

# **Current Trends**

# Hysterectomy Prevalence and Death Rates for Cervical Cancer – United States, 1965–1988

Since the 1960s, hysterectomy has been one of the most frequently performed inpatient surgical procedures in the United States, with an estimated 33% of women undergoing a hysterectomy by 60 years of age (1). However, rates of cervical cancer mortality that do not allow for the proportion of women with hysterectomies in the population will underestimate the rates in the true at-risk population (i.e., women with intact uteri) and may influence apparent secular trends in rates of cervical cancer mortality (2). This report uses national mortality and hospital-discharge data to compare death rates, corrected and uncorrected for hysterectomy prevalence, for women who died with an underlying diagnosis of cervical cancer (International Classification of Diseases, Ninth Revision [ICD-9] and ICD-9-Clinical Modification, code 180) (3).

To determine the effect of hysterectomy prevalence on death rates\* for cervical cancer, age-specific proportions of women in the United States with intact uteri from 1965 through 1988 were estimated using data from CDC's National Hospital Discharge Survey (NHDS) (4). Because the secular decline in death rates for cervical cancer appeared similar before and after correcting for hysterectomy prevalence (Figure 1), linear regression models were used to assess the effect of hysterectomy prevalence on the trend in rates of cervical cancer mortality. These models used logarithmic transformations of corrected and uncorrected rates as dependent variables (5) (Table 1).

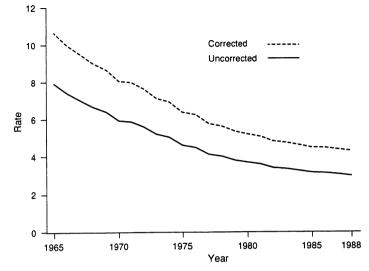
The prevalence of women with hysterectomies accounted for 8% of the decrease since 1965 in total age-adjusted death rates (Table 1). However, the difference in average annual rate of change for the 24-year period was not statistically significant (p=0.07). The largest effect was for women aged 40–69 years, for whom 11% of the decrease could be attributed to hysterectomies (p=0.06).

Excluding women without intact uteri from the at-risk population, the cervical cancer death rate in 1965 increased from 7.9 to 10.6 per 100,000 women; in 1988, these rates were 3.0 and 4.3 per 100,000, respectively. During the 24-year period,

<sup>\*</sup>Age-adjusted to the 1970 U.S. population.

## Cervical Cancer - Continued

FIGURE 1. Age-adjusted death rates\* for cancer of the uterine cervix, corrected and uncorrected for the prevalence of hysterectomy, by year – United States, 1965–1988



\*Per 100,000 women.

# TABLE 1. Effect of correcting for hysterectomy prevalence on death rates\* and trends in mortality from cervical cancer, by age group – United States, 1965–1988

Age (yrs)/	Death	rate	Average relative %	% Relative change in		
Year	Uncorrected	Corrected	increase <sup>†</sup>	trend <sup>s</sup>		
20-39						
1965	3.3	3.4				
1988	1.3	1.4	10	8		
4069						
1965	17.8	24.0				
1988	6.5	9.6	38	11		
≥70						
1965	26.9	40.0				
1988	10.8	16.4	56	2		
Total						
1965	7.9	10.6				
1988	3.0	4.3	39	8		

\*Per 100,000 women.

<sup>†</sup>Average relative percent increase (ARPI) in the death rate after correction for hysterectomy prevalence, estimated using the linear regression equation:

natural log (death rate) = B1 (year) + B2 (hysterectomy).

Therefore,  $ARPI = [EXP (B2) - 1] \times 100\%$ .

<sup>§</sup>Relative percent change in trend in death rates for 1965–1988, attributable to changes in the prevalence of hysterectomy, estimated using the linear regression equation:

natural log (death rate) = B1 (year) + B2 (hysterectomy) + B3 (hysterectomy  $\times$  year). Therefore, change in trend = [EXP (24  $\times$  B3) - 1]  $\times$  100%.

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annual corrected rates were an average of 39% greater than uncorrected rates (Table 1). The relative difference in the corrected and uncorrected rates increased significantly with age, from a 10% differential for women aged 20–39 years to a 56% differential for women  $\geq$ 70 years of age (p for heterogeneity <0.001).

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**Editorial Note:** The decline in death rates for cervical cancer in the United States is generally attributed to use of the Papanicolaou (Pap) test (6). However, because the Pap test has never been evaluated in a randomized clinical trial, some investigators have questioned its value in reducing mortality and have proposed that increasing rates of hysterectomy could account for this decline (7). Although findings in this report suggest that including women who have had hysterectomies artificially lowers death rates, only 8% of the mortality decline since 1965 can be attributed to this inclusion. Incidence and death rates for cervical cancer increase with age, and the greatest effect of previous hysterectomies on death rates was among elderly women; however, Pap test screening incidence rates decrease with age (8).

The approach used in this analysis has at least two limitations. First, this analysis assumed that a woman who has had a hysterectomy is not at risk for dying from cervical cancer. However, a woman who underwent a hysterectomy for cervical cancer but who subsequently died from the disease would have been included in the numerator for rate calculation but inappropriately excluded from the denominator, thereby inflating the estimate for the effect of hysterectomy prevalence on cervical cancer death rates. In this analysis, this effect was likely to have been limited; hysterectomies for cervical malignancies would have little effect on the corrected death rates because less than 2% of all hysterectomies are performed for cervical cancer (1). Second, this analysis could not adequately evaluate regional and racial differences in the rate of hysterectomy because of limitations of the sample size (1), and this variability could be associated with differential effects on cervical cancer mortality over time.

The substantial increase in rates of cervical cancer mortality for elderly women after correcting for hysterectomy prevalence (Table 1) highlights the inadequate screening of older women with intact uteri. The American Cancer Society recommends annual Pap tests from the onset of sexual activity or from age 18; after three consecutive negative tests, the physician may recommend less frequent testing (9). This recommendation contains no upper age limit on testing. Because declines in cervical cancer mortality are not artifacts of increasing rates of hysterectomy and can be attributed largely to use of the Pap test, additional cervical cancer mortality may be prevented by greater compliance with recommended Pap test guidelines.

To further reduce cervical cancer mortality in the United States, national health objectives for the year 2000 include increasing to at least 95% the proportion of women aged  $\geq 18$  years<sup>†</sup> with uterine cervix who have ever received a Pap test; for women aged  $\geq 18$  years, increasing to at least 85% those who received a Pap test within the preceding 1–3 years (70% for women aged  $\geq 70$  years); and reducing death from cancer of the uterine cervix to no more than 1.5 per 100,000 women<sup>§</sup> (10).

<sup>&</sup>lt;sup>†</sup>Baseline in 1987: 88% "ever" and 75% "within the preceding 3 years" and for women aged  $\geq$ 70 years, 76% "ever" and 44% "in the preceding 3 years."

<sup>&</sup>lt;sup>§</sup>Age-adjusted to the 1970 U.S. population.

## Cervical Cancer - Continued

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# Death Rates of Malignant Melanoma Among White Men – United States, 1973–1988

Since 1973, death rates for malignant melanoma (*International Classification of Diseases, Ninth Revision,* codes 172.0–172.9) have increased in the United States and other countries; this increase has occurred disproportionately among white men (1,2). To develop hypotheses on the etiology of this increase, the Boston University Schools of Medicine and Public Health and CDC reviewed data from the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute and other existing databases. This report summarizes patterns of malignant melanoma among whites in the United States from 1973 through 1988 and suggests possible causes for these patterns.\*

National incidence and death rates were obtained from the SEER Program. The SEER Program comprises cases from population-based cancer registries throughout the United States<sup>†</sup> that represent an estimated 9.6% of the U.S. population. The SEER Program also publishes death rates based on a public-use data tape from CDC's National Center for Health Statistics.

From 1973 through 1988, the age-adjusted melanoma death rates (standardized to the 1970 U.S. population) for whites were higher for men than for women (3,4), and

<sup>\*</sup>Because of limitations in the size of the sample of all other races, the analysis and report present comparisons by sex and age among whites.

<sup>&</sup>lt;sup>†</sup>From 1973 through 1988, the nine locations were Connecticut, Hawaii, Iowa, New Mexico, and Utah; and Atlanta, Detroit, San Francisco/Oakland, and Seattle/Puget Sound.

# Malignant Melanoma – Continued

among men the death rate for malignant melanoma increased faster than for any other cancer (4). During this 16-year period, the overall increase in the death rate was 50% for men (2.2 to 3.3 per 100,000) compared with 21% for women (1.4 to 1.7 per 100,000) (3,4). The greatest rise in melanoma mortality occurred among men aged  $\geq$ 50 years, with a peak increase of 78% for men aged 80–84 years (3,4) (Figure 1). The SEER data indicate that incidence rates were nearly equal for white men and women aged 40–44 years (16.1 per 100,000 versus 16.5 per 100,000, respectively) but were higher for men aged 50–54 years than for women of the same age (24.9 per 100,000 versus 18.1 per 100,000, respectively) and more than double for men aged 65–69 years than for women in the same age group (41.6 per 100,000 versus 17.9 per 100,000, respectively) (4).

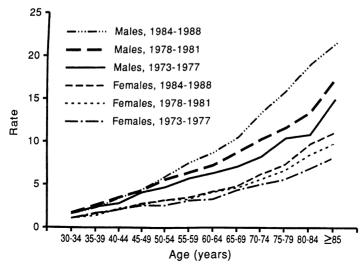
In addition, for cases diagnosed from 1981 through 1987, the 5-year survival rates were poorer for men than women (77% versus 87%, respectively).

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**Editorial Note:** No single etiology has been identified as the cause of malignant melanoma. Instead, various factors have been associated with an increased risk for this cancer (e.g., sun exposure, the presence of many or unusual moles, and genetic predisposition) (5). In particular, the increase in recreational exposure to sunlight during this century has been suggested as a contributor to the increasing incidence of melanoma noted in this report.

In the United States, almost half (46%) of all melanoma deaths occur among men aged  $\geq$ 50 years (6). Possible factors that may contribute to the higher mortality among white men  $\geq$ 50 years of age than among women include biological features (*Continued on page 27*)

FIGURE 1. Age-adjusted death rates\* for whites for melanoma of the skin, by sex and age – Surveillance, Epidemiology, and End Results Program, United States, 1973–1988



\*Per 100,000 population, adjusted to the 1970 U.S. standard population.

#### CASES CURRENT INCREASE DISEASE DECREASE 4 WEEKS 384 Aseptic Meningitis Encephalitis, Primary 33 997 Hepatitis A 733 Hepatitis **B** 184 Hepatitis, Non-A, Non-B 53 Hepatitis, Unspecified 66 Legionellosis 38 Malaria 97 Measles, Total 125 Meningococcal Infections 152 Mumps 102 Pertussis 258 Rabies, Animal 22 Rubella 2 0.5 4 0.25 1 Ratio(Log Scale)\* BEYOND HISTORICAL LIMITS

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending January 11, 1992, with historical data - United States

\*Ratio of current 4-week total to the mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

# TABLE I. Summary – cases of specified notifiable diseases, United States, cumulative, week ending January 11, 1992 (2nd Week)

	Cum. 1992		Cum. 1992
AIDS	1,733	Measles: imported	
Anthrax	- 1	indigenous	1 1
Botulism: Foodborne	· ·	Plague	
Infant		Poliomyelitis, Paralytic*	
Other	· ·	Psittacosis	2
Brucellosis	1	Rabies, human	
Cholera	-	Syphilis, primary & secondary	975
Congenital rubella syndrome		Syphilis, congenital, age < 1 year	
Diphtheria	-	Tetanus	
Encephalitis, post-infectious	1	Toxic shock syndrome	5
Gonorrhea	13.333	Trichinosis	3
Haemophilus influenzae (invasive disease)	29	Tuberculosis	557
Hansen Disease	-	Tularemia	3
Leptospirosis	· ·	Typhoid fever	3
Lyme Disease	71	Typhus fever, tickborne (RMSF)	3
		·,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

\*Nine suspected cases of poliomyelitis have been reported in 1991; 4 of the 8 suspected cases in 1990 were confirmed, and all were vaccine associated.

	Aseptic Encephalitis							lepatitis	ſ			
Reporting Area	AIDS	Aseptic Menin- gitis	Primary	Post-in- fectious	Gono	rrhea	A	B	NA,NB	Unspeci- fied	Legionel- Iosis	Lyme Disease
	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1991	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992
UNITED STATES	1,733	152	14	1	13,333	17,291	374	229	43	6	29	71
NEW ENGLAND	13	38	-	-	209	867	14	22	-	-	6 2	9
Maine N.H.	6 6	1		-		2 14	3	5	-	-	1	1
Vt.	-	4	-	-	159	3 266	-7	16		-	2	1
Mass. R.I.	-	33	-		20	35	4	1	-	-	ī	7
Conn.	1	-	-	•	30	547	-	-	-	-	-	-
MID. ATLANTIC Upstate N.Y.	173 41	5	-	:	600	1,420	16	27	2		1	41
N.Y. City	6	-	-	-	-	243	-		-	-	-	•
N.J. Pa.	94 32	5	-		292 308	236 941	16	27	2	-	1	41
E.N. CENTRAL	194	23	2		2,824	2,753	43	35	3	2	12	8
Ohio	33	7	1		1,786	501	28 13	8 6	2	1	10	8
Ind. III.	1 141	5	-	-	245 389	1,052	-	-	-	-	-	-
Mich.	10 9	11	1	-	403 1	915 285	2	17 4	- 1	1	2	-
Wis.		8	1	-	978	836	33	4			1	-
W.N. CENTRAL Minn.	117 15	-	-	-	20	132	-	-	-	-	-	-
lowa	8 85	5	-	:	622	81 382	-	2	-	-	1	
Mo. N. Dak.		1	-		-	-		-	-	-	-	-
S. Dak. Nebr.	1	-	-		3 33	8 82	30 1	-	-	-		-
Kans.	8	2	1		300	151	2	2	-	-	-	-
S. ATLANTIC	421	16	3	-	4,645	6,287	13	11	2		4	6 1
Del. Md.	7 97	2	2		46 427	23 782	:	3	-	-	-	-
D.C.	30	-	-	-	301 668	494 156	1 2	1	-		- 1	- 5
Va. W. Va.	4 7	3	-		49	63	1	1		-		-
N.C.	50 26	7	1	-	729 546	1,295 480	2 5	3 1	2	-	3	
S.C. Ga.	1	2	-	-	1,405	1,664	1	-	-	-	-	-
Fla.	199	2	-	-	474	1,330	1	•	-	-	-	-
E.S. CENTRAL Ky.	61 1	20 16		-	836 134	1,393 204	6	24 4	18	-	2 1	-
Tenn.	12	1	-	-	242	322	4	16 4	16 2	-	1	:
Ala. Miss.	48	3	-	-	96 364	613 254	2	- 4	-	-	-	-
W.S. CENTRAL	162	4	-	-	982	1,418	17	18	2	1	-	2
Ark.	13	4	:	:	1 330	315 275	6	8	-	-	:	1
La. Okla.	10 41	-	-	-	75	178	11	10	2	1		1
Tex.	98	-	-	•	576	650	÷	-	-		-	-
MOUNTAIN Mont.	10 1	2	-	-	457 5	491 2	54 3	8 1	5	1	-	-
Idaho	-	-	-	-	2	2	-	3	-	•	-	-
Wyo. Colo.	-	-	-	-	1 155	3 129	4	1	3 1	1		-
N. Mex.	9		-		40	34	-	-		-	-	-
Ariz. Utah	-	2	-	-	189 3	225 17	45	2	1	-		-
Nev.	-	-	-	-	62	79	2	1	-	-	-	-
PACIFIC Wash.	582	36	8	1	1,802 103	1,826 267	178 7	80 14	11 3	2	3 3	5
Oreg.	-	-	-		48	93	6	5	1	:	-	-
Calif. Alaska	572	35 1	7 1	1	1,635 15	1,422 27	164	61	7	2	-	5
Hawaii	10		-	-	1	17	1	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-	-	-
P.R. V.I.	:	1	-	:	1	- 12	-	1 1	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	2	•	-	-	-	-	-

# TABLE II. Cases of selected notifiable diseases, United States, weeks ending January 11, 1992, and January 12, 1991 (2nd Week)

N: Not notifiable

## January 17, 1992

			Meas	les (Rut	ceola)		Menin-						Τ			
Reporting Area	Malaria	Indig	enous		orted*	Total	gococcal Infections	Mu	mps		Pertussi	5		Rubeila	Rubella	
	Cum. 1992	1992	Cum. 1992	1992	Cum. 1992	Cum. 1991	Cum. 1992	1992	Cum. 1992	1992	Cum. 1992	Cum. 1991	1992	Cum. 1992	Cum 1991	
UNITED STATES	9	1	1		-	105	67	18	36	6	10	65	3	4	5	
NEW ENGLAND	-	-		•		-	3	-	•	-	-	6	-	-	-	
Maine N.H.			-	:	:			-		:		5	:	-	:	
Vt.	-	-	•	•	•	•	-	-	•	-		1	-	-	-	
Mass. R.I.	-	-		-	-	-	3	2	2	-	-	-		-	-	
Conn.	-	•	-			-	-	•	-	-			-	-	-	
MID. ATLANTIC	2	-	-	•	-	58	2	-		-	-	6		-	-	
Upstate N.Y. N.Y. City	-	-	-	-		:		:	-			-	-	-	-	
N.J. Pa.	1	-	-	-	:	16	-		-	-	-	1	-	-	-	
	1	-	-	-	-	42	2	-	-	-	-	5	•	-	-	
E.N. CENTRAL Ohio			-		-	2	15	2	7 5	4	4	24 5	•	-	1	
Ind.	-	-	-	-	-	-	8		-	4	4	9	-	-	1	
III. Mich.	-	-	:	2	-	1	3 4	2	2	-	:	8 2	-	-	-	
Wis.	-	-	-		-	1	-	-	-	-	-	-	-	-	:	
W.N. CENTRAL	-		-	-	-	-	5	-	-	-	-	10	-	-	2	
Minn. Iowa	-	-	-	:			-		-	-	-	6	-	-	ĩ	
Mo.	-	-	-	-	-	-	-		-	-	-	1	2	-	1	
N. Dak. S. Dak.	-	-	-	-	:	-	-	:	-	-	-	-	-	-	-	
Nebr.		-	-		-	-	-	-	-	-		1	-	-	:	
Kans.	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	
S. ATLANTIC	-	-	•	-	-	2	10	8	10	•	-	-	-	-	-	
Del. Md.	-	2	-		-	-	-	:	-	:		-	-	-	-	
D.C.	-	-	-	-	-	-	:	:	:	-	-	-	-	-	-	
Va. W. Va.	-	-	-	-	-	-	2	3	3	-	-	-	-	-	-	
N.C.	-	-	-		-	-	3	-		-	-	-	-	-	-	
S.C. Ga.	-	-	-	:	-	-	2 1	-	2	:		-	•	-	-	
Fla.	-	-	-	-	-	2	2	5	5	-	-	-	-	-	-	
E.S. CENTRAL	-	-	-	-	-	-	7	-	2	1	2	1	-	-		
Ky. Tenn.			-		-		5 1	-		-	:	-	-	-	-	
Ala.	-	-	-	-	-	-	1		2	1	2	1	-	-	2	
Miss.	-	-	-	•	-	•	-	-	-	-	-	-	-	-	-	
W.S. CENTRAL	-	:	-	•	-	1	3	1	1	-	-	1	-	-	-	
Ark. La.	-	-	-		-	1	3	1	1	-	-	- 1	-	:		
Okla. Tex.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MOUNTAIN	-	-	-	-	-		-	-	-	-	•	-	-	-	-	
MOUNTAIN Mont.	3		-		-	3	5 2	3	5	-	1	6	-	-	1	
Idaho	-	-	-	-	-	•	ī	-	-	-	-	-	-	-	-	
Wyo. Colo.	2	-	1	-	-		-	-	-	2	- 1	- 3	•	-	-	
N. Mex.	ī	-	-	-	-	-	-	Ν	Ν	-	-	1	-	-		
Ariz. Utah	-	-	-	:	:	1	:	3	3	-	-	2	-	-	-	
Nev.	-	-	-		-	2	2	-	2	-	-		-	-	1	
PACIFIC	4	1	1	-	-	39	17	4	11	1	3	11	3	4	1	
Wash. Oreg.	2 1	- 1	- 1	:		•	5 3	- N	1	-	-	-	-	-	-	
Calif.	-	-	-	-		39	8	N 4	N 10	1	3	6	1	2	1	
Alaska Hawaii	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Guam			-		-	-	1		-	-	-	5	2	2	-	
P.R.	-	U -	-	U	-	-	-	U -	-	U 1	1	2	U	-		
V.I. Amer. Samoa	-	Ū	-		-	-	-		1	-	-	-		-	-	
	-	0	-	υ	-	-	-	U	-	υ	-	-	U	-		

# TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending January 11, 1992, and January 12, 1991 (2nd Week)

\*For measles only, imported cases includes both out-of-state and international importations. N: Not notifiable U: Unavailable <sup>†</sup>International <sup>§</sup>Out-of-state

Reporting Area	Sy (Primary 8	philis k Secondary)	Toxic- shock Syndrome	Tuber	culosis	Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal	
	Cum. 1992	Cum. 1991	Cum. 1992	Cum. 1992	Cum. 1991	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992	
UNITED STATES	975	1,238	5	557	524	3	3	3	137	
NEW ENGLAND	16	43	2	79	7	-		-	17	
Maine N.H.	-		- 1	-	:	:	-	-		
Vt.	-	-	-	-	-	-	-	-	-	
Mass. R.I.	5 1	27	1	79	2		-	-		
Conn.	10	16	-	-	5	-	-	-	17	
MID. ATLANTIC	69	307	1	88	105	-	1	-	41	
Upstate N.Y. N.Y. City	45	150	-	83	86		-	-	-	
N.J.	6	51	-	-	13	-	1	-	24 17	
Pa.	18	106	1	5	6	-	-	-		
E.N. CENTRAL Ohio	110 24	169	-	17 5	64 27	-	-	-	3	
Ind.	16	6	-	1	1	-	-	-	•	
III. Malada	11 59	126 10	-	9	35	-	-	-	1	
Mich. Wis.		27	-	2	1	-	-	-	2	
W.N. CENTRAL	22	21	-	3	9		-	-	15	
Minn.		3	-	2	-	-	-	-	2	
lowa Mo	21	1 17	-	1	6	-	-	-	6	
Mo. N. Dak.	21	···-	-	-	3	-	-	-	-	
S. Dak.	-	-	-	-	-	-	-	-	-	
Nebr. Kans.	1	-	-	-			-	-	7	
S. ATLANTIC	425	352	1	78	20	-	-	-	38	
Del.	6	2	-	-	-	-	-	• .	8	
Md. D.C.	188 53	31 29	-	28 3	3 3	-	-	-	13	
Va.	26	14	-	-	-	-	-	-	5	
W. Va.	2	32	- 1	3 6	5	•	-	-	2	
N.C. S.C.	41 22	32	-	6	9		-	-	2	
Ga.	43	88	-	-	•	•	-	-	8	
Fla.	44	119	-	32			-	-	-	
E.S. CENTRAL	88 5	43 1		14 5	25	1 1	-	-	-	
Ky. Tenn.	18	4	-	-	-	-	-	-	-	
Ala.	12	20	-	5 4	16 9	-	-	-	-	
Miss.	53	18	-		3		-		-	
W.S. CENTRAL Ark.	197	135 9	-	-		2 1	-	3 2	8	
La.	77	70	-	-	-	-	-	-		
Okla.	6	4 52	-	:	-	1		1	8	
Tex.	114			4	36				5	
MOUNTAIN Mont.	30	28	1	4	- 30	-		-	1	
Idaho	-	-	-	-	-	-	-	-	-	
Wyo. Colo.	2	1 2	-	-	6	-	-	-	4	
N. Mex.	2	-	-	-	-	-	-	-	-	
Ariz.	5	25	1	:	20 10	-	-	-	-	
Utah Nev.	21	-	-	4	-	-	-	-	-	
PACIFIC	18	140	-	274	258		2	-	10	
Wash.	-	8	-	5	5	-		-	-	
Oreg. Calif.	1 17	131	-	5 263	247	-	2	-	10	
Alaska		131	-	203	1	-	-	-	-	
Hawaii	-	-	-	1	5	-	-	-	-	
Guam	-	-	-	-	-	-	-	-	-	
P.R. V.I.	5	·-	-	-	-	-	-	-	-	
Amer. Samoa	-	-	-	-	-	•	-	-		
C.N.M.I.	-	-	-	-	3	-	-			

# TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending January 11, 1992, and January 12, 1991 (2nd Week)

U: Unavailable

TABLE III.	Deaths in 121 U	.S. cities,*	week ending
	January 11, 199	2 (2nd We	ek)

All C		All Ca	uses, B	y Age	(Years)		P&I <sup>†</sup>	[	T	All Cau	ises, B	y Age	Years)		P&I <sup>†</sup>
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND	839	613		59	19	18	74	S. ATLANTIC	1,803	1,142	374	201	51	34	127
Boston, Mass.	248	158		23	5	12	17	Atlanta, Ga.	217	131			5	-	14
Bridgeport, Conn. Cambridge, Mass.	60 40	47 34	6 3	3	2	2	7 3	Baltimore, Md. Charlotte, N.C.	359 127	222 91				6 2	35 5
Fall River, Mass.	35	27	5	3	-	-	1	Jacksonville, Fla.	169	111		19		1	24
Hartford, Conn.	65	40		9	3	1	5	Miami, Fla.	103	64	19	11	4	5	1
Lowell, Mass. Lynn, Mass.	34 23	27 20	5 2	1	1	•	2	Norfolk, Va. Richmond, Va.	82 130	51 79				3	6
New Bedford, Mass.	29	21	5	2	-	1	2	Savannah, Ga.	64	41				1	5 1
New Haven, Conn.	75	60	7	5	3	-	6	St. Petersburg, Fla.	101	83	8	6		ī	3
Providence, R.I. Somerville, Mass.	34 13	27 12	4	1	2	-	2 1	Tampa, Fla.	230	147				2	24
Springfield, Mass.	66	51		4		1	10	Washington, D.C. Wilmington, Del.	200 21	106 16				11	9
Waterbury, Conn.	43	33	5	3	2	-	5	E.S. CENTRAL	875	591				18	67
Worcester, Mass.	74	56	15	1	1	1	13	Birmingham, Ala.	151	99				3	4
MID. ATLANTIC	1,312	908		109	30	29	110	Chattanooga, Tenn.		74	17	7	2	2	12
Albany, N.Y. Allentown, Pa.	68 32	48 27	9 5	5	3	3	11 3	Knoxville, Tenn. Louisville, Ky.	84 121	62 82		5 9		÷	8
Buffalo, N.Y.	104	71	23	5	3	2	5	Memphis, Tenn.	127	73				5 4	9 8
Camden, N.J.	85	59		8	4	3	5	Mobile, Ala.	45	37	4	3	1	-	8
Elizabeth, N.J. Erie, Pa.§	25 45	20 34		3 2	-	2	2 5	Montgomery, Ala.	57	40				:	
Jersey City, N.J.	92	56		19	2	3	7	Nashville, Tenn.	188	124				4	18
New York City, N.Y.	U	U	U	U	U	υ	U	W.S. CENTRAL Austin, Tex.	1,829 65	1,171 39			46 2	45 1	117 6
Newark, N.J. Paterson, N.J.	84 39	38 21	20 10	14 7	6 1	6	7	Baton Rouge, La.	84	58				1	3
Philadelphia, Pa.	198	131	41	20	5	1	12	Corpus Christi, Tex.		44		4	ī	4	4
Pittsburgh, Pa.§	76	52	16	7	-	1	5	Dallas, Tex. El Paso, Tex.	261 104	169 70				6	12
Reading, Pa.	46 144	41	4	1	-	;	15	Ft. Worth, Tex.	104	99				1	7 10
Rochester, N.Y. Schenectady, N.Y.	33	99 27	30 5	10	1	4	8 2	Houston, Tex.	420	262	88	48		13	40
Scranton, Pa.§	53	45	4	3	1	-	8	Little Rock, Ark.	88	48 85				3	4
Syracuse, N.Y.	90	68		2	1	1	8	New Orleans, La. San Antonio, Tex.	125 302	191				4	19
Trenton, N.J. Utica, N.Y.	43 23	29 19	10 4	1	2	1	3 2	Shreveport, La.	39	20	8	10		í	3
Yonkers, N.Y.	32	23		2	-	2	2	Tulsa, Okla.	120	86	5 22	10	1	1	9
E.N. CENTRAL	2,843	1,856	504	288	127	68	194	MOUNTAIN	949	627	188			22	78
Akron, Ohio	77	54	13	5	2	3	-	Albuquerque, N.M. Colo. Springs, Colo.	116 66	82 41	21			1	8 8
Canton, Ohio Chicago, III.	47 501	34 196	9 100	2 123	1 67	1 15	4 26	Denver, Colo.	147	101	23	15		4	19
Cincinnati, Ohio	182	128	37	9	6	2	23	Las Vegas, Nev.	76	38			2	3	6
Cleveland, Ohio	143	92	35	9	4	3	3	Ogden, Utah Phoenix, Ariz.	26 224	23 133				-7	4
Columbus, Ohio Dayton, Ohio	362 150	248 115	71 25	27 9	5	11 1	26 12	Pueblo, Colo.	41	30					3
Detroit, Mich.	329	204		32	22	13	14	Salt Lake City, Utah		42			4	2	7
Evansville, Ind.	62	41	15	5	-	1	3	Tucson, Ariz.	191	137			-	3	19
Fort Wayne, Ind.	94 18	79	8 3	3	2 2	2	6	PACIFIC	2,569	1,771				60	208
Gary, Ind. Grand Rapids, Mich.	72	11 54		2	2	3	16	Berkeley, Calif. Fresno, Calif.	28 104	17 68				3 3	1 6
Indianapolis, Ind.	324	233	56	23	4	8	25	Glendale, Calif.	28	26	; -	- 2		-	ž
Madison, Wis.	21	19	1	1	-	-	-	Honolulu, Hawaii	88	58				2	13
Milwaukee, Wis. Peoria, III.	205 49	162 32	26 11	11 5	4 1	2	24 3	Long Beach, Calif. Los Angeles, Calif.	U 619	U 388				U 7	U 37
Rockford, III.	58	42	6	8	i	1	6	Pasadena, Calif.	57	49					5
South Bend, Ind.	64	48	6	6	3	1	3	Portland, Oreg.	139	107	' 17	6	5	4	11
Toledo, Ohio Youngstown, Ohio	U 85	U 64	U 13	U 6	U 1	U 1	U	Sacramento, Calif.	283 299	206 210				.9	28 36
W.N. CENTRAL	1.048						-	San Diego, Calif. San Francisco, Calif.		149				12 4	13
Des Moines, Iowa	29	772 24	156 4	64 1	32	24	78 3	San Jose, Calif.	276	210	40	16		5	33
Duluth, Minn.	59	48	7	ż	1	1	5	Santa Cruz, Calif.	41	33				-	10
Kansas City, Kans.	26	13	10	3	:	-	1	Seattle, Wash. Spokane, Wash.	190 60	131 46				7 3	6 3
Kansas City, Mo. Lincoln, Nebr.	121 46	95 37	16 5	7	2 1	1	9 3	Tacoma, Wash.	102	73				1	4
Minneapolis, Minn.	273	211	38	9	9	6	28	TOTAL	14,067 <sup>¶</sup>	9,451	2,578	1,274			1,053
Omaha, Nebr.	123	90	21	8	2	2	15		,	-,	_,	.,		510	.,
St. Louis, Mo.	216 75	147 57	35 9	17	6	11	- 9								
St. Paul, Minn. Wichita, Kans.	80	57	11	1 13	5 6	3	9 5								

\*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.

Included. Phenemonia and influenza. §Because of changes in reporting methods in these 3 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. U: Unavailable

## Malignant Melanoma - Continued

(i.e., a possible predisposition toward a more aggressive form of the disease) (7), and gender differences in anatomic sites of malignant melanomas and self-discovery patterns. Specifically, back lesions, which may be more difficult to discover by self-inspection, are more prevalent among men (8). In addition, men may be less likely to discover melanoma on themselves than women (9). These findings may, in part, account for a higher percentage of men with more advanced melanomas than women (14% versus 10% regional and distant disease, respectively, p < 0.0001) (4) and a worse prognosis for back lesions for men than for women (8). These sex-specific differences should be considered in planning improved strategies to control and prevent melanomas.

Because skin cancer is external and visible, efforts to increase public and professional education about the early detection of melanomas may help to reduce mortality among groups at highest risk. For example, free screening programs sponsored by the American Academy of Dermatology have examined approximately 500,000 persons for melanoma and other skin cancers (American Academy of Dermatology, unpublished data, 1992). However, men have constituted only one third of all attendees, of whom only 15% were aged ≥65 years.

Additional measures for physicians and other health-care providers include examination of the back and other anatomic sites that are difficult for patients to self-inspect for pigmented lesions. Also, physicians should indicate on patients' medical records an assessment of factors such as "changing moles," "higher than average number of moles," and "family history of melanoma" as a prompt for rapid, noninvasive visual examinations for skin cancer.

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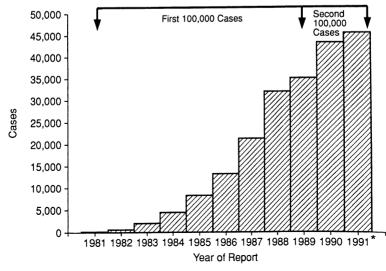
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## The Second 100,000 Cases of Acquired Immunodeficiency Syndrome – United States, June 1981–December 1991

The first cases of acquired immunodeficiency syndrome (AIDS) were reported in June 1981 (1). From 1981 through December 1987, 50,000 AIDS cases had been reported to CDC, and by August 1989, 100,000 cases had been reported (2). From September 1989 through November 1991, state and territorial health departments reported 100,000 additional cases. By December 31, 1991, a cumulative total of 206,392 cases had been reported (Figure 1), and the cumulative number of reported deaths associated with AIDS was 133,232. This report presents characteristics of the first and second 100,000 persons with AIDS.

Overall, most reported AIDS cases occurred among homosexual/bisexual men (i.e., men who reported sexual contact with other men) (59%) and injecting-drug users (IDUs) (22%). Of the first 100,000 reported AIDS cases, 61% occurred among homosexual/bisexual men with no history of IDU, and 20%, among female or heterosexual male IDUs. In comparison, of the second 100,000 reported cases, 55% occurred among homosexual/bisexual men with no history of IDU, and 24% occurred among female or heterosexual male IDUs.

The second 100,000 cases reflect an increasing proportion of persons with AIDS who have been reported to have had heterosexual exposure to persons at risk for human immunodeficiency virus (HIV) infection. Of the first 100,000 persons with AIDS, 5% were attributed to heterosexual transmission, compared with 7% among the second 100,000-a 44% increase. Of all AIDS cases among women, 34% were attributed to heterosexual transmission, and women accounted for 61% of all cases attributed to heterosexual transmission. Of the first 100,000 persons with AIDS, 9% were women, compared with 12% of the second 100,000 persons. The first 100,000



## FIGURE 1. AIDS cases, by year of report - United States, 1981-1991

\*Cases reported through December 1991.

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## Acquired Immunodeficiency Syndrome – Continued

persons with AIDS included 1683 children, of whom 81% were born to mothers with or at risk for HIV infection; the second 100,000 persons with AIDS included 1702 children, of whom 87% were born to mothers with or at risk for HIV infection.

A disproportionate number of AIDS cases continue to be reported among blacks and Hispanics. Of the first 100,000 reported cases, 27% occurred among blacks and 15% among Hispanics; of the second 100,000 reported cases, these proportions increased to 31% and 17% for blacks and Hispanics, respectively.

The proportion of AIDS cases related to transfusions as a mode of exposure declined in both adults (2.5% to 1.9%) and children (11% to 5.6%) from the first to the second 100,000 cases.

## Reported by: Surveillance Br, Div of HIV/AIDS, National Center for Infectious Diseases, CDC.

**Editorial Note:** The cumulative total of more than 200,000 reported AIDS cases emphasizes the rapidly increasing magnitude of the HIV epidemic in the United States. The first 100,000 cases were reported during an 8-year period, whereas the second 100,000 cases were reported during a 2-year period.

The number and proportion of AIDS cases associated with heterosexual transmission of HIV has been increasing steadily. Factors associated with an increased risk for heterosexual transmission include multiple sex partners and the presence of other sexually transmitted diseases. In the United States, men and women who have unprotected sexual contact, particularly with partners known to have risks for HIV infection, are at increased risk for HIV infection. A recent analysis of expected trends in AIDS cases in the United States suggests that by 1995, the infection rate among nondrug-using heterosexual men and women may be associated with a doubling of AIDS cases acquired through heterosexual transmission (*3*).

Of the estimated 1 million HIV-infected persons in the United States, approximately 20% have developed AIDS. Approximately half of all persons who have been diagnosed with HIV infection and who have evidence of severe immunosuppression (i.e., CD4 + counts <200 cells/µL) meet the current AIDS surveillance case definition (4). Approximately 125,000 persons who do not have an AIDS-defining illness are estimated to have a CD4 + lymphocyte count <200 cells/µL (CDC, unpublished data). CDC has proposed expanding the AIDS surveillance case definition to facilitate more complete reporting of all persons with severe HIV-related immunosuppression and who are at the highest risk for developing serious illnesses or death\* (5).

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<sup>\*</sup>The draft document is available for review from the National AIDS Clearinghouse, P.O. Box 6003, Rockville, MD 20849-6003; telephone (800) 458-5231. Written comments on this draft document should be sent to the same address by February 14, 1992.

## Notices to Readers

# Special Reports on Awareness of AIDS and HIV Among Racial and Ethnic Minority Groups

CDC's National Center for Health Statistics (NCHS) has released two special reports examining the awareness of acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) among blacks and Hispanics in the United States. The reports, based on data collected in 1990, describe various aspects of AIDS-related knowledge and HIV-antibody testing experience. Differentials by age, sex, and educa tion are compared with those from the non-Hispanic white population.

Copies of the reports, AIDS Knowledge and Attitudes of Black Americans: United States, 1990 (1) and AIDS Knowledge and Attitudes of Hispanic Americans: United States, 1990 (2), are available free of charge from the Scientific and Technical Information Branch, NCHS, CDC, Room 1064, 6525 Belcrest Road, Hyattsville, MD 20782; telephone (301) 436-8500.

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# Frontline Health-Care Workers: A National Conference on Device-Mediated Bloodborne Infections

CDC, the Food and Drug Administration, and the Occupational Safety and Health Administration will cosponsor "Frontline Health-Care Workers: A National Conference on Device-Mediated Bloodborne Infections" in Washington, D.C., August 17–19, 1992. The meeting will 1) focus attention on sharp-instrument injuries and performance safety of medical devices and instruments; 2) bring together device manufacturers and user/purchaser(s) to facilitate understanding of needs and interventions pertaining to device-mediated infections; and 3) facilitate private-sector initiatives for technology advancement, including the development of infection-prevention devices and strategies.

Additional information is available from Laura Timperio, PACE Enterprises, Inc., 17 Executive Park Drive, Suite 200, Atlanta, GA 30329; telephone (404) 633-8610; fax (404) 633-8745.

# 27th Annual Meeting of the Public Health Service Professional Association

The 27th Annual Meeting of the Public Health Service (PHS) Professional Association will be held in Cincinnati, Ohio, April 25–28, 1992. The theme for this meeting, "Prevention, Health Promotion, and Care: In the Home, the Workplace, and the Environment," illustrates the impact of the PHS on all facets of improving, promoting,

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## Notices to Readers - Continued

and ensuring the health of persons in the United States. Topics for the general sessions include environmental clean-up, worker safety and health, women's and children's health, reproductive issues, health-care financing, and quality and access to health care.

Additional information is available from Laurie Johnson, Commissioned Officers Association, 1400 Eye St., N.W., Suite 725, Washington, DC 20005; telephone (202) 289-6400.

# Fifth National Forum on AIDS, Hepatitis, and Other Bloodborne Diseases

The National Foundation for Infectious Diseases, in collaboration with CDC and the National Institute of Allergy and Infectious Diseases, will cosponsor the Fifth National Forum on AIDS, Hepatitis, and Other Bloodborne Diseases March 29–April 1, 1992, in Atlanta. The forum will emphasize the integration of scientific knowledge with public and health-care policy in three major areas: 1) epidemiology of bloodborne diseases and their agents; 2) occupational and patient safety – risk assessment and prevention of bloodborne diseases.

Additional information is available from the forum secretariat: SYMEDCO, Two Research Way, Princeton, NJ 08540; telephone (609) 452-7100, ext. 287; fax (609) 452-1564.

## Erratum: Vol. 40, No. RR-14

In the *MMWR Recommendations and Reports* (No. RR-14) dated December 13, 1991, the title for Neal A. Halsey that appeared in the membership section of the Immunization Practices Advisory Committee (ACIP) was incorrect. The entry should read: Neal A. Halsey, M.D., Professor, Department of Pediatrics, Johns Hopkins University School of Medicine.

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Director, Centers for Disease Control William L. Roper, M.D., M.P.H.	Editor, <i>MMWR</i> Series Richard A. Goodman, M.D., M.P.H.
Director, Epidemiology Program Office Stephen B. Thacker, M.D., M.Sc.	Managing Editor, <i>MMWR</i> (Weekly) Karen L. Foster, M.A.

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