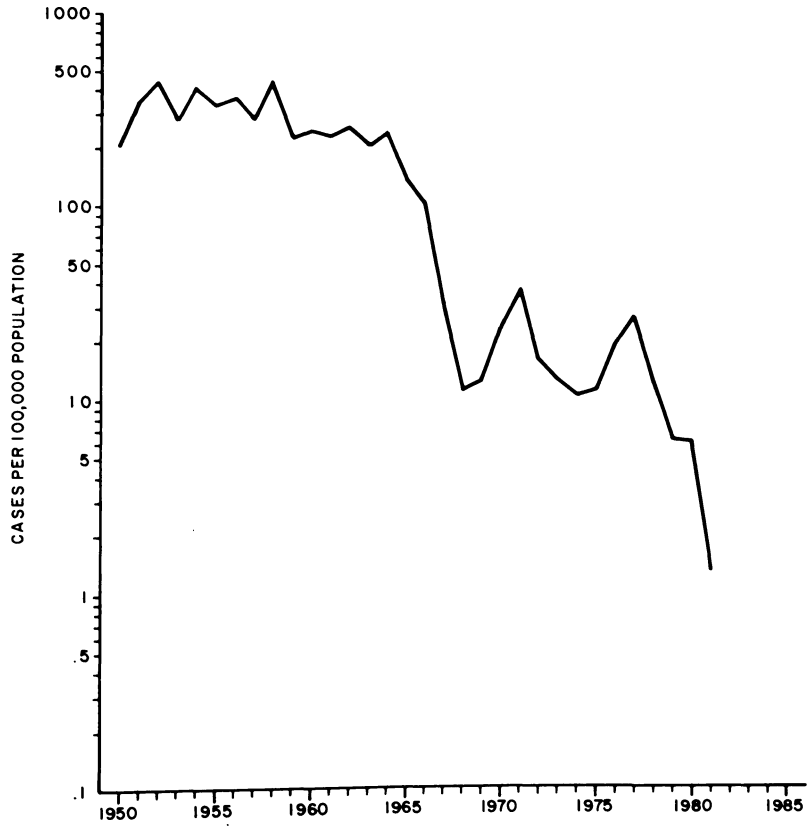
MORBIDITY AND MORTALITY WEEKLY REPORT

Epidemiologic Notes and Reports

Measles — United States, 1981

Reported measles in the United States reached a record low in 1981 when a provisional total of 3,032 measles cases were reported (1.3 cases/100,000 population of all ages). This is a 99.4% reduction from the 1950-1962 prevaccine era when an annual average of 525,730 cases were reported (315.2 cases/100,000 population) (Figure 1).

FIGURE 1. Incidence of reported measles, United States, 1950-1981



Measles — Continued

There was only a mild seasonal increase in reported measles cases during the spring of 1981. Record lows were set during 47 of the 52 reporting weeks. Except for a 7-week period in the spring, fewer than 100 cases were reported each week. Moreover, fewer than 50 cases per week were reported for 31 of the weeks. During week 35, ending September 5, only 5 cases were reported—a record low for any week of any year.

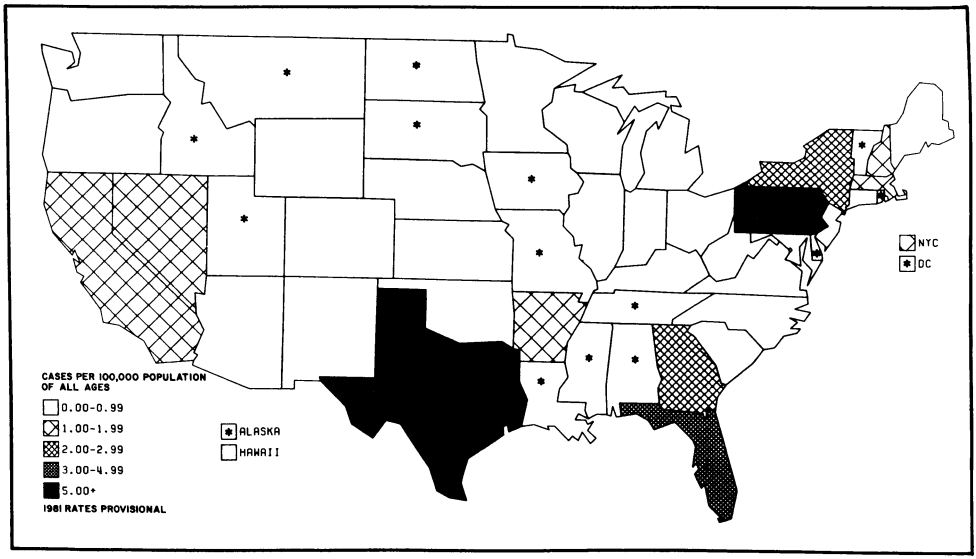
Most reporting areas reported very few cases in 1981. Forty-four states and the District of Columbia reported <100 cases, and 33 states and the District of Columbia reported <10 cases in 1981. Sixteen reporting areas had no indigenous measles transmission at all in 1981 (Figure 2). These included 8 states (Alaska, Delaware, Mississippi, Montana, North Dakota, Rhode Island, South Dakota, and Utah) that reported no measles cases. In 5 reporting areas (Alabama, District of Columbia, Idaho, Iowa, and Vermont) all cases were foreign importations or could be linked within 2 generations of the disease to those importations. In 2 states (Missouri and Tennessee) all cases were out-of-state introductions or could be linked within 2 generations of the disease to those introductions. Finally, 1 state (Louisiana) had both foreign importations and out-of-state introductions as the source of all its cases.

Measles incidence by state was also very low (Figure 2). Forty-one reporting areas had an incidence of <1 case/100,000 total population. Only 2 reporting areas (Texas and Pennsylvania) had incidences of >5 cases/100,000 total population.

Forty-six states and the District of Columbia each had at least 1 period of 4 consecutive weeks free of reported measles in 1981.

In 1981, only 317 (10.1%) of the nation's 3,144 counties reported any measles (Figure 3). Only 53 (1.7%) counties reported measles during 5 or more weeks; only 26 (0.8%) reported measles during 10 or more weeks. In any given week, a maximum of 45 (1.4%) counties and a minimum of 6 (0.2%) counties reported measles.

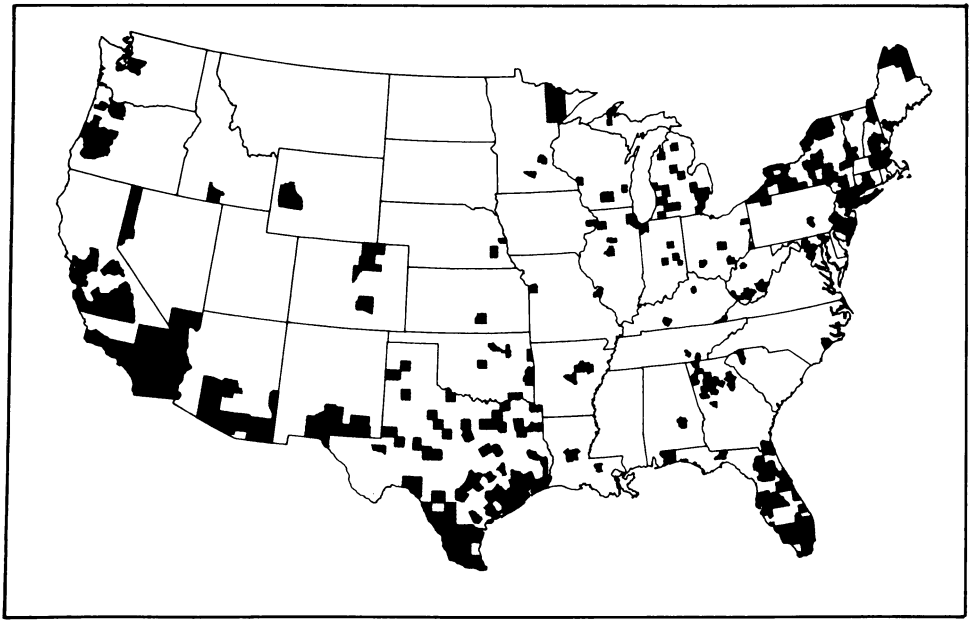
FIGURE 2. Incidence of reported measles, by state, United States, 1981



*No indigenous transmission (either no cases reported or all cases linked within 2 generations of the disease to foreign importations or out-of-state introductions).

Measles — Continued

FIGURE 3. Counties* reporting measles, United States, 1981



*Two counties in Hawaii and none in Alaska reported measles.

Reported by Immunization Div, Center for Prevention Svcs, CDC.

Editorial Note: A nationwide program is in progress to eliminate indigenous measles from the United States by October 1982. The data presented above indicate that during the third year of the Measles Elimination Program, measles disease has been reduced to record low levels. Measles morbidity is only 0.6% of the prevaccine level. More than half the states reported <10 cases. Approximately one-third of the reporting areas had no indigenous measles transmission.

Ninety percent of the nation's counties reported no measles in 1981, and only 1.7% of the counties reported measles during 5 or more weeks. These data indicate that measles transmission is extremely limited within the United States and has already been successfully eliminated from most of the country.

Tularemia Associated with Domestic Cats — Georgia, New Mexico

Domestic cats are the presumed source of infection for 2 recently reported cases of tularemia. Both patients, 1 in Georgia and 1 in New Mexico, recovered following streptomycin therapy.

Tularemia — Continued

Georgia: On May 17, 1981, a 32-year-old man living in rural southeast Georgia had onset of fever and noted a papule on the dorsum of the right thumb. The following day, trimethoprim-sulfamethoxazole was prescribed. On May 21, therapy was changed to ampicillin because of a persistent fever that was thought to be caused by sinusitis.

The patient was hospitalized on May 26 with a temperature of 101 F (38.3 C). A necrotic, ulcerating lesion, with associated ascending lymphangitis, and tender lymphadenitis was present on the dorsum of his thumb. The remainder of the physical examination was normal. The white blood cell count (WBC) was 12,900/mm^3, with a differential count of 56 segmented neutrophils, 7 band forms, 24 lymphocytes, 4 atypical lymphocytes, and 9 monocytes. A Gram stain of lesion exudate, as well as aerobic and anaerobic bacterial cultures on routine media (which did not include the glucose-cysteine blood agar usually required for the growth of *Francisella tularensis*), revealed no organisms. A biopsy of the ulcer showed skin necrosis.

Because a consulting physician suggested a diagnosis of tularemia, streptomycin, 1 gram intramuscularly every 12 hours, was administered; 2 days later, the dose was lowered to 500 mg every 12 hours and continued for an additional 10 days. The patient recovered uneventfully. Tests of acute- and convalescent-phase serum specimens, using the tube agglutination technique for detection of *F. tularensis* antibody, revealed a rise in titer from 20 on May 29 to 2,560 on June 10.

In the 2 weeks before onset of the patient's illness, his 3 Siamese cats had fever and became anorectic and listless. The family veterinarian prescribed penicillin and streptomycin on May 8, and the patient treated the cats at home without receiving any injuries that he could recall. Despite therapy, 2 cats died on May 13, and the third, noted by the veterinarian to be icteric shortly before death, died May 17. Two cats were necropsied; the livers of both animals contained numerous discrete white spots <3 mm in diameter. On microscopic examination these foci, as well as others in the spleen, were found to be areas of acute inflammation containing coccobacillary organisms. The organisms were immunofluorescence-positive for *F. tularensis*, but cultures prepared after the tissues had been frozen were negative.

New Mexico: On May 13, 1981, a 31-year-old man living in Taos County who had been bitten by his pet cat 4 days earlier had onset of fever, rigors, myalgia, non-productive cough, pleuritic pain, and vomiting. When examined by a physician on May 17, the patient appeared acutely ill and had a temperature of 102.9 F (39.4 C). Skin lesions resembling insect bites were noted on several areas of his body. The WBC was 9,900/mm^3 with 64% neutrophils, 25% band forms, and 11% lymphocytes. Chest X ray revealed a left basilar infiltrate.

Tularemia was suspected, and streptomycin, 1 gram intramuscularly every 12 hours, was given as outpatient therapy and was continued for 9 days. The patient was clinically improved after 48 hours of treatment, but his fever persisted for 3 more days. Tests of acute- and convalescent-phase serum specimens, using the microagglutination technique for detection of *F. tularensis* antibody, revealed a rise in titer from <20 on May 19 to ≥ 640 on June 2.

On May 9, the patient had found his cat eating a dead rabbit under the bed. While removing the cat and rabbit from the house, the patient was bitten on the hand. On May 12, the cat became anorectic and listless; when examined that day by a veterinarian, it had a temperature of 105.1 F (40.6 C; normal temperature 100.5-102.5 F) but appeared normal otherwise. No therapy was given. The cat appeared healthy when examined again on May 19, and a serum specimen obtained at that time had an *F. tularensis* antibody titer of 160.

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Tularemia – Continued

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Editorial Note: Cases of human tularemia associated with cats are uncommon. Humans may acquire the disease by the bite or scratch of a cat, which, though infected, may not show signs of clinical illness. Bite transmission is more commonly reported and probably reflects the presence of the organism in the mouths of cats after they have eaten or mouthed infected animals, usually rodents or rabbits. However, in the absence of a known scratch, bite, or break in the patient's skin, exposure to a cat with an ulcer has also been reported as a source of infection (*1*). While *F. tularensis* has been reported to penetrate unbroken skin of guinea pigs and mice (*2*), it seems plausible that the organism enters through minute abrasions on the skin. This is the most likely route of infection in the Georgia case, where there was no history of a bite or scratch. Although lymphangitis was noted in this case, involvement of the regional lymphatic vessels is rare in tularemia and usually manifests as firm, nontender nodules (*3*).

Cutaneous inoculation of *F. tularensis* most commonly results in ulceroglandular tularemia. The New Mexico case, however, appears to have been typhoidal tularemia with secondary pneumonia, which is most likely to occur with this form of tularemia. Typhoidal tularemia is uncommon, accounting for only 6.2% of the cases in a study of 225 tularemia patients (*3*). Patients with typhoidal tularemia appear ill with a systemic, febrile illness but have no localizing physical findings. Thus, diagnosis of this form of tularemia is difficult.

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2. Quan SF, McManus AG, von Fintel H. Infectivity of tularemia applied to intact skin and ingested in drinking water. Science 1956;123:942-3.
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Current Trends

Influenza Update — United States

A total of 10 states have reported isolations of influenza type B this season, and 4 states have reported influenza A(H1N1) isolations (*1-3*). Tucson, Arizona, was the only locality reporting isolates with concurrent widespread respiratory illness.

In Tucson, 21 influenza B isolates from patients with respiratory illness were obtained in the period December 26, 1981-January 29, 1982, by the virology laboratory of the University of Arizona hospital. The ages of these patients ranged from 1 to 69 years. The low median age, 17 months, reflects the predominantly young age group attending clinical centers that submitted specimens for diagnosis to the laboratory. Increased school absenteeism, averaging 15% among elementary and junior high students, has been noted in many schools in the middle section of the city. Influenza type B virus has now been identified in each of 4 specimens collected during the week of January 17 from children with influenza-like illness who at-

Influenza — Continued

tended a neighborhood school in this section. There is no evidence of widespread respiratory illness among adults in Tucson.

Other communities in the United States have reported only sporadic cases of influenza this season. Since mid January, 3 states—Arkansas, Colorado, and Wisconsin—have reported their first isolations of influenza B for the season. All 3 isolates were from young adults who had typical influenza illnesses. The patients from Colorado and Wisconsin had not traveled recently, but the Arkansas patient had onset of illness 1 day after returning from a trip to San Diego, California, and Honolulu, Hawaii.

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References

1. CDC. Influenza B—Texas. MMWR 30:566;1981.
2. CDC. Influenza—United States, worldwide. MMWR 30: 634-5;1982.
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TABLE I. Summary — cases of specified notifiable diseases, United States

DISEASE	4th WEEK ENDING			CUMULATIVE, FIRST 4 WEEKS		
	January 30 1982	January 31 1981	MEDIAN 1977-1981	January 30 1982	January 31 1981	MEDIAN 1977-1981
Aseptic meningitis	62	95	57	321	280	219
Brucellosis	1	1	1	4	6	6
Encephalitis: Primary (arthropod-borne & unspec.)	13	16	12	42	58	40
Post-infectious	–	1	1	1	5	5
Gonorrhea: Civilian	16,477	18,164	18,738	73,767	76,337	73,235
Military	547	404	577	2,008	2,268	2,203
Hepatitis: Type A	393	413	545	1,390	1,659	1,874
Type B	334	334	312	1,211	1,243	1,114
Non A, Non B	30	N	N	72	N	N
Unspecified	156	201	196	615	755	657
Legionellosis	8	N	N	16	N	N
Leprosy	1	3	3	2	10	8
Malaria	10	13	12	44	90	38
Measles (rubeola)	9	38	192	36	126	469
Meningococcal infections: Total	69	105	69	212	303	201
Civilian	68	105	69	211	302	200
Military	1	–	–	1	1	1
Mumps	91	96	307	287	368	935
Pertussis	22	13	23	47	47	65
Rubella(German measles)	13	50	134	104	167	380
Syphilis (Primary & Secondary): Civilian	687	552	508	2,506	2,269	1,814
Military	20	9	6	45	30	24
Tuberculosis	452	446	523	1,540	1,519	1,544
Tularemia	1	5	1	4	9	9
Typhoid fever	17	6	6	32	29	19
Typhus fever, tick-borne (RMSF)	2	2	1	11	6	4
Rabies, animal	71	106	57	295	374	190

TABLE II. Notifiable diseases of low frequency, United States

	CUM. 1982		CUM. 1982
Anthrax	–	Poliomyelitis: Total	–
Botulism (N.Y. City 1, Calif. 1)	8	Paralytic	–
Cholera	1	Psittacosis (Colo. 1)	6
Congenital rubella syndrome	–	Rabies, human	–
Diphtheria	–	Tetanus (W.Va. 1, Ark. 1)	3
Leptospirosis (Calif. 1)	3	Trichinosis (Idaho 2)	5
Plague	1	Typhus fever, flea-borne (endemic, murine)	–

N: Not notifiable

TABLE III. Cases of specified notifiable diseases, United States, weeks ending January 30, 1982 and January 31, 1981 (4th week)

REPORTING AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	ENCEPHALITIS		GONORRHEA (Civilian)		HEPATITIS (Viral), by type				LEGIONELLOSIS	LEPROSY
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	1982	CUM. 1982	CUM. 1982	CUM. 1982	CUM. 1982	CUM. 1981	1982	1982	1982	1982	1982	CUM. 1982
UNITED STATES	62	4	42	1	73,767	76,337	393	334	30	156	8	2
NEW ENGLAND	2	–	–	–	1,641	2,089	3	14	–	14	–	–
Maine	–	–	–	–	104	105	–	1	–	–	–	–
N.H.	1	–	–	–	71	82	–	1	–	–	–	–
Vt.	–	–	–	–	42	38	–	1	–	–	–	–
Mass.	–	–	–	–	646	806	2	4	–	14	–	–
R.I.	1	–	–	–	113	98	1	3	–	–	–	–
Conn.	–	–	–	–	665	960	–	4	–	–	–	–
MID. ATLANTIC	10	–	7	–	8,237	7,649	26	28	1	14	–	–
Upstate N.Y.	2	–	3	–	1,158	753	6	10	1	6	–	–
N.Y. City	4	–	3	–	4,131	3,175	8	8	–	5	–	–
N.J.	–	–	–	–	1,116	1,681	12	10	–	3	–	–
Pa.	4	–	1	–	1,832	2,040	–	–	–	–	–	–
E.N. CENTRAL	5	–	11	–	9,078	11,883	55	56	3	22	–	–
Ohio	–	–	1	–	2,795	4,237	9	10	1	6	–	–
Ind.	2	–	5	–	1,662	1,010	7	10	1	4	–	–
Ill.	–	–	–	–	1,242	2,984	23	8	1	1	–	–
Mich.	3	–	4	–	2,468	2,621	12	27	–	11	–	–
Wis.	–	–	1	–	911	1,031	4	1	–	–	–	–
W.N. CENTRAL	3	–	–	–	3,746	4,046	14	15	1	2	–	–
Minn.	1	–	–	–	622	603	5	4	–	1	–	–
Iowa	1	–	–	–	314	382	4	–	1	–	–	–
Mo.	1	–	–	–	1,725	1,887	4	9	–	1	–	–
N. Dak.	–	–	–	–	35	41	–	–	–	–	–	–
S. Dak.	–	–	–	–	99	101	1	–	–	–	–	–
Nebr.	–	–	–	–	198	295	–	2	–	–	–	–
Kans.	–	–	–	–	753	737	–	–	–	–	–	–
S. ATLANTIC	10	1	5	–	20,848	19,053	32	64	1	6	4	–
Del.	–	–	–	–	299	342	1	3	1	–	–	–
Md.	–	–	3	–	2,874	2,009	2	4	–	–	1	–
D.C.	–	–	–	–	875	1,263	1	8	–	–	–	–
Va.	2	1	1	–	1,599	1,962	5	5	–	–	3	–
W. Va.	2	–	–	–	199	249	5	1	–	–	–	–
N.C.	4	–	1	–	3,362	3,282	1	11	–	1	–	–
S.C.	–	–	–	–	1,575	1,727	2	6	–	2	–	–
Ga.	–	–	–	–	3,844	4,197	7	19	–	3	–	–
Fla.	2	–	–	–	6,221	4,022	8	7	–	–	–	–
E.S. CENTRAL	2	–	3	–	4,952	6,435	21	35	4	3	1	–
Ky.	–	–	–	–	768	859	10	5	2	1	–	–
Tenn.	1	–	2	–	1,869	2,359	5	20	1	–	–	–
Ala.	1	–	1	–	1,225	2,095	5	10	1	2	1	–
Miss.	–	–	–	–	1,090	1,122	1	–	–	–	–	–
W.S. CENTRAL	9	–	2	–	11,184	12,432	101	41	–	54	–	–
Ark.	–	–	–	–	967	776	4	1	–	2	–	–
La.	–	–	–	–	1,682	1,670	12	8	–	7	–	–
Okla.	1	–	1	–	1,112	1,127	6	4	–	3	–	–
Tex.	8	–	1	–	7,423	8,859	79	28	–	42	–	–
MOUNTAIN	2	–	2	1	2,619	2,643	38	12	5	13	2	–
Mont.	–	–	–	–	139	96	2	–	–	–	1	–
Idaho	–	–	–	–	86	129	3	1	–	–	1	–
Wyo.	–	–	–	–	82	74	1	–	–	–	–	–
Colo.	–	–	–	1	741	812	4	5	–	4	–	–
N. Mex.	1	–	–	–	332	321	4	1	1	3	–	–
Ariz.	1	–	–	–	707	666	18	3	1	4	–	–
Utah	–	–	–	–	117	141	4	2	–	2	–	–
Nev.	–	–	2	–	415	404	2	–	3	–	–	–
PACIFIC	19	3	12	–	11,462	10,107	103	69	15	28	1	2
Wash.	3	–	1	–	958	713	22	3	–	–	1	–
Oreg.	–	–	–	–	633	709	10	7	–	1	–	–
Calif.	11	3	11	–	9,365	8,166	69	56	13	27	–	2
Alaska	–	–	–	–	303	267	1	–	–	–	–	–
Hawaii	5	–	–	–	203	252	1	3	2	–	–	–
Guam	U	–	–	–	–	20	U	U	U	U	U	–
P.R.	–	–	–	–	137	204	–	–	–	2	–	–
V.I.	1	–	–	–	20	–	–	–	–	–	–	–
Pac. Trust Terr.	U	–	–	–	–	46	U	U	U	U	U	–

N: Not notifiable U: Unavailable

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending January 30, 1982 and January 31,1981 (4th week)

REPORTING AREA	MALARIA		MEASLES (RUBEOLA)			MENINGOCOCCAL INFECTIONS (Total)		MUMPS		PERTUSSIS	RUBELLA		
	1982	CUM. 1982	1982	CUM. 1982	CUM. 1981	1982	CUM. 1982	1982	CUM. 1982	1982	1982	CUM. 1982	CUM. 1981
UNITED STATES	10	44	9	36	126	69	212	91	287	22	13	104	167
NEW ENGLAND	1	2	1	3	5	2	10	6	24	1	1	6	34
Maine	–	–	–	–	–	–	2	3	7	–	–	–	17
N.H.	–	–	–	1	2	–	3	–	3	–	1	5	15
Vt.	–	–	1	2	1	–	1	2	3	–	–	–	–
Mass.	1	2	–	–	–	–	–	1	8	1	–	1	2
R.I.	–	–	–	–	–	–	1	–	1	–	–	–	–
Conn.	–	–	–	–	2	2	3	–	2	–	–	–	–
MID. ATLANTIC	–	2	3	13	41	9	27	4	18	3	–	3	36
Upstate N.Y.	–	–	3	8	21	2	6	2	6	–	–	1	15
N.Y. City	–	2	–	4	5	2	7	2	6	2	–	2	5
N.J.	–	–	–	–	5	4	11	–	2	–	–	–	14
Pa.	–	–	–	1	10	1	3	–	4	1	–	–	2
E.N. CENTRAL	1	5	–	–	4	7	16	48	117	10	4	13	33
Ohio	–	–	–	–	–	3	6	27	60	1	–	–	–
Ind.	–	–	–	–	–	–	–	–	6	–	–	1	13
Ill.	–	–	–	–	–	3	3	2	6	2	3	8	7
Mich.	1	4	–	–	4	1	7	16	36	2	–	1	5
Wis.	–	1	–	–	–	–	–	3	9	5	1	3	8
W.N. CENTRAL	1	1	–	–	–	3	11	2	14	2	1	5	5
Minn.	–	–	–	–	–	1	4	–	–	–	–	1	–
Iowa	–	–	–	–	–	–	1	2	5	–	–	–	–
Mo.	1	1	–	–	–	1	5	–	2	2	–	2	–
N. Dak.	–	–	–	–	–	1	1	–	–	–	–	–	–
S. Dak.	–	–	–	–	–	–	–	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–	–	–	–	–
Kans.	–	–	–	–	–	–	–	–	7	–	1	2	5
S. ATLANTIC	1	7	1	7	19	16	50	9	43	1	1	7	8
Del.	–	–	–	–	–	–	–	–	–	–	–	–	–
Md.	1	4	–	–	–	–	3	–	3	–	–	–	–
D.C.	–	1	–	–	–	–	–	–	–	–	–	–	–
Va.	–	1	1	7	–	1	4	1	4	–	–	6	–
W. Va.	–	–	–	–	2	–	1	4	25	–	–	–	6
N.C.	–	–	–	–	–	3	6	–	2	1	–	–	2
S.C.	–	1	–	–	–	2	7	–	2	–	–	–	–
Ga.	–	–	–	–	8	4	17	1	1	–	1	1	–
Fla.	–	–	–	–	9	6	12	3	6	–	–	–	–
E.S. CENTRAL	–	–	1	2	–	5	16	1	3	–	1	4	2
Ky.	–	–	1	1	–	–	1	–	1	–	1	4	2
Tenn.	–	–	–	1	–	2	7	–	1	–	–	–	–
Ala.	–	–	–	–	–	3	8	–	–	–	–	–	–
Miss.	–	–	–	–	–	–	–	1	1	–	–	–	–
W.S. CENTRAL	2	2	2	2	6	13	29	6	12	1	1	11	8
Ark.	–	–	–	–	–	2	2	1	2	–	–	–	–
La.	–	–	–	–	–	–	3	–	–	–	–	–	–
Okla.	–	–	–	–	–	2	3	–	–	–	–	–	–
Tex.	2	2	2	2	6	9	21	5	10	1	1	11	8
MOUNTAIN	–	1	–	–	5	3	13	4	8	1	–	2	2
Mont.	–	–	–	–	–	1	2	1	1	–	–	–	–
Idaho	–	–	–	–	–	–	–	–	2	–	–	–	–
Wyo.	–	–	–	–	–	–	–	–	–	–	–	1	–
Colo.	–	1	–	–	–	2	5	–	–	1	–	–	–
N. Mex.	–	–	–	–	–	–	1	–	–	–	–	–	–
Ariz.	–	–	–	–	–	–	2	2	3	–	–	–	1
Utah	–	–	–	–	–	–	1	–	1	–	–	1	1
Nev.	–	–	–	–	5	–	2	1	1	–	–	–	–
PACIFIC	4	24	1	9	46	11	40	11	48	3	4	53	39
Wash.	–	1	–	–	–	–	4	3	12	2	–	1	7
Oreg.	–	2	–	–	–	6	13	–	–	–	–	–	–
Calif.	3	20	1	8	46	5	22	8	36	1	4	51	32
Alaska	–	–	–	–	–	–	1	–	–	–	–	–	–
Hawaii	1	1	–	1	–	–	–	–	–	–	–	1	–
Guam	U	–	U	–	2	U	–	U	–	U	U	–	–
P.R.	–	–	3	4	14	–	–	–	2	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–	–	–	–
Pac. Trust Terr.	U	–	U	–	–	U	–	U	–	U	U	–	1

U: Unavailable

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending January 30, 1982 and January 31, 1981 (4th week)

REPORTING AREA	SYPHILIS (Civilian) (Primary & Secondary)		TUBERCULOSIS		TULAREMIA	TYPHOID FEVER		TYPHUS FEVER (Tick-borne) (RMSF)		RABIES, Animal
	CUM. 1982	CUM. 1981	1982	CUM. 1982	CUM. 1982	1982	CUM. 1982	1982	CUM. 1982	CUM. 1982
UNITED STATES	2,506	2,269	452	1,540	4	17	32	2	11	295
NEW ENGLAND	39	55	17	47	–	–	1	–	–	3
Maine	–	1	2	3	–	–	–	–	–	3
N.H.	–	3	–	2	–	–	–	–	–	–
Vt.	–	1	–	3	–	–	–	–	–	–
Mass.	28	31	14	30	–	–	1	–	–	–
R.I.	3	8	–	6	–	–	–	–	–	–
Conn.	8	11	1	3	–	–	–	–	–	–
MID. ATLANTIC	362	336	40	188	–	2	4	–	–	1
Upstate N.Y.	28	33	12	42	–	–	1	–	–	–
N.Y. City	248	196	20	94	–	1	2	–	–	–
N.J.	35	44	–	–	–	1	1	–	–	–
Pa.	51	63	8	52	–	–	–	–	–	1
E.N. CENTRAL	78	157	79	252	–	2	3	–	–	27
Ohio	14	28	8	58	–	1	1	–	–	2
Ind.	20	10	15	32	–	–	–	–	–	2
Ill.	20	99	34	95	–	–	–	–	–	13
Mich.	15	9	18	51	–	1	2	–	–	–
Wis.	9	11	4	16	–	–	–	–	–	10
W.N. CENTRAL	53	35	16	30	3	2	2	–	–	96
Minn.	11	7	5	5	–	–	–	–	–	26
Iowa	1	1	–	3	–	1	1	–	–	28
Mo.	33	22	6	10	2	1	1	–	–	11
N. Dak.	1	–	–	1	–	–	–	–	–	13
S. Dak.	–	–	–	2	–	–	–	–	–	–
Nebr.	–	2	1	1	–	–	–	–	–	11
Kans.	7	3	4	8	1	–	–	–	–	7
S. ATLANTIC	730	575	95	329	–	2	3	1	7	41
Del.	2	1	–	1	–	–	–	–	–	–
Md.	52	45	–	58	–	1	1	–	4	2
D.C.	43	55	–	11	–	–	–	–	–	–
Va.	50	47	20	27	–	–	1	–	–	16
W. Va.	2	–	2	8	–	1	1	–	–	2
N.C.	59	51	14	47	–	–	–	1	3	–
S.C.	44	49	10	34	–	–	–	–	–	4
Ga.	150	144	17	62	–	–	–	–	–	14
Fla.	328	183	32	81	–	–	–	–	–	3
E.S. CENTRAL	155	157	38	142	–	4	5	1	3	23
Ky.	9	11	17	45	–	–	–	–	–	4
Tenn.	25	47	10	42	–	–	1	–	–	13
Ala.	51	54	11	55	–	4	4	1	3	6
Miss.	70	45	–	–	–	–	–	–	–	–
W.S. CENTRAL	734	583	61	118	1	–	1	–	–	46
Ark.	20	6	–	–	1	–	–	–	–	10
La.	126	108	28	30	–	–	–	–	–	–
Okla.	15	14	10	26	–	–	1	–	–	14
Tex.	573	455	23	62	–	–	–	–	–	22
MOUNTAIN	58	59	16	47	–	2	2	–	–	4
Mont.	–	1	1	2	–	–	–	–	–	1
Idaho	1	–	2	2	–	–	–	–	–	–
Wyo.	3	1	–	–	–	–	–	–	–	1
Colo.	22	14	–	8	–	–	–	–	–	–
N. Mex.	16	15	4	9	–	–	–	–	–	1
Ariz.	1	17	6	20	–	2	2	–	–	1
Utah	2	–	–	–	–	–	–	–	–	–
Nev.	13	11	3	6	–	–	–	–	–	–
PACIFIC	297	312	90	387	–	3	11	–	1	54
Wash.	–	6	8	16	–	–	–	–	–	–
Oreg.	16	9	1	7	–	–	–	–	–	–
Calif.	273	288	71	346	–	3	11	–	1	50
Alaska	1	1	8	8	–	–	–	–	–	4
Hawaii	7	8	2	10	–	–	–	–	–	–
Guam	–	–	U	–	–	U	–	U	–	–
P.R.	28	39	2	7	–	–	–	–	–	2
V.I.	–	–	–	1	–	–	–	–	–	–
Pac. Trust Terr.	–	–	U	–	–	U	–	U	–	–

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending January 30, 1982 (4th week)

REPORTING AREA	ALL CAUSES, BY AGE (YEARS)						P&I** TOTAL
	ALL AGES	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	688	450	159	44	14	21	49
Boston, Mass.	177	99	47	15	10	6	24
Bridgeport, Conn.	51	39	9	3	–	–	3
Cambridge, Mass.	30	23	5	2	–	–	3
Fall River, Mass.	37	28	7	2	–	–	1
Hartford, Conn.	56	37	12	3	1	3	1
Lowell, Mass.	29	23	5	1	–	–	2
Lynn, Mass.	15	11	2	2	–	–	–
New Bedford, Mass.	22	18	4	–	–	–	–
New Haven, Conn.	31	18	7	3	1	2	2
Providence, R.I.	86	52	24	5	–	5	6
Somerville, Mass.	7	4	2	1	–	–	1
Springfield, Mass.	42	19	18	2	1	2	1
Waterbury, Conn.	46	39	6	1	–	–	2
Worcester, Mass.	59	40	11	4	1	3	3
MID. ATLANTIC	2,811	1,908	622	149	54	78	112
Albany, N.Y.	55	38	13	2	2	–	1
Allentown, Pa.	20	14	5	1	–	–	–
Buffalo, N.Y.	150	97	40	2	7	4	8
Camden, N.J.	40	22	9	2	3	4	2
Elizabeth, N.J.	35	26	7	2	–	–	1
Erie, Pa.†	54	38	11	2	1	2	1
Jersey City, N.J.	73	47	14	4	5	3	2
N.Y. City, N.Y.	1,488	1,028	315	82	22	41	56
Newark, N.J.	60	29	18	11	1	1	5
Paterson, N.J.§	32	26	–	3	–	3	–
Philadelphia, Pa.†	292	180	86	15	7	4	17
Pittsburgh, Pa.†	87	48	26	4	3	6	3
Reading, Pa.	36	30	5	1	–	–	2
Rochester, N.Y.	124	91	20	10	–	3	7
Schenectady, N.Y.	29	24	4	1	–	–	1
Scranton, Pa.†	42	32	9	1	–	–	2
Syracuse, N.Y.	96	62	22	4	3	5	2
Trenton, N.J.	54	42	11	–	–	1	–
Utica, N.Y.	25	20	3	1	–	1	–
Yonkers, N.Y.	19	14	4	1	–	–	2
E.N. CENTRAL	2,495	1,623	596	141	60	74	72
Akron, Ohio	87	62	21	1	3	–	–
Canton, Ohio	40	28	11	1	–	–	7
Chicago, Ill.	610	360	151	54	23	22	16
Cincinnati, Ohio	143	94	41	5	1	2	6
Cleveland, Ohio	187	100	64	15	4	4	3
Columbus, Ohio	138	85	32	6	8	7	6
Dayton, Ohio	109	72	28	5	2	2	3
Detroit, Mich.	283	171	67	24	6	15	7
Evansville, Ind.	67	48	17	–	–	2	3
Fort Wayne, Ind.	51	31	9	5	2	4	2
Gary, Ind.	16	6	7	1	1	1	–
Grand Rapids, Mich.	72	57	11	1	2	1	1
Indianapolis, Ind.	169	109	41	8	4	7	6
Madison, Wis.	29	21	5	1	1	1	–
Milwaukee, Wis.	130	91	31	6	1	1	–
Peoria, Ill.	27	21	6	–	–	–	–
Rockford, Ill.	61	40	16	3	–	2	4
South Bend, Ind.	57	41	14	2	–	–	5
Toledo, Ohio §	119	115	–	1	1	1	1
Youngstown, Ohio	100	71	24	2	1	2	2
W.N. CENTRAL	845	583	161	47	21	33	32
Des Moines, Iowa	61	43	15	3	–	–	1
Duluth, Minn.	30	24	2	2	1	1	–
Kansas City, Kans.	43	23	15	3	1	1	–
Kansas City, Mo.	140	92	35	4	5	4	8
Lincoln, Nebr.	25	19	4	–	–	2	1
Minneapolis, Minn.	99	63	20	3	4	9	2
Omaha, Nebr.	93	73	15	1	3	1	2
St. Louis, Mo.	194	142	29	15	2	6	10
St. Paul, Minn.	80	55	10	7	3	5	2
Wichita, Kans.	80	49	16	9	2	4	6

REPORTING AREA	ALL CAUSES, BY AGE (YEARS)						P&I** TOTAL
	ALL AGES	≥65	45-64	25-44	1-24	<1	
S. ATLANTIC	1,601	951	429	116	44	60	63
Atlanta, Ga.	217	136	44	21	5	11	5
Baltimore, Md.	357	199	114	21	15	8	7
Charlotte, N.C.	66	37	20	1	2	5	4
Jacksonville, Fla.	100	59	28	8	5	–	1
Miami, Fla.	134	81	42	6	2	3	1
Norfolk, Va.	66	44	15	–	4	3	8
Richmond, Va.	95	59	23	9	1	3	7
Savannah, Ga.	56	29	16	9	1	1	8
St. Petersburg, Fla.	135	104	21	5	1	4	3
Tampa, Fla.	78	50	16	4	3	5	12
Washington, D.C.	233	115	73	27	3	15	4
Wilmington, Del.	64	38	17	5	2	2	3
E.S. CENTRAL	806	501	206	48	23	28	37
Birmingham, Ala.	163	104	34	13	4	8	2
Chattanooga, Tenn.	69	45	19	3	1	1	6
Knoxville, Tenn.	65	38	18	4	3	2	2
Louisville, Ky.	121	73	31	5	5	7	8
Memphis, Tenn.	206	129	50	15	4	8	11
Mobile, Ala.	40	26	9	2	2	1	2
Montgomery, Ala.	19	10	6	3	–	–	1
Nashville, Tenn.	123	76	39	3	4	1	5
W.S. CENTRAL	1,373	788	336	117	55	77	53
Austin, Tex.	55	37	13	1	1	3	4
Baton Rouge, La.	43	21	13	4	2	3	1
Corpus Christi, Tex.	62	40	13	2	4	3	1
Dallas, Tex.	252	140	67	23	4	18	9
El Paso, Tex.	46	30	8	4	2	2	1
Fort Worth, Tex.	115	59	24	11	5	16	5
Houston, Tex.	192	96	52	24	14	6	3
Little Rock, Ark.	68	33	21	7	3	4	6
New Orleans, La.	180	100	50	17	6	7	2
San Antonio, Tex.	194	122	37	14	9	12	12
Shreveport, La.	67	49	12	4	1	1	2
Tulsa, Okla.	99	61	26	6	4	2	7
MOUNTAIN	660	425	140	51	22	22	43
Albuquerque, N. Mex.	55	20	18	12	5	–	1
Colo. Springs, Colo.	41	32	6	2	1	–	5
Denver, Colo.	121	85	23	7	1	5	6
Las Vegas, Nev.	95	49	22	13	8	3	7
Ogden, Utah	21	9	5	3	1	3	3
Phoenix, Ariz.	145	106	29	5	1	4	4
Pueblo, Colo.	19	15	2	–	–	2	3
Salt Lake City, Utah	48	25	13	2	4	4	1
Tucson, Ariz.	115	84	22	7	1	1	13
PACIFIC	2,130	1,455	434	128	50	62	124
Berkeley, Calif.	28	25	1	–	2	–	1
Fresno, Calif.	71	48	16	4	2	1	4
Glendale, Calif.	40	34	5	1	–	–	2
Honolulu, Hawaii	63	42	9	7	1	4	4
Long Beach, Calif.	128	91	28	6	–	3	7
Los Angeles, Calif.	801	557	141	55	30	17	35
Oakland, Calif.	92	58	24	5	1	4	5
Pasadena, Calif.	32	22	7	–	1	2	3
Portland, Oreg.	138	89	29	10	1	9	–
Sacramento, Calif.	57	37	12	2	1	5	12
San Diego, Calif.	142	96	32	8	2	4	17
San Francisco, Calif.	128	93	25	8	1	1	5
San Jose, Calif.	177	108	48	13	4	4	15
Seattle, Wash.	135	90	34	7	1	3	3
Spokane, Wash.	62	34	21	1	2	4	8
Tacoma, Wash.	36	31	2	1	1	1	3
TOTAL	13,409††	8,684	3,083	841	343	455	585

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

**Pneumonia and influenza

†Because of changes in reporting methods in these 4 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

††Total includes unknown ages.

§Data not available. Figures are estimates based on average of past 4 weeks.

Surveillance Summary

Abortion Surveillance, 1979 — Provisional Statistics

In 1979, all 50 states and the District of Columbia reported to CDC a provisional total of 1,238,987 legally induced abortions, a 7% increase over 1978 (Table 1). The national abortion ratio increased by 3%, from 347 to 358/1,000 live births, amounting to more than 1 abortion for every 3 live births.

New York and California reported the largest number of abortions, as they have done consistently since 1970. Abortions in these 2 states represented 28% of the national total in 1979, approximately the same percentage as in the 3 previous years. Idaho, South Dakota, and Wyoming each reported fewer than 2,500 abortions. The majority of states reported an increased number of abortions, with only 7 states reporting a decrease. Abortion ratios ranged from a low of 84/1,000 live births in Wyoming to a high of over 1,000/1,000 in the District of Columbia. Twelve states, New York City, and the District of Columbia recorded a decrease from 1978 in the abortion ratio.

TABLE 1. Provisional number of legal abortions, live births, and abortion ratios, reported by state of occurrence, 1979

State	Abortions*	Live births†	Ratio§
Alabama	15,300¶	60,628	252
Alaska	2,600**	8,912	292
Arizona	7,811	45,707	171
Arkansas	6,059	35,008	173
California	187,312	363,463	515
Colorado	16,476††	47,813	345
Connecticut	14,214	36,959	385
Delaware	3,636	9,123	399
Dist. of Col.	28,694	20,334	§§
Florida	56,152	120,839	465
Georgia	36,588	89,446	409
Hawaii	6,125	17,429	351
Idaho	2,446	19,686	124
Illinois	68,187††	181,218	376
Indiana	14,658	87,452	168
Iowa	5,247¶	47,083	111
Kansas	12,335††	37,100	332
Kentucky	11,340	60,182	188
Louisiana	13,512	79,413	170
Maine	3,963	15,755	252
Maryland	25,526	50,043	510
Massachusetts	44,044	73,104	602
Michigan	44,542¶	142,127	313
Minnesota	18,672	64,939	288
Mississippi	4,411	45,913	96
Missouri	17,289††	78,505	220
Montana	3,447††	13,803	250
Nebraska	4,608††	26,093	177
Nevada	6,374	11,830	539
New Hampshire	3,116¶	12,830	243
New Jersey	24,714	91,896	269
New Mexico	5,193	25,570	203

Abortion Surveillance — Continued

TABLE 1. Provisional number of legal abortions, live births, and abortion ratios, reported by state of occurrence, 1979 — *Continued*

New York	154,183	231,787	665
(City)	(103,814)††	(106,394)	(976)
(Upstate)	(50,369)††	(125,395)	(402)
North Carolina	29,479	84,388	349
North Dakota	2,150¶¶	12,769	168
Ohio	41,851	164,111	255
Oklahoma	10,710	47,214	227
Oregon	14,501††	42,984	337
Pennsylvania	64,147	157,783	407
Rhode Island	5,389††	12,235	440
South Carolina	10,976††	49,956	220
South Dakota	1,398	12,623	111
Tennessee	23,400††	72,261	324
Texas	76,996	265,066	290
Utah	3,697††	42,304	87
Vermont	2,925††	7,396	395
Virginia	31,414††	73,812	426
Washington	29,710	55,077	539
West Virginia	2,954¶	30,263	98
Wisconsin	17,764¶¶	72,818	244
Wyoming	752	8,946	84
Totals	1,238,987	3,463,996	358

* 1979 abortion data from central health agencies unless otherwise noted.
† Provisional from National Center for Health Statistics, Monthly Vital Statistics Report, Volume 29, Number 12, March 18, 1981.
§ Abortions/1000 live births (provisional live birth data from National Center for Health Statistics, Monthly Vital Statistics Report, Vol. 29, No. 12, March 18, 1981)
¶ Reported from hospitals and/or facilities in state.
** 1978 abortion data from the Alan Guttmacher Institute.
†† Data from Vital Statistics Division, National Center for Health Statistics.
§§ Greater than 1,000 abortions/1,000 live births.
¶¶ 1978 abortion data from central health agency.

Twenty-nine women died after abortions in 1979, 2 more than in 1978. Fluctuations in the total number of abortion deaths reflect variations in all 3 abortion categories—legally induced, illegally induced, and spontaneous (Figure 4). Twenty women died after legally induced abortions in 1979, compared with 11 in 1978. Using national denominators and excluding ectopic-pregnancy deaths from the numerators, the crude death-to-case rate was 1.5/100,000 legally induced abortions in 1979 compared with 0.6 in 1978 (Table 2).

No deaths were reported due to illegally induced abortions in 1979; 7 had been reported in 1978. Previously the lowest annual number of deaths after illegal abortions was 2 in 1976 (Figure 4). In 1979, 9 women died from spontaneous abortions in the United States, compared with a mean of 15 deaths per year for the 7 preceding years. One death from an ectopic pregnancy was apparently misdiagnosed as an incomplete spontaneous abortion. None of the spontaneous-abortion deaths were associated with intrauterine devices.

Reported by Abortion Surveillance Br, Statistical Svcs Br, Family Planning Evaluation Div, Center for Health Promotion and Education, CDC.

Abortion Surveillance — Continued

FIGURE 4. Abortion-related deaths by category* and year,† United States, 1972-1979

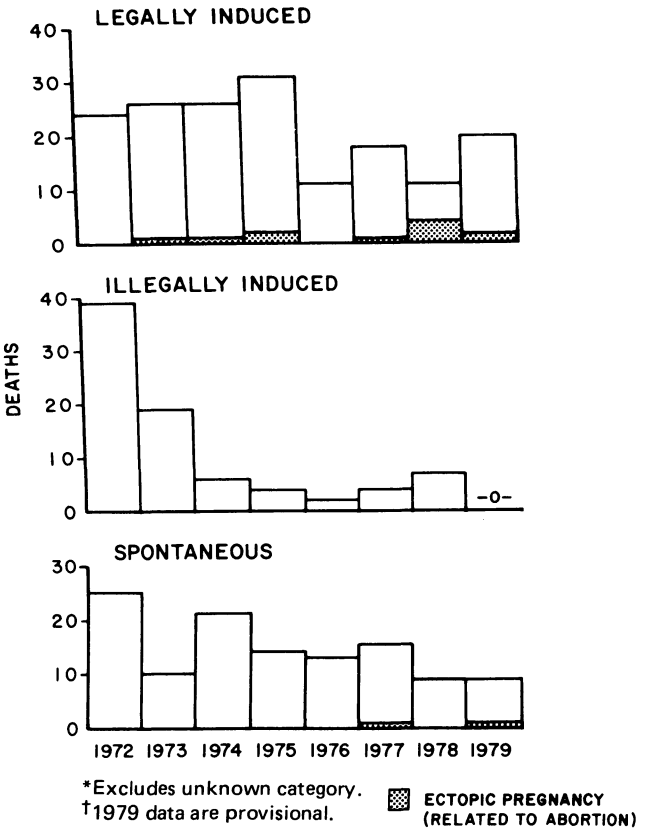

TABLE 2. Death-to-case rates for induced abortions,* United States, 1972-1979

Year	Rate
1972	4.1
1973	4.1
1974	3.3
1975	3.4
1976	1.1
1977	1.6
1978	0.6
1979	1.5

*Excludes deaths from ectopic pregnancies.

Abortion Surveillance — Continued

Editorial Note: This report presents provisional data; a more complete abortion surveillance report and annual summary are forthcoming.

Since 1969, when CDC began collecting information on legal abortions, the number of women obtaining these procedures has increased each year. In 1979, the total number of legal abortions reported to CDC rose by the same percentage (7%) as in the previous year. The abortion ratio, however, rose by less than half the percentage increase reported in 1978, indicating a relatively larger increase in the number of births in 1979.

The number of abortions reported to CDC for 1979 was probably less than the number actually performed. In public-health surveillance, the number of cases reported is usually lower than the number obtained through national surveys (*1*)—such as those of the Alan Guttmacher Institute (AGI)—a difference that has been substantiated by statewide surveys (*2-3*). AGI's projected estimate of 1,540,000 abortions for 1979 is about 20% higher than CDC's provisional figure. This difference has been consistent over time (*4*).

No deaths from illegal abortions were reported in 1979. This is the first reporting year since 1972, when CDC surveillance of abortion deaths began, that no such deaths have been reported. We regard the number of deaths due to illegal abortions as an indirect reflection of the number of such procedures performed. The decline since 1972 in deaths from illegal abortions is probably the result of an increased availability of safer, legal procedures throughout the country. The absence of any deaths from illegal abortions in 1979 indicates that restricting federal funds for abortion probably had little impact in causing low-income women to seek illegal abortions (*5*).

The inclusion between 1972 and 1979 of 13 deaths from ectopic pregnancy (2 after diagnoses of spontaneous abortions and 11 after attempted legally induced abortions) accounts for most of the difference between this and previous publications in the number of abortion-related deaths reported. During this period, the incidence of ectopic pregnancy in the United States has been rising, while death-to-case rates have declined (*6*). Of these 13 deaths reported from ectopic pregnancy associated with abortion, 9 occurred in the last 3 reporting years of the period: 2 in 1977, 4 in 1978, and 3 in 1979 (Figure 4).

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The Morbidity and Mortality Weekly Report, circulation 100,000, is published by the Centers for Disease Control, Atlanta, Georgia. The data in this report are provisional, based on weekly telegraphs to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

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☆U.S. Government Printing Office: 1982-740-185/930 Region IV

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE / CENTERS FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333
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U.S. Department of HHS
HHS 396

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HHS Publication No. (CDC) 82-8017

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