

HIVAIDS

Surveillance Supplemental Report

===== Volume 8, Number 1 =====

Deaths among Persons with AIDS through December 2000



DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
Atlanta, Georgia 30333



The *HIV/AIDS Surveillance Supplemental Report* is published by the Surveillance Branch of the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention, Centers for Disease Control and Prevention (CDC). This report describes deaths among persons with AIDS and HIV-related deaths through the end of 2000. All data in this report are provisional.

Suggested Citation: Centers for Disease Control and Prevention. Deaths among Persons with AIDS through December 2000, *HIV/AIDS Surveillance Supplemental Report*, 2002;8(No. 1):[inclusive

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Commentary

By the end of 2000, over 450,000 deaths among persons with AIDS in the United States and territories had been reported to the Centers for Disease Control and Prevention. This report describes deaths among persons with AIDS, by year of death, age group, geographic area, exposure category, and race/ethnicity. Deaths among persons with AIDS can be attributable to any cause of death, not necessarily HIV-related disease. This report also includes death certificate data collected by the National Center for Health Statistics on the leading causes of death, including HIV disease in the general population.

The number of deaths in persons with AIDS increased each year from the beginning of the epidemic until 1995, reflecting the increase in incidence through the 1980s and early 1990s. Declines in the number of deaths in 1996 and 1997 were considerably greater than expected if based only on the decrease in incidence. The introduction of highly active antiretroviral therapy (HAART) in 1996 had a dramatic effect on the survival time of persons with HIV infection and AIDS (figures 1 and 2), resulting in large increases in the number of persons living with HIV and AIDS. Decreases over the past several years in the number of deaths among persons with HIV and AIDS are evident in all geographic and demographic groups in the United States.

The decrease in the number of deaths among persons with AIDS was first evident in 1994 among whites and Asian/Pacific Islanders and the following year among all other racial/ethnic groups (figures 4 and 5), and both men and women (figure 6). Declines in deaths somewhat reflect differential declines in AIDS incidence among persons in the different exposure categories. Stratified by category of exposure to HIV (figure 8), the number of reported deaths first began to decrease in 1990 among persons exposed through blood transfusions, blood components, or tissue, followed by decreases in 1994 among men exposed through receipt of clotting factor. In 1995 and 1996 decreases in deaths were seen among persons with AIDS exposed through heterosexual contact.

Deaths in states in the West and U.S. territories began to decrease one year before those in the other regions (figure 9).

Data from the National Vital Statistics System show that from 1992 through 1995, HIV infection was the eighth leading cause of death among all persons in the United States. In 2000, HIV infection was the 18th leading cause of death. In selected demographic groups, HIV remains a high ranking cause of death. Among persons 25-44 years old, HIV was the most common cause of death in 1994 and 1995. In 2000, it was the 5th leading cause of death, after unintentional injury, cancer, heart disease, and suicide in this age group (figure 10).

Despite overall declines in mortality among persons with HIV/AIDS, mortality rates vary by region and race (table 3) and age group and race (table 6). Addressing disparities in care, preventing secondary transmission, and meeting the social and medical needs of persons living with HIV or AIDS remain public health challenges.

Additional reading:

Fleming PL, Ward JW, Karon JM, Hanson DL, DeCock KM. Declines in AIDS incidence and deaths in the USA: a signal change in the epidemic. *AIDS*. 1998;112(supp A):S55-S61.

Karon JM, Fleming PL, Steketee RW, De Cock KM. HIV in the United States at the turn of the century: an epidemic in transition. *Am J Public Health*. 2001;91:1060-1068.

Lee LM, Karon JM, Selik R, Neal JJ, Fleming PL. Survival after AIDS diagnosis in adolescents and adults during the treatment era, United States, 1984-1997. *JAMA*. 2001;285:1308-15.

Public use slides on mortality among persons with HIV/AIDS are available at: www.cdc.gov/hiv/graphics/mortalit.htm

Information about cause-of-death data from death certificates is available at:

www.cdc.gov/nchs/about/major/dvs/mortdata.htm

Figure 1. Proportion of AIDS patients surviving at least 1 year after diagnosis of their first AIDS-defining opportunistic illness, by year of diagnosis of opportunistic illness, 1984–2000, United States

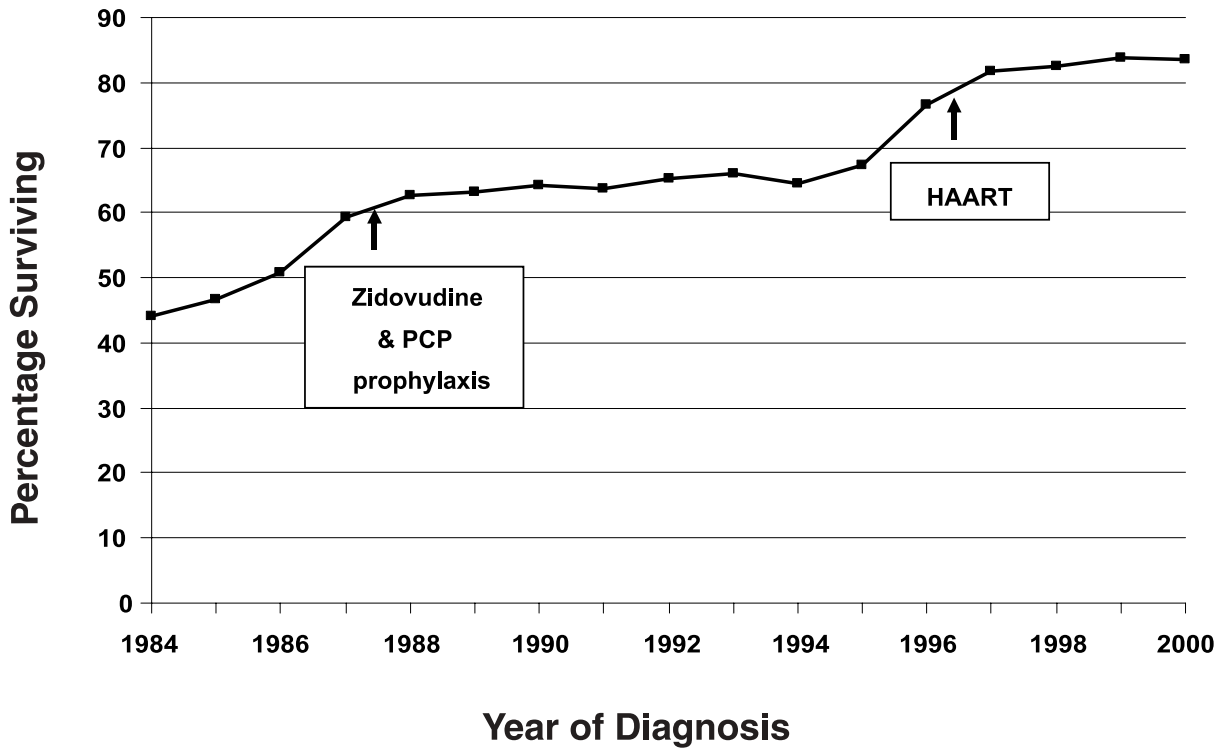


Figure 2. Cumulative proportion of AIDS patients surviving, by number of months after diagnosis of first AIDS-defining opportunistic illness, for different years of diagnosis, 1984–2000, United States

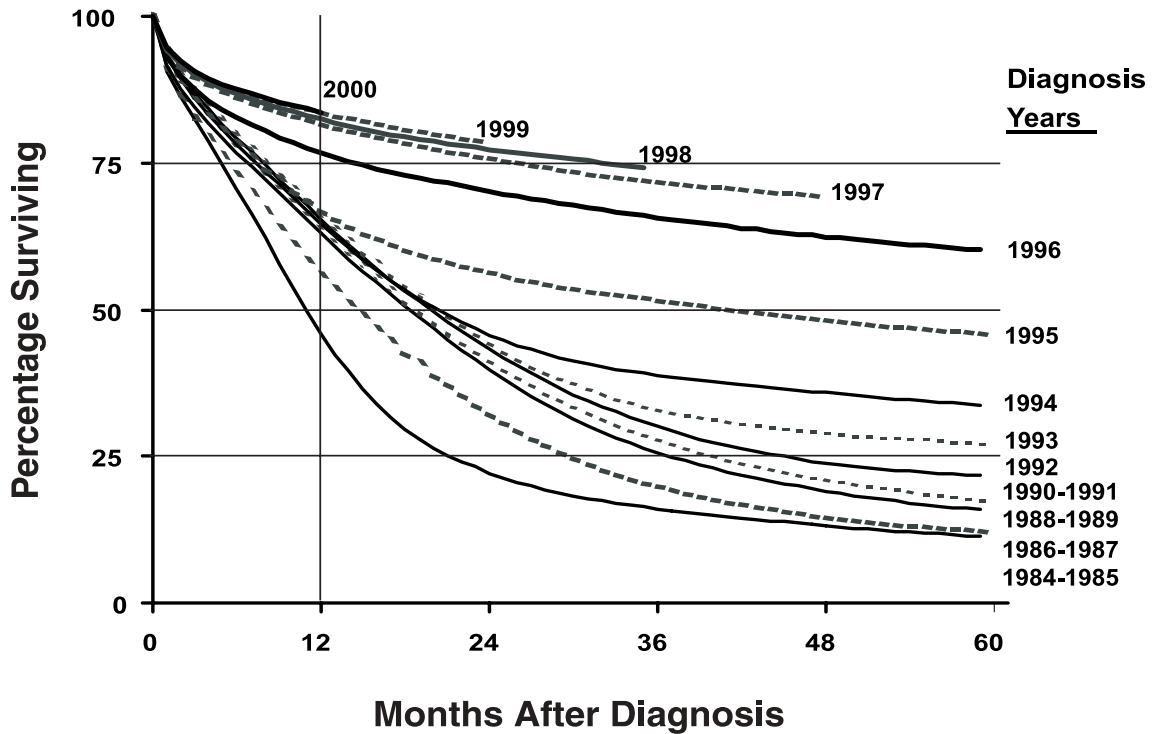


Table 1. AIDS cases reported through December 2000 by age at diagnosis, and persons reported to be living with AIDS as of December 2000¹, by area of residence at AIDS diagnosis, United States

Area of residence	AIDS cases by age at diagnosis			Persons living with AIDS ² by age as of December 2000		
	Adults/adolescents	Children <13 years old	Total ³	Adults/adolescents	Children <13 years old	Total ⁴
Alabama	6,196	72	6,268	3,076	17	3,093
Alaska	472	5	477	221	1	222
Arizona	7,389	39	7,428	3,153	8	3,161
Arkansas	2,939	38	2,977	1,606	20	1,626
California	119,021	607	119,628	42,331	153	42,484
Colorado	7,066	29	7,095	2,893	1	2,894
Connecticut	11,386	176	11,562	5,678	58	5,736
Delaware	2,558	22	2,580	1,158	13	1,171
District of Columbia	12,930	171	13,101	6,314	82	6,396
Florida	78,830	1,401	80,231	34,306	466	34,772
Georgia	22,608	212	22,820	9,898	85	9,983
Hawaii	2,445	16	2,461	977	5	982
Idaho	495	2	497	220	0	220
Illinois	24,732	269	25,001	9,545	106	9,651
Indiana	6,097	41	6,138	2,622	13	2,635
Iowa	1,307	9	1,316	562	4	566
Kansas	2,354	12	2,366	964	2	966
Kentucky	3,317	26	3,343	1,594	14	1,608
Louisiana	12,493	125	12,618	5,256	48	5,304
Maine	947	9	956	439	5	444
Maryland	21,380	301	21,681	9,693	129	9,822
Massachusetts	16,045	206	16,251	6,687	57	6,744
Michigan	11,207	107	11,314	4,417	23	4,440
Minnesota	3,739	23	3,762	1,604	9	1,613
Mississippi	4,406	55	4,461	2,031	23	2,054
Missouri	9,154	57	9,211	4,193	16	4,209
Montana	323	3	326	164	0	164
Nebraska	1,084	10	1,094	467	4	471
Nevada	4,386	27	4,413	2,038	10	2,048
New Hampshire	871	9	880	474	4	478
New Jersey	41,317	748	42,065	14,432	182	14,614
New Mexico	2,037	8	2,045	937	6	943
New York	139,634	2,241	141,875	52,164	499	52,663
North Carolina	10,295	116	10,411	4,483	37	4,520
North Dakota	106	1	107	43	1	44
Ohio	11,253	121	11,374	4,431	36	4,467
Oklahoma	3,762	26	3,788	1,546	6	1,552
Oregon	4,781	17	4,798	2,008	5	2,013
Pennsylvania	24,243	325	24,568	11,042	152	11,194
Rhode Island	2,032	21	2,053	876	6	882
South Carolina	9,428	79	9,507	4,605	25	4,630
South Dakota	162	4	166	69	1	70
Tennessee	8,513	52	8,565	4,589	17	4,606
Texas	53,537	380	53,917	22,864	123	22,987
Utah	1,952	21	1,973	977	3	980
Vermont	397	6	403	193	2	195
Virginia	12,899	169	13,068	5,668	69	5,737
Washington	9,443	35	9,478	4,004	11	4,015
West Virginia	1,068	9	1,077	453	4	457
Wisconsin	3,547	29	3,576	1,510	11	1,521
Wyoming	184	3	187	75	2	77
U.S. dependencies, possessions, and associated nations						
Guam	46	0	46	22	0	22
Pacific Islands, U.S.	4	0	4	2	0	2
Puerto Rico	24,491	388	24,879	8,809	88	8,897
Virgin Islands, U.S.	466	17	483	212	6	218
Total	764,439	8,902	773,341	310,972	2,674	313,646

¹Data reported through June 30, 2001.

²Persons reported with vital status "alive" as of the last update. Excludes persons whose vital status is unknown.

³Includes 672 persons whose area of residence at AIDS diagnosis is unknown.

⁴Includes 383 persons whose area of residence at AIDS diagnosis is unknown.

Table 2. Estimated¹ number of deaths in persons with AIDS and death rates per 100,000 population in 2000, and cumulative deaths through December 2000, by age and area of residence at death, United States

Area of residence	Deaths in 2000 by age at death				Cumulative deaths through 2000 by age at death		
	Adults/ adolescents	Children <13 years old	Total ²	Death rate per 100,000	Adults/ adolescents	Children <13 years old	Total ³
Alabama	177	2	180	4.0	3,335	46	3,380
Alaska	3	0	3	0.5	255	3	258
Arizona	129	2	131	2.5	4,482	26	4,509
Arkansas	21	0	21	0.8	1,421	15	1,436
California	1,538	2	1,540	4.5	71,974	336	72,310
Colorado	113	0	113	2.6	4,059	20	4,079
Connecticut	160	0	160	4.7	5,836	96	5,932
Delaware	90	0	90	11.5	1,384	10	1,394
District of Columbia	150	2	152	26.6	7,619	110	7,729
Florida	2,101	9	2,110	13.2	43,683	751	44,434
Georgia	636	1	638	7.8	13,062	111	13,173
Hawaii	33	1	34	2.8	1,524	8	1,532
Idaho	11	0	11	0.8	308	2	310
Illinois	504	2	506	4.1	15,409	127	15,536
Indiana	117	0	117	1.9	3,593	20	3,613
Iowa	31	0	31	1.1	884	6	890
Kansas	30	0	30	1.1	1,433	6	1,439
Kentucky	55	0	55	1.4	1,894	8	1,902
Louisiana	361	1	362	8.1	7,643	63	7,706
Maine	8	0	8	0.6	592	1	593
Maryland	607	0	607	11.5	11,062	120	11,183
Massachusetts	169	3	171	2.7	8,980	116	9,096
Michigan	301	0	301	3.0	7,059	68	7,128
Minnesota	77	0	77	1.6	2,235	11	2,246
Mississippi	174	0	174	6.1	2,497	27	2,524
Missouri	181	0	181	3.2	5,079	38	5,117
Montana	4	0	4	0.4	195	5	200
Nebraska	30	0	30	1.8	679	5	684
Nevada	131	0	131	6.5	2,382	15	2,397
New Hampshire	10	0	10	0.8	468	5	473
New Jersey	1,002	6	1,007	12.0	26,272	433	26,705
New Mexico	41	0	41	2.3	1,150	1	1,151
New York	2,216	7	2,223	11.7	87,377	1,388	88,766
North Carolina	309	1	311	3.9	6,390	72	6,462
North Dakota	9	0	9	1.3	96	0	96
Ohio	137	0	137	1.2	7,444	70	7,515
Oklahoma	71	0	71	2.1	2,316	16	2,332
Oregon	92	0	92	2.7	3,019	8	3,027
Pennsylvania	388	1	389	3.2	13,882	141	14,024
Rhode Island	51	0	51	4.8	1,189	13	1,202
South Carolina	249	0	249	6.2	5,001	48	5,050
South Dakota	5	0	5	0.7	132	2	134
Tennessee	255	1	256	4.5	4,202	33	4,235
Texas	1,050	2	1,052	5.0	30,970	211	31,181
Utah	39	0	39	1.7	1,017	13	1,030
Vermont	4	0	4	0.7	234	4	238
Virginia	401	1	402	5.7	7,254	59	7,313
Washington	121	1	122	2.1	5,261	15	5,276
West Virginia	26	0	26	1.4	738	5	743
Wisconsin	101	0	101	1.9	2,196	18	2,214
Wyoming	5	0	5	1.0	100	0	100
U.S. dependencies, possessions and associated nations							
Guam	0	0	0	0.0	29	0	29
Pacific Islands, U.S.	0	0	0	0.0	5	0	5
Puerto Rico	693	5	698	18.3	16,727	213	16,940
Virgin Islands, U.S.	5	0	5	0.0	241	7	248
Total	15,237	51	15,288		454,562	4,956	459,518

¹Data are adjusted for delays in the reporting of cases and deaths.

²Includes 16 cases whose area of residence at death and diagnosis is a foreign country or unknown; totals may not equal the sum of the rows or columns due to rounding.

³Includes 298 cases whose area of residence at death and diagnosis is a foreign country or unknown; totals may not equal the sum of the rows or columns due to rounding.

Table 3. Estimated¹ number of deaths in adults/adolescents with AIDS and death rates per 100,000 population in 1999, and cumulative deaths through December 2000, by division of residence at death and race/ethnicity, United States

Division of residence	Race/ethnicity	Deaths in 1999 ²	Death rate/100,000 ³	Cumulative deaths through 2000 ⁴
New England	White	266	2.49	9,967
	Black	141	26.14	4,573
	Hispanic	138	23.23	2,629
	Asian/Pacific Islander	2	—	45
	American Indian/Alaska Native	3	—	40
Mid-Atlantic	White	802	3.21	40,278
	Black	2,573	63.06	57,018
	Hispanic	1,075	32.88	29,412
	Asian/Pacific Islander	21	1.54	599
	American Indian/Alaska Native	0	—	49
East North Central	White	463	1.44	19,097
	Black	750	17.57	14,207
	Hispanic	84	5.29	2,191
	Asian/Pacific Islander	4	—	112
	American Indian/Alaska Native	1	—	68
West North Central	White	240	1.61	7,926
	Black	115	13.67	2,115
	Hispanic	17	4.64	342
	Asian/Pacific Islander	2	—	30
	American Indian/Alaska Native	8	4.81	116
South Atlantic	White	1,091	3.48	35,894
	Black	3,252	36.46	52,633
	Hispanic	286	10.20	7,310
	Asian/Pacific Islander	15	1.58	179
	American Indian/Alaska Native	4	—	111
East South Central	White	203	1.75	6,383
	Black	386	14.02	5,431
	Hispanic	2	—	85
	Asian/Pacific Islander	1	—	15
	American Indian/Alaska Native	0	—	7
West South Central	White	672	4.04	24,610
	Black	754	20.99	11,959
	Hispanic	241	4.94	5,464
	Asian/Pacific Islander	5	0.80	101
	American Indian/Alaska Native	9	2.59	180
Mountain	White	296	2.56	10,232
	Black	78	18.86	1,180
	Hispanic	137	5.24	1,976
	Asian/Pacific Islander	5	1.47	70
	American Indian/Alaska Native	22	4.82	219
Pacific	White	1,189	5.25	54,960
	Black	451	20.87	11,895
	Hispanic	452	5.10	12,689
	Asian/Pacific Islander	56	1.33	1,902
	American Indian/Alaska Native	26	6.86	449
Puerto Rico and territories ⁵	White	2	—	87
	Black	11	—	181
	Hispanic	704	—	16,698
	Asian/Pacific Islander	2	—	24
	American Indian/Alaska Native	0	—	0

¹Data are adjusted for delays in the reporting of cases and deaths.

²Eleven persons reported with a foreign country or unknown area of death and 9 persons missing race/ethnicity data have been excluded.

³Rates are not presented for subpopulations with fewer than 5 cases.

⁴294 persons reported with a foreign country or unknown area of death and 252 persons missing race/ethnicity data have been excluded.

⁵Race-specific denominators are not available for Puerto Rico and U.S. territories.

Table 4. Estimated¹ number of deaths in adults/adolescents with AIDS, by sex, exposure category, and division of residence at death², for cumulative deaths through December 2000, and deaths in 2000, United States

Division of residence	Exposure category ³	Male			Female		
		Deaths through 2000	(%)	Deaths in 2000	Deaths through 2000	(%)	Deaths in 2000
New England	MSM	7,226	(51)	77	—	—	—
	IDU	4,918	(35)	165	1,757	(57)	75
	MSM-IDU	817	(6)	24	—	—	—
	Hemophilia/coagulation disorder	207	(1)	5	9	(0)	0
	Heterosexual contact	676	(5)	20	1,136	(37)	29
	Receipt of blood transfusion, blood components, or tissue	153	(1)	1	116	(4)	0
	Risk not reported or identified	185	(1)	0	75	(2)	1
Mid-Atlantic	MSM	43,359	(43)	678	—	—	—
	IDU	45,338	(45)	1,353	16,102	(60)	635
	MSM-IDU	6,009	(6)	131	—	—	—
	Hemophilia/coagulation disorder	706	(1)	16	163	(1)	10
	Heterosexual contact	3,829	(4)	280	9,824	(37)	456
	Receipt of blood transfusion, blood components, or tissue	660	(1)	10	549	(2)	20
	Risk not reported or identified	623	(1)	7	280	(1)	1
East North Central	MSM	22,125	(70)	532	—	—	—
	IDU	5,239	(17)	207	2,032	(51)	117
	MSM-IDU	2,478	(8)	110	—	—	—
	Hemophilia/coagulation disorder	536	(2)	14	7	(0)	0
	Heterosexual contact	905	(3)	43	1,686	(42)	120
	Receipt of blood transfusion, blood components, or tissue	293	(1)	7	214	(5)	4
	Risk not reported or identified	123	(0)	2	38	(1)	3
West North Central	MSM	7,537	(77)	204	—	—	—
	IDU	734	(8)	37	220	(29)	15
	MSM-IDU	899	(9)	44	—	—	—
	Hemophilia/coagulation disorder	267	(3)	9	2	(0)	0
	Heterosexual contact	186	(2)	14	435	(57)	35
	Receipt of blood transfusion, blood components, or tissue	109	(1)	2	88	(12)	0
	Risk not reported or identified	41	(0)	1	15	(2)	0
South Atlantic	MSM	47,086	(60)	1,587	—	—	—
	IDU	16,933	(21)	880	7,125	(42)	453
	MSM-IDU	6,077	(8)	260	—	—	—
	Hemophilia/coagulation disorder	531	(1)	13	24	(0)	0
	Heterosexual contact	6,681	(8)	514	8,972	(52)	790
	Receipt of blood transfusion, blood components, or tissue	1,083	(1)	32	829	(5)	23
	Risk not reported or identified	576	(1)	7	228	(1)	5
East South Central	MSM	7,073	(68)	291	—	—	—
	IDU	1,207	(12)	86	465	(31)	41
	MSM-IDU	1,057	(10)	53	—	—	—
	Hemophilia/coagulation disorder	196	(2)	5	3	(0)	0
	Heterosexual contact	710	(7)	88	959	(63)	93
	Receipt of blood transfusion, blood components, or tissue	141	(1)	2	91	(6)	1
	Risk not reported or identified	9	(0)	1	9	(1)	0

Table 4. Estimated¹ number of deaths in adults/adolescents with AIDS, by sex, exposure category, and division of residence at death², for cumulative deaths through December 2000, and deaths in 2000, United States — continued

Division of residence	Exposure category ³	Male			Female		
		Deaths through 2000	(%)	Deaths in 2000	Deaths through 2000	(%)	Deaths in 2000
West South Central	MSM	27,402	(71)	697	—	—	—
	IDU	4,487	(12)	248	1,531	(40)	116
	MSM-IDU	4,346	(11)	161	—	—	—
	Hemophilia/coagulation disorder	301	(1)	4	11	(0)	0
	Heterosexual contact	1,410	(4)	110	1,929	(51)	154
	Receipt of blood transfusion, blood components, or tissue	526	(1)	7	295	(8)	4
	Risk not reported or identified	66	(0)	2	23	(1)	1
Mountain	MSM	9,407	(74)	273	—	—	—
	IDU	1,209	(10)	58	460	(46)	29
	MSM-IDU	1,495	(12)	58	—	—	—
	Hemophilia/coagulation disorder	178	(1)	5	2	(0)	0
	Heterosexual contact	216	(2)	14	424	(43)	27
	Receipt of blood transfusion, blood components, or tissue	151	(1)	1	97	(10)	3
	Risk not reported or identified	32	(0)	1	11	(1)	0
Pacific	MSM	60,692	(79)	1,016	—	—	—
	IDU	5,777	(7)	222	1,964	(42)	114
	MSM-IDU	8,093	(10)	232	—	—	—
	Hemophilia/coagulation disorder	486	(1)	9	21	(1)	0
	Heterosexual contact	1,029	(1)	62	2,103	(44)	93
	Receipt of blood transfusion, blood components, or tissue	898	(1)	13	573	(12)	11
	Risk not reported or identified	285	(0)	8	77	(2)	3
Puerto Rico and territories	MSM	3,018	(22)	99	—	—	—
	IDU	7,524	(56)	300	1,418	(41)	67
	MSM-IDU	1,358	(10)	52	—	—	—
	Hemophilia/coagulation disorder	41	(0)	1	7	(0)	0
	Heterosexual contact	1,499	(11)	76	1,949	(56)	101
	Receipt of blood transfusion, blood components, or tissue	74	(1)	0	98	(3)	1
	Risk not reported or identified	1	(0)	0	2	(0)	1

¹Data are adjusted for delays in the reporting of cases and deaths, and the redistribution of cases initially reported with no identified risk.

²247 men and 47 women whose division of residence at death and AIDS diagnosis is unknown are excluded.

³MSM=men who have sex with men; IDU=injection drug use; MSM-IDU=men who have sex with men and inject drugs.

Table 5. Estimated¹ number of deaths in adults/adolescents with AIDS, by sex, race/ethnicity, and exposure category, for deaths in 2000 and cumulative through December 2000, United States

Race/ethnicity and exposure category ²	Male		Female	
	Deaths in 2000	Deaths through 2000	Deaths in 2000	Deaths through 2000
White, not Hispanic				
MSM	2,649	151,573	—	—
IDU	557	17,810	335	6,722
MSM-IDU	454	16,473	—	—
Hemophilia	57	2,652	1	87
Heterosexual contact	149	3,238	273	6,190
Receipt of blood transfusion, blood components, or tissue	38	2,737	13	1,537
Risk not reported or identified	7	365	4	135
Total	3,911	194,848	626	14,671
Black, not Hispanic				
MSM	1,965	51,298	—	—
IDU	2,030	48,581	1,046	19,816
MSM-IDU	459	10,638	—	—
Hemophilia/coagulation disorder	15	431	7	107
Heterosexual contact	846	10,101	1,289	16,555
Receipt of blood transfusion, blood components, or tissue	29	818	41	953
Risk not reported or identified	18	1,387	10	584
Total	5,364	123,255	2,393	38,016
Hispanic				
MSM	780	29,284	—	—
IDU	943	26,549	269	6,357
MSM-IDU	200	5,226	—	—
Hemophilia/coagulation disorder	8	311	3	52
Heterosexual contact	217	3,657	324	6,431
Receipt of blood transfusion, blood components, or tissue	7	442	11	391
Risk not reported or identified	6	183	3	33
Total	2,160	65,651	610	13,264
Asian/Pacific Islander				
MSM	43	2,158	—	—
IDU	11	221	5	72
MSM-IDU	3	117	—	—
Hemophilia/coagulation disorder	1	39	0	2
Heterosexual contact	9	121	12	174
Receipt of blood transfusion, blood components, or tissue	1	82	2	65
Risk not reported or identified	0	23	0	8
Total	69	2,761	20	322
American Indian/Alaska Native				
MSM	20	634	—	—
IDU	14	166	7	100
MSM-IDU	7	180	—	—
Hemophilia/coagulation disorder	0	17	0	1
Heterosexual contact	2	32	5	86
Receipt of blood transfusion, blood components, or tissue	0	9	1	11
Risk not reported or identified	0	2	0	4
Total	43	1,039	14	202
Unknown race/ethnicity				
MSM	2	149	—	—
IDU	0	55	0	13
MSM-IDU	2	9	—	—
Hemophilia/coagulation disorder	0	2	0	0
Heterosexual contact	0	12	0	6
Receipt of blood transfusion, blood components, or tissue	0	4	0	1
Risk not reported or identified	0	1	0	0
Total	5	232	0	20

¹Data adjusted for delays in the reporting of cases and deaths and redistribution of risk for cases initially reported without risk information. Columns may not sum to totals due to rounding.

²MSM=men who have sex with men; IDU=injection drug use; MSM-IDU=men who have sex with men and inject drugs.

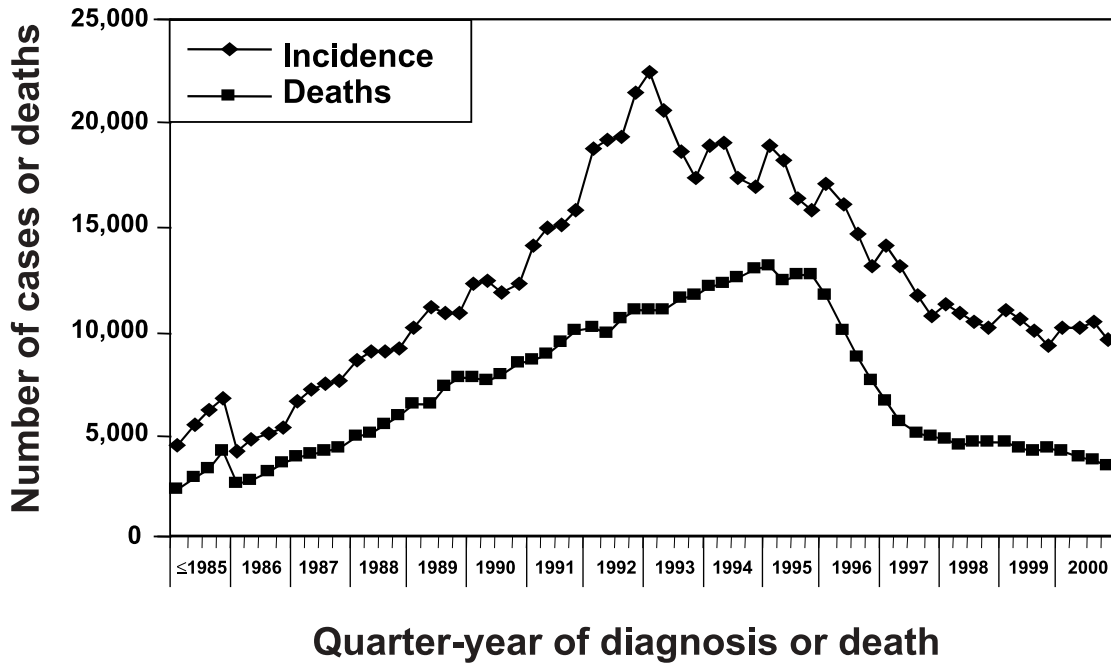
Table 6. Estimated¹ number of deaths in adults/adolescents with AIDS and death rates per 100,000 population for 1999, and cumulative deaths through December 2000, by race/ethnicity, sex, and age at death, United States

Race/ethnicity and age at death ²	Male		Female		Cumulative deaths through 2000
	Deaths in 1999	Rate per 100,000	Deaths in 1999	Rate per 100,000	
White, not Hispanic					
<13	7	0.04	4	0.03	1,106
13-19	7	0.08	3	0.04	410
20-29	139	1.14	50	0.42	18,119
30-39	1,453	9.80	273	1.84	89,460
40-49	1,773	11.40	259	1.66	67,421
50-59	867	7.65	82	0.69	23,919
60+	285	1.78	37	0.18	10,103
All ages	4,531	4.72	710	0.71	210,538
Black, not Hispanic					
<13	33	0.89	24	0.66	2,829
13-19	14	0.69	16	0.82	409
20-29	285	11.65	252	9.76	17,149
30-39	1,675	67.92	896	31.95	66,494
40-49	2,428	110.46	978	38.18	52,680
50-59	1,108	87.74	323	20.32	17,402
60+	418	27.38	139	6.11	7,232
All ages	5,960	38.03	2,628	15.09	164,195
Hispanic					
<13	8	0.20	14	0.34	1,188
13-19	5	0.26	5	0.28	203
20-29	134	4.93	53	2.10	9,012
30-39	827	30.57	267	10.49	35,101
40-49	926	48.38	273	14.30	23,797
50-59	347	33.28	107	9.33	7,705
60+	177	15.81	27	1.86	3,151
All ages	2,424	15.38	746	4.79	80,156
Asian/Pacific Islander					
<13	0	0.00	1	0.10	35
13-19	0	0.00	0	0.00	11
20-29	5	0.64	2	0.25	245
30-39	28	3.35	4	0.45	1,234
40-49	46	6.23	6	0.76	1,029
50-59	12	2.64	3	0.65	389
60+	4	0.89	1	0.17	176
All ages	96	1.96	18	0.34	3,119
American Indian/Alaska Native					
<13	0	0.00	0	0.00	18
13-19	0	0.00	0	0.00	5
20-29	3	2.06	1	0.65	146
30-39	20	13.22	7	4.68	607
40-49	24	18.08	6	3.98	361
50-59	7	8.80	1	1.46	93
60+	1	1.15	2	2.02	32
All ages	55	5.57	17	1.69	1,261
All racial/ethnic groups²					
<13	48	0.19	43	0.17	5,177
13-19	27	0.19	25	0.19	1,037
20-29	565	3.10	359	1.99	44,691
30-39	4,003	19.07	1,447	6.80	192,988
40-49	5,196	25.30	1,522	7.22	145,387
50-59	2,341	16.51	517	3.41	49,538
60+	885	4.59	207	0.80	20,706
All ages	13,066	9.80	4,120	2.96	459,523

¹Data are adjusted for delays in the reporting of cases and deaths. Columns may not sum to totals due to rounding.

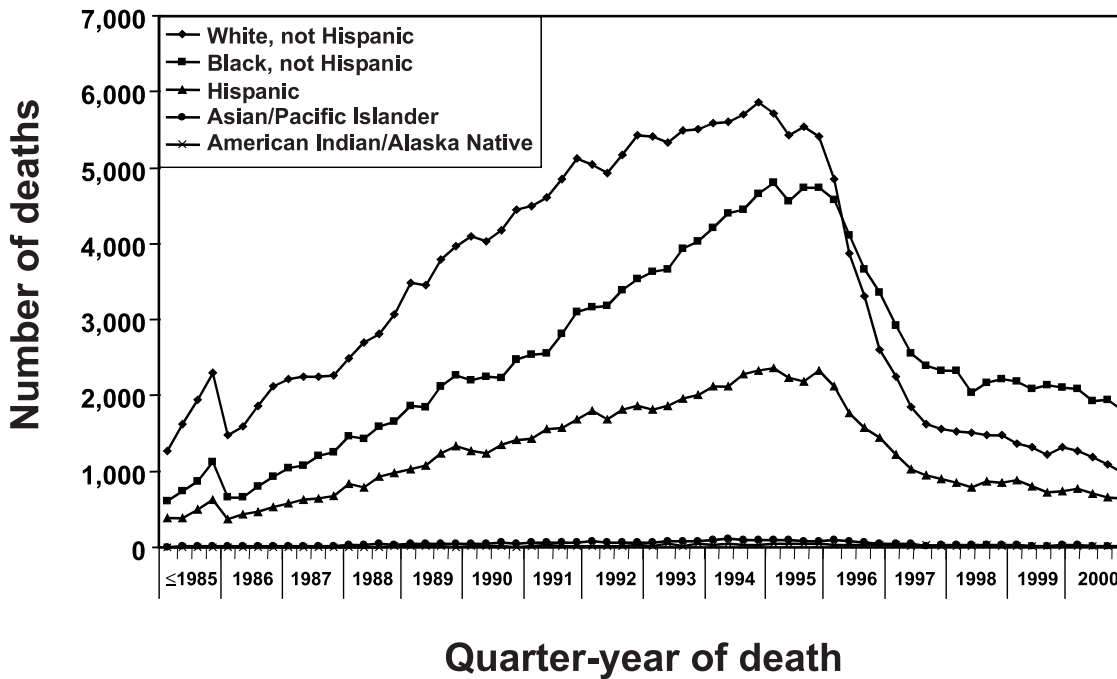
²Data tabulated under "all racial/ethnic groups" include 254 persons whose race/ethnicity is unknown.

Figure 3. Estimated¹ adult/adolescent AIDS incidence and deaths, by quarter-year of diagnosis or death, 1985-2000, United States



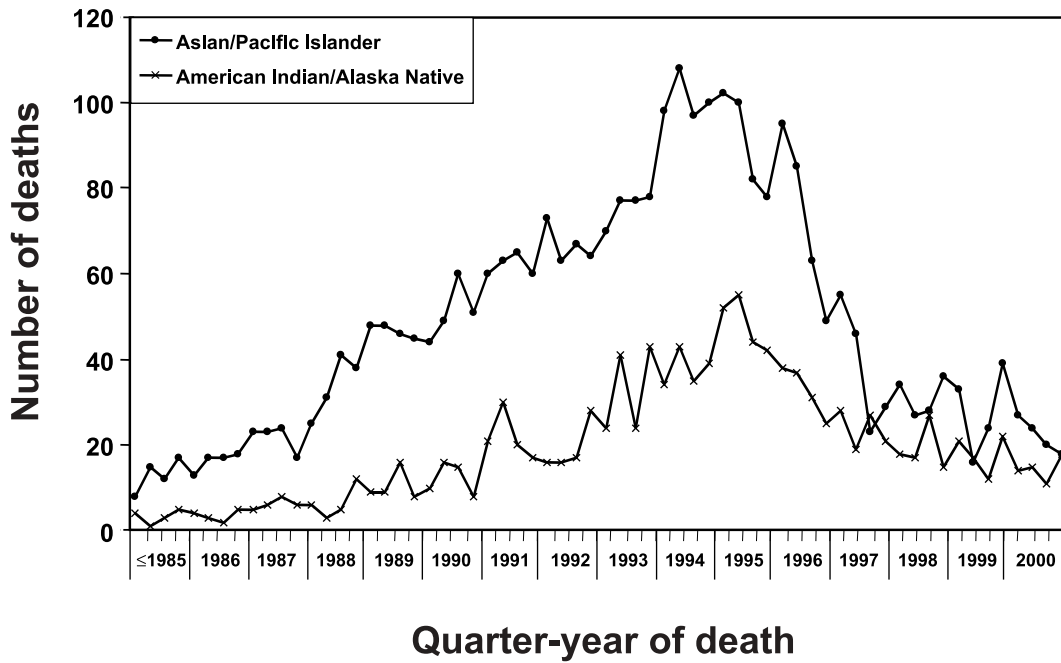
¹Data are adjusted for delays in the reporting of cases and deaths.

Figure 4. Estimated¹ adult/adolescent deaths among persons with AIDS, by race/ethnicity and quarter-year of death, 1985-2000, United States



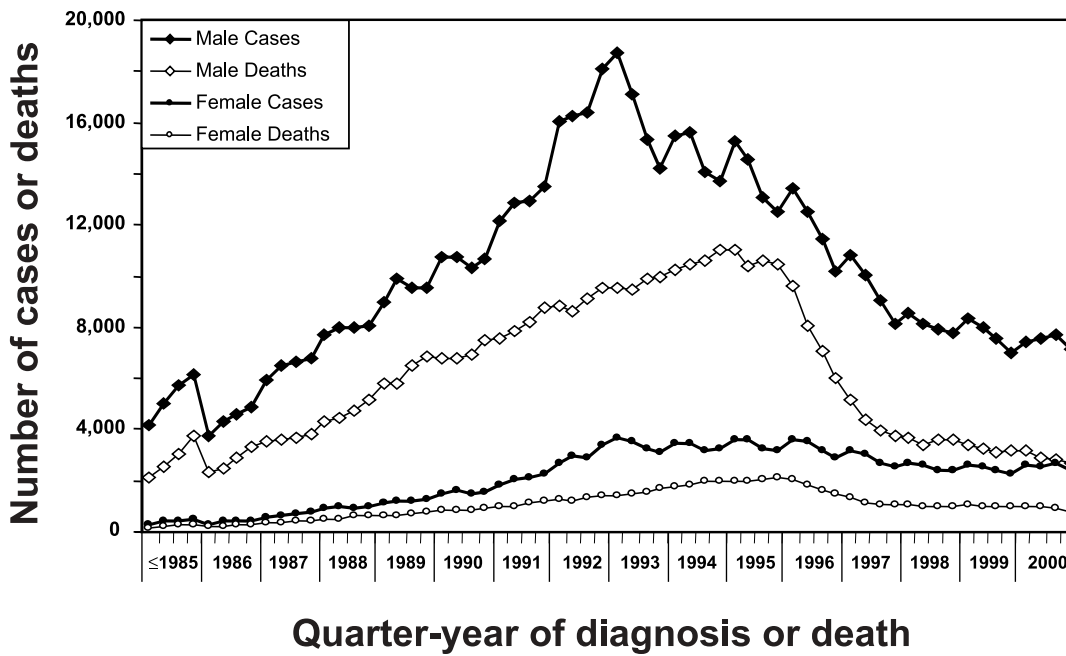
¹Data are adjusted for delays in the reporting of deaths; excludes approximately 250 cases with unknown race/ethnicity.

Figure 5. Estimated¹ adult/adolescent deaths among Asian/Pacific Islander and American Indian/Alaska Native persons with AIDS, by race/ethnicity and quarter-year of death, 1985-2000, United States



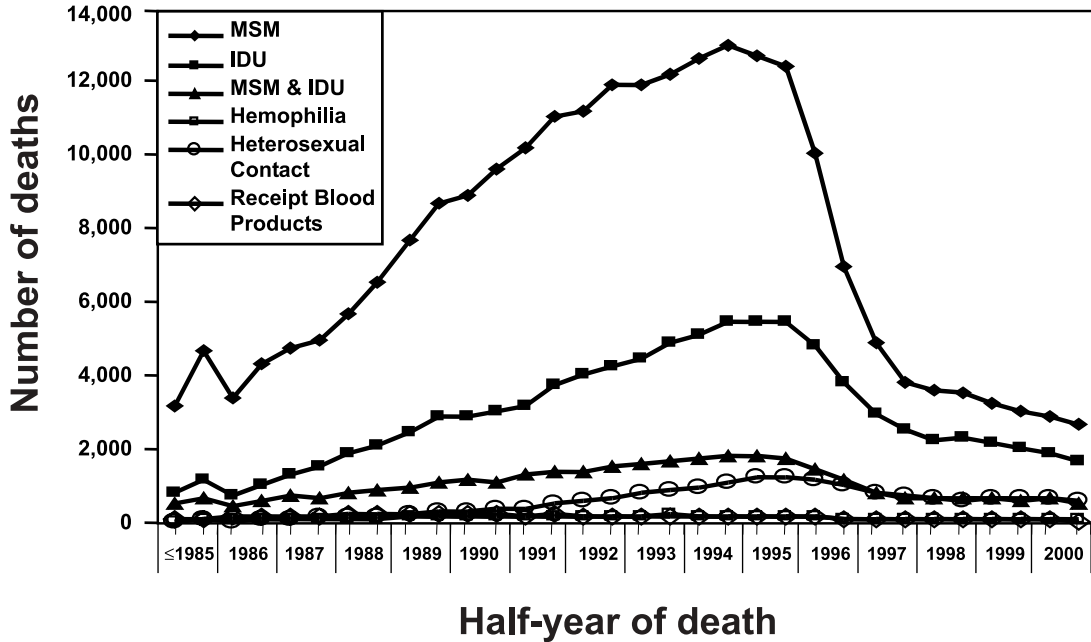
¹Data are adjusted for delays in the reporting of deaths.

Figure 6. Estimated¹ adult/adolescent AIDS incidence¹ and deaths, by sex and quarter-year of diagnosis or death, 1985-2000, United States



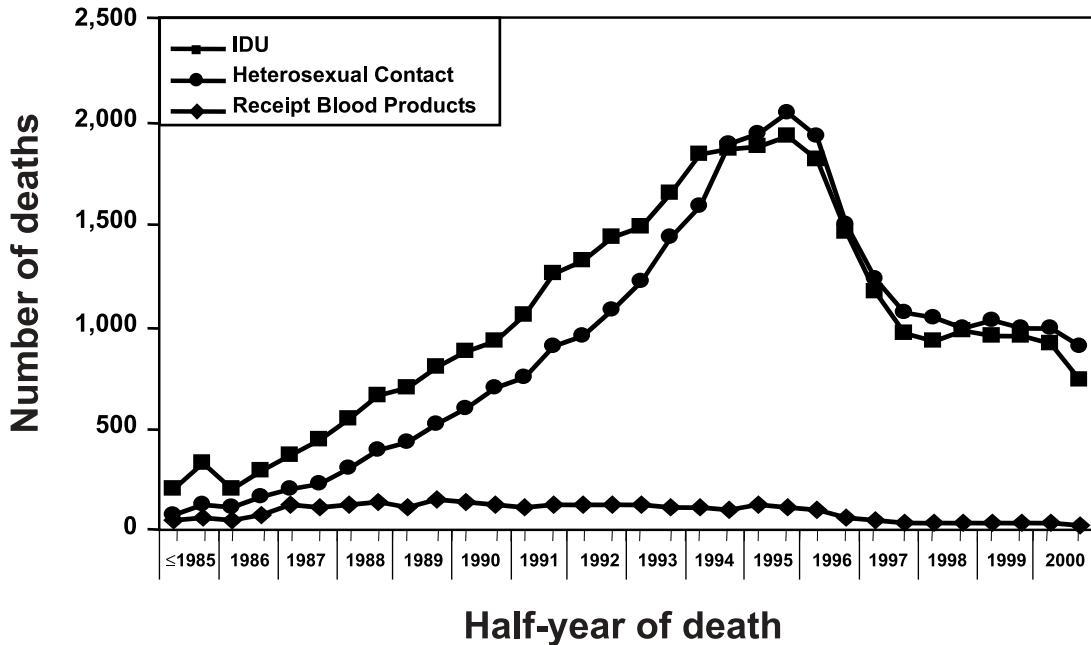
¹Data are adjusted for delays in the reporting of cases or deaths.

Figure 7. Estimated¹ adult/adolescent deaths among men with AIDS, by risk exposure² and half-year of death, 1985-2000, United States



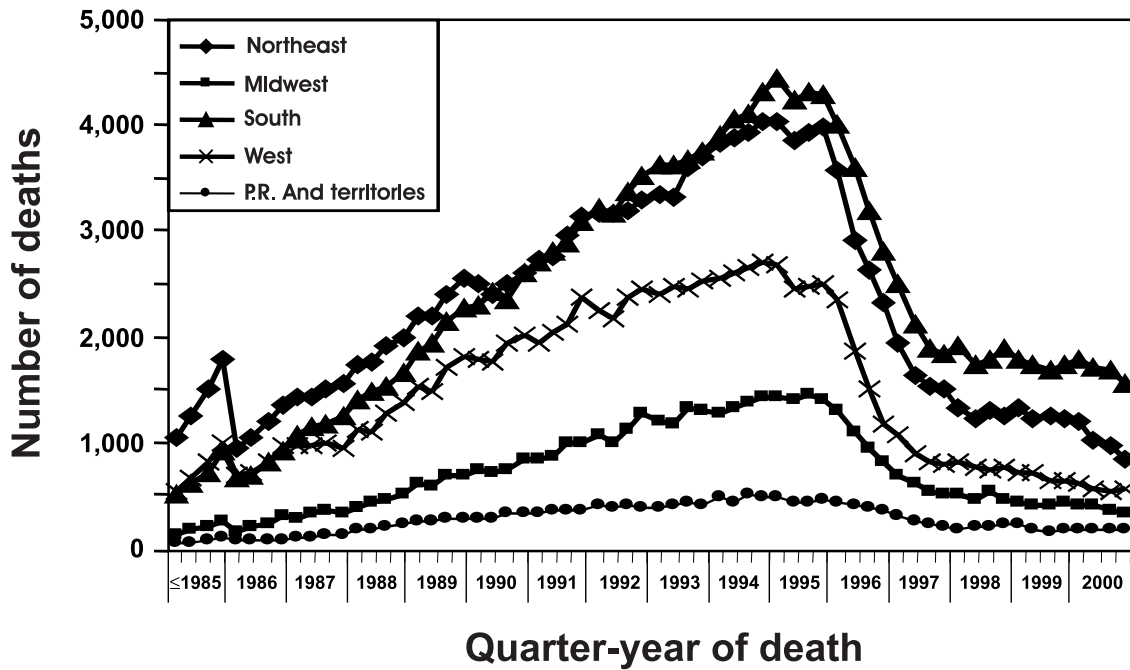
¹Data are adjusted for delays in the reporting of deaths and the redistribution of cases initially reported without risk information.
²Excludes approximately 1960 cases with other or unknown risk exposures, see technical notes.

Figure 8. Estimated¹ adult/adolescent deaths among women with AIDS, by risk exposure² and half-year of death, 1985-2000, United States



¹Data are adjusted for delays in the reporting of deaths and the redistribution of cases initially reported without risk information.
²Excludes approximately 1,010 cases with other or unknown risk exposures, see technical notes.

Figure 9. Estimated¹ adult/adolescent deaths among persons with AIDS, by region of residence at death and quarter-year of death, 1985-2000, United States



¹Data are adjusted for delays in the reporting of deaths; excludes approximately 360 cases with the place of death reported as a foreign country or unknown, see technical notes.

Table 7. Number of deaths, percent of total deaths, and death rates per 100,000 for the 10 leading causes of deaths among persons 25-34 and 35-44 years of age, by race/ethnicity and sex, United States, 2000

Male					Female				
Rank	Cause of death	Number	Percent of total deaths	Death rate	Rank	Cause of death	Number	Percent of total deaths	Death rate
White, not Hispanic — 25–34 years									
1	Accidents (unintentional injuries)	5,861	36.8	46.8	1	Accidents (unintentional injuries)	1,869	25.8	14.9
2	Intentional self-harm	2,989	18.8	23.9	2	Malignant neoplasms	1,340	18.5	10.7
3	Malignant neoplasms	1,259	7.9	10.1	3	Intentional self-harm	669	9.2	5.3
4	Diseases of heart	1,115	7.0	8.9	4	Diseases of heart	538	7.4	4.3
5	Assault (homicide)	677	4.2	5.4	5	Assault (homicide)	346	4.8	2.8
6	Human immunodeficiency virus disease	475	3.0	3.8	6	Cerebrovascular diseases	152	2.1	1.2
7	Diabetes mellitus	220	1.4	1.8	7	Human immunodeficiency virus disease	144	2.0	1.1
8	Congenital malformations, deformations and chromosomal abnormalities	203	1.3	1.6	8	Congenital malformations, deformations and chromosomal abnormalities	141	1.9	1.1
9	Cerebrovascular diseases	161	1.0	1.3	9	Diabetes mellitus	137	1.9	1.1
10	Chronic liver disease and cirrhosis	140	0.9	1.1	10	Influenza and pneumonia	102	1.4	0.8
Black, not Hispanic — 25–34 years									
1	Assault (homicide)	1,883	28.3	80.4	1	Human immunodeficiency virus disease	592	17.1	22.7
2	Accidents (unintentional injuries)	1,316	19.8	56.2	2	Accidents (unintentional injuries)	424	12.3	16.3
3	Human immunodeficiency virus disease	822	12.4	35.1	3	Diseases of heart	386	11.2	14.8
4	Diseases of heart	543	8.2	23.2	4	Malignant neoplasms	382	11.1	14.7
5	Intentional self-harm	397	6.0	17.0	5	Assault (homicide)	310	9.0	11.9
6	Malignant neoplasms	259	3.9	11.1	6	Diabetes mellitus	89	2.6	3.4
7	Diabetes mellitus	98	1.5	4.2	7	Cerebrovascular diseases	88	2.5	3.4
8	Cerebrovascular diseases	70	1.1	3.0	8	Intentional self-harm	72	2.1	2.8
8	Chronic lower respiratory diseases	70	1.1	3.0	9	Anemias	69	2.0	2.6
10	Septicemia	59	0.9	2.5	10	Pregnancy, childbirth and the puerperium	65	1.9	2.5
Hispanic — 25–34 years									
1	Accidents (unintentional injuries)	1,499	35.7	55.4	1	Accidents (unintentional injuries)	277	21.2	10.8
2	Assault (homicide)	697	16.6	25.7	2	Malignant neoplasms	235	18.0	9.1
3	Intentional self-harm	370	8.8	13.7	3	Assault (homicide)	113	8.6	4.4
4	Human immunodeficiency virus disease	274	6.5	10.1	4	Human immunodeficiency virus disease	91	7.0	3.5
5	Malignant neoplasms	241	5.7	8.9	5	Diseases of heart	81	6.2	3.1
6	Diseases of heart	199	4.7	7.3	6	Intentional self-harm	50	3.8	1.9
7	Chronic liver disease and cirrhosis	82	2.0	3.0	7	Cerebrovascular diseases	43	3.3	1.7
8	Cerebrovascular diseases	65	1.5	2.4	8	Pregnancy, childbirth and the puerperium	36	2.8	1.4
9	Diabetes mellitus	48	1.1	1.8	9	Influenza and pneumonia	20	1.5	0.8
10	Influenza and pneumonia	27	0.6	1.0	10	Congenital malformations, deformations and chromosomal abnormalities	21	1.6	0.8

Table 7. Number of deaths, percent of total deaths, and death rates per 100,000 for the 10 leading causes of deaths among persons 25-34 and 35-44 years of age, by race/ethnicity and sex, United States, 2000

Male				Female					
Rank	Cause of death	Number	Percent of total deaths	Death rate	Rank	Cause of death	Number	Percent of total deaths	Death rate
Asian/Pacific Islander — 25-34 years									
1	Accidents (unintentional injuries)	178	30.2	19.0	1	Malignant neoplasms	90	29.3	8.9
2	Intentional self-harm	114	19.3	12.2	2	Accidents (unintentional injuries)	63	20.5	6.2
3	Malignant neoplasms	79	13.4	8.4	3	Intentional self-harm	40	13.0	3.9
4	Assault (homicide)	48	8.1	5.1	4	Assault (homicide)	19	6.2	*
5	Diseases of heart	43	7.3	4.6	5	Diseases of heart	17	5.5	*
6	Human immunodeficiency virus disease	13	2.2	*	6	Cerebrovascular diseases	5	1.6	*
7	Cerebrovascular diseases	12	2.0	*	6	Pregnancy, childbirth and the puerperium	5	1.6	*
8	Chronic lower respiratory diseases	6	1.0	*	6	Congenital malformations, deformations and chromosomal abnormalities	5	1.6	*
8	Chronic liver disease and cirrhosis	6	1.0	*	9	Chronic lower respiratory diseases	4	1.3	*
10	Diabetes mellitus	4	0.7	*	10	Diabetes mellitus	3	1.0	*
10	Influenza and pneumonia	4	0.7	*					
10	Nephritis, nephrotic syndrome and nephrosis	4	0.7	*					
10	Congenital malformations, deformations and chromosomal abnormalities	4	0.7	*					
10	Legal intervention	4	0.7	*					
American Indian — 25-34 years									
1	Accidents (unintentional injuries)	172	42.0	89.1	1	Accidents (unintentional injuries)	67	36.0	36.6
2	Intentional self-harm	59	14.4	30.6	2	Intentional self-harm	19	10.2	*
3	Assault (homicide)	46	11.2	23.8	3	Chronic liver disease and cirrhosis	16	8.6	*
4	Chronic liver disease and cirrhosis	23	5.6	11.9	4	Malignant neoplasms	13	7.0	*
5	Diseases of heart	16	3.9	*	4	Assault (homicide)	13	7.0	*
6	Malignant neoplasms	13	3.2	*	6	Diseases of heart	8	4.3	*
7	Diabetes mellitus	6	1.5	*	7	Cerebrovascular diseases	5	2.7	*
8	Human immunodeficiency virus disease	5	1.2	*	8	Pregnancy, childbirth and the puerperium	4	2.2	*
9	Influenza and pneumonia	3	0.7	*	9	Human immunodeficiency virus disease	3	1.6	*
9	Chronic lower respiratory diseases	3	0.7	*	10	Viral hepatitis	2	1.1	*
					10	Influenza and pneumonia	2	1.1	*
White, not Hispanic — 35-44 years									
1	Accidents (unintentional injuries)	8,113	21.6	50.0	1	Malignant neoplasms	6,257	30.4	38.7
2	Diseases of heart	6,446	17.1	39.7	2	Accidents (unintentional injuries)	2,895	14.0	17.9
3	Malignant neoplasms	5,201	13.8	32.1	3	Diseases of heart	2,297	11.1	14.2
4	Intentional self-harm	4,287	11.4	26.4	4	Intentional self-harm	1,253	6.1	7.7
5	Human immunodeficiency virus disease	1,678	4.5	10.3	5	Chronic liver disease and cirrhosis	722	3.5	4.5
6	Chronic liver disease and cirrhosis	1,518	4.0	9.4	6	Cerebrovascular diseases	684	3.3	4.2
7	Assault (homicide)	836	2.2	5.2	7	Diabetes mellitus	494	2.4	3.1
8	Diabetes mellitus	766	2.0	4.7	8	Assault (homicide)	437	2.1	2.7
9	Cerebrovascular diseases	694	1.8	4.3	9	Human immunodeficiency virus disease	322	1.6	2.0
10	Influenza and pneumonia	394	1.0	2.4	10	Chronic lower respiratory diseases	303	1.5	1.9

Table 7. Number of deaths, percent of total deaths, and death rates per 100,000 for the 10 leading causes of deaths among persons 25-34 and 35-44 years of age, by race/ethnicity and sex, United States, 2000

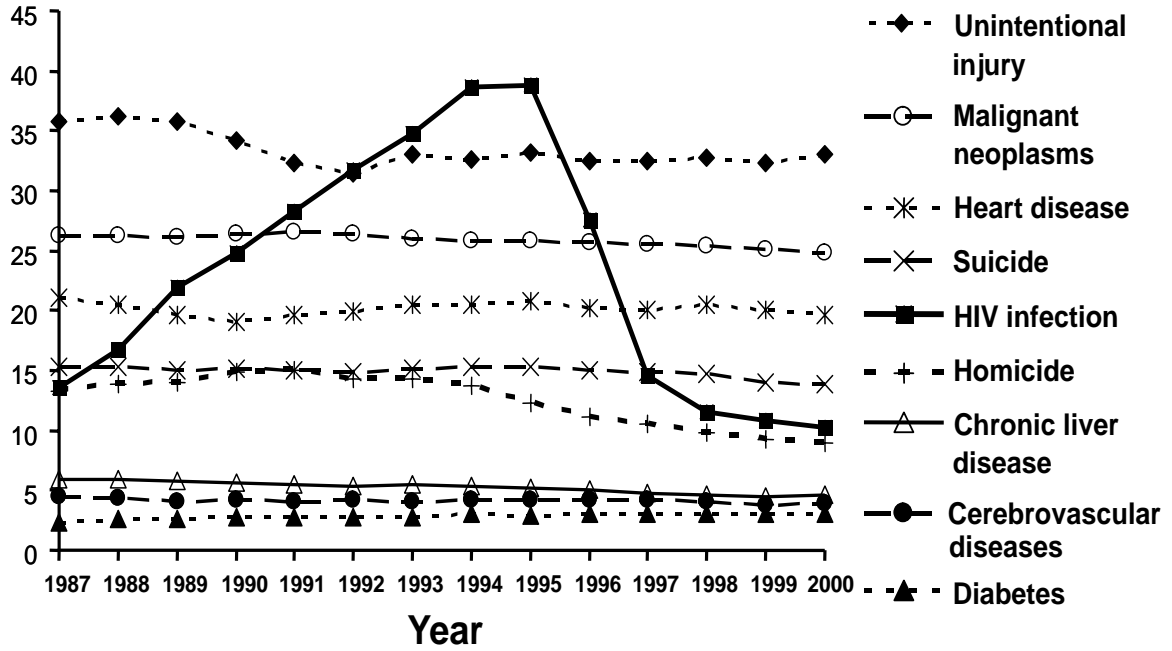
Male				Female					
Rank	Cause of death	Number	Percent of total deaths	Death rate	Rank	Cause of death	Number	Percent of total deaths	Death rate
Black, not Hispanic — 35-44 years									
1	Human immunodeficiency virus disease	2,060	17.1	81.4	1	Malignant neoplasms	1,780	21.7	61.8
2	Diseases of heart	1,972	16.4	77.9	2	Diseases of heart	1,287	15.7	44.7
3	Accidents (unintentional injuries)	1,649	13.7	65.1	3	Human immunodeficiency virus disease	968	11.8	33.6
4	Malignant neoplasms	1,292	10.7	51.0	4	Accidents (unintentional injuries)	604	7.3	21.0
5	Assault (homicide)	1,027	8.5	40.6	5	Cerebrovascular diseases	435	5.3	15.1
6	Cerebrovascular diseases	394	3.3	15.6	6	Assault (homicide)	332	4.0	11.5
7	Intentional self-harm	346	2.9	13.7	7	Diabetes mellitus	206	2.5	7.2
8	Chronic liver disease and cirrhosis	279	2.3	11.0	8	Septicemia	167	2.0	5.8
9	Diabetes mellitus	252	2.1	10.0	9	Chronic liver disease and cirrhosis	144	1.8	5.0
10	Nephritis, nephrotic syndrome and nephrosis	175	1.5	6.9	10	Chronic lower respiratory diseases	143	1.7	5.0
Hispanic — 35-44 years									
1	Accidents (unintentional injuries)	1,317	23.5	52.2	1	Malignant neoplasms	761	30.6	31.5
2	Human immunodeficiency virus disease	603	10.8	23.9	2	Accidents (unintentional injuries)	301	12.1	12.5
3	Diseases of heart	550	9.8	21.8	3	Diseases of heart	210	8.4	8.7
4	Malignant neoplasms	534	9.5	21.2	4	Human immunodeficiency virus disease	159	6.4	6.6
5	Chronic liver disease and cirrhosis	399	7.1	15.8	5	Cerebrovascular diseases	122	4.9	5.0
6	Assault (homicide)	359	6.4	14.2	6	Chronic liver disease and cirrhosis	102	4.1	4.2
7	Intentional self-harm	320	5.7	12.7	7	Assault (homicide)	88	3.5	3.6
8	Cerebrovascular diseases	145	2.6	5.7	8	Intentional self-harm	65	2.6	2.7
9	Viral hepatitis	100	1.8	4.0	9	Diabetes mellitus	59	2.4	2.4
10	Diabetes mellitus	95	1.7	3.8	10	Septicemia	33	1.3	1.4
Asian/Pacific Islander — 35-44 years									
1	Malignant neoplasms	247	24.9	26.6	1	Malignant neoplasms	296	44.1	29.4
2	Diseases of heart	174	17.5	18.7	2	Accidents (unintentional injuries)	69	10.3	6.9
3	Accidents (unintentional injuries)	138	13.9	14.8	3	Cerebrovascular diseases	49	7.3	4.9
4	Intentional self-harm	85	8.6	9.1	4	Diseases of heart	48	7.2	4.8
5	Cerebrovascular diseases	47	4.7	5.1	5	Intentional self-harm	30	4.5	3.0
6	Assault (homicide)	45	4.5	4.8	6	Assault (homicide)	27	4.0	2.7
7	Chronic liver disease and cirrhosis	31	3.1	3.3	7	Influenza and pneumonia	11	1.6	*
8	Human immunodeficiency virus disease	25	2.5	2.7	8	Chronic lower respiratory diseases	10	1.5	*
9	Viral hepatitis	15	1.5	*	9	Congenital malformations, deformations and chromosomal abnormalities	8	1.2	*
9	Diabetes mellitus	15	1.5	*	10	Diabetes mellitus	7	1.0	*
					10	Chronic liver disease and cirrhosis	7	1.0	*

Table 7. Number of deaths, percent of total deaths, and death rates per 100,000 for the 10 leading causes of deaths among persons 25-34 and 35-44 years of age, by race/ethnicity and sex, United States, 2000

Male				Female					
Rank	Cause of death	Number	Percent of total deaths	Death rate	Rank	Cause of death	Number	Percent of total deaths	Death rate
American Indian — 35-44 years									
1	Accidents (unintentional injuries)	166	24.6	92.3	1	Accidents (unintentional injuries)	90	22.2	49.6
2	Diseases of heart	83	12.3	46.1	2	Chronic liver disease and cirrhosis	59	14.5	32.5
3	Chronic liver disease and cirrhosis	78	11.6	43.3	3	Malignant neoplasms	56	13.8	30.9
4	Intentional self-harm	53	7.9	29.5	4	Diseases of heart	39	9.6	21.5
5	Malignant neoplasms	49	7.3	27.2	5	Intentional self-harm	14	3.4	*
6	Assault (homicide)	32	4.7	17.8	5	Assault (homicide)	14	3.4	*
7	Human immunodeficiency virus disease	20	3.0	11.1	7	Cerebrovascular diseases	11	2.7	*
8	Influenza and pneumonia	18	2.7	*	8	Influenza and pneumonia	10	2.5	*
9	Diabetes mellitus	16	2.4	*	9	Viral hepatitis	7	1.7	*
10	Cerebrovascular diseases	11	1.6	*	9	Diabetes mellitus	7	1.7	*

Source: *National Vital Statistics Report*, Vol. 50, No. 16, September 16, 2002.

Figure 10. Death rates per 100,000 population from leading causes of death among persons 25–44 years old, United States, 1987–2000



Note: For comparison with data for 1999–2000, data for 1987–1998 were modified to appear as if based on ICD-10 rules for selecting the underlying cause of death instead of ICD-9.

Source: National Center for Health Statistics National Vital Statistics System.

Technical Notes

AIDS cases are reported to CDC by all 50 states, the District of Columbia, U.S. dependencies and possessions, and independent nations in free association with the United States¹ by the use of a uniform case definition and case surveillance report form. Cases in this supplemental report were reported according to the 1993 expanded AIDS surveillance case definition (*MMWR* 1992;41 [RR-17]:1-190. A case may be reported upon the initial diagnosis of AIDS (or HIV in areas with HIV infection case surveillance) and later updated when the disease or the vital status changes. Some cases may be first reported at death, either from surveillance activities at a hospital or other places where death may occur, or from a review of death certificates or a death registry. Health departments routinely review death registries to ascertain deaths of persons who were reported with HIV or AIDS.

Data in this report include persons diagnosed with AIDS through the end of December 2000 and reported to CDC through June 30, 2001. Data presented in tables 2-6 and figures 1-9 are estimates of AIDS cases and deaths in persons with AIDS and not actual counts of persons reported to the surveillance system. The numbers of AIDS cases and deaths reported to CDC are statistically adjusted for delays in the reporting of cases and deaths.

The survival analysis presented in figures 1 and 2 used the product-limit (Kaplan-Meier) method and AIDS case data reported through December 31, 2001. The analysis was limited to AIDS cases that had an initial AIDS-defining opportunistic illness diagnosed in 1984 through 2000, and included deaths that occurred through January 2001 (to allow at least 11 months for a death to be reported), with survival censored beyond 72 months.

The date of death for decedents reported to CDC without a date of death was imputed as the date that death was reported to CDC minus the estimated median number of months required to report deaths (3 months). If AIDS diagnosis occurred after the imputed date, then the date of AIDS diagnosis was used as the date of death.

Data are presented by area of residence at death in tables 2, 3, and 4 and figure 9. From 1970 through

2000, 81,532 deaths were reported without an area of residence at death, 18% of the total reported deaths. The majority of these deaths (59%) were reported between 1988 and 1991. An additional 244 cases reported "foreign county" as the area of residence at death. For the 375,634 deaths reported with an area of residence at death within the United States and its territories, (257 cases were missing an area of residence at diagnosis) the concordance between the area of residence at death and the area of residence at AIDS diagnosis was 94%. Therefore, for deaths reported without an area of residence at death, we substituted the area of residence at AIDS diagnosis. Thirty-one cases had neither an area of residence at death nor diagnosis reported.

Table 1 includes persons whose vital status is reported as "alive" and excludes those with an unknown vital status. The remainder of this report includes deaths reported in persons with AIDS regardless of the cause of death. Data in tables 2 and 6 are enumerated by age at death; tables 3, 4 and 5 present data for only adults and adolescents based on the age at AIDS diagnosis. Tables 3 and 6 present data on deaths in 1999 because race/ethnicity-specific United States population denominators are not available for 2000 due to the expansion of the racial/ethnic categories in the 2000 census.

Divisions of residence included in this report are defined as follows. New England: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; Middle Atlantic: New York, New Jersey, and Pennsylvania; East North Central: Ohio, Indiana, Illinois, Michigan, and Wisconsin; West North Central: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas; South Atlantic: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida; East South Central: Kentucky, Tennessee, Alabama, and Mississippi; West South Central: Arkansas, Louisiana, Oklahoma, and Texas; Mountain: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, and Nevada; Pacific: Washington, Oregon, California, Alaska, and Hawaii.

Table 7 and Figure 10 present data compiled by the National Center for Health Statistics from death certificates of residents in the United States and the District of Columbia. For these data, each death is attributed to one underlying cause, based on information on the death certificate. The underlying cause of death was

¹Included among the dependencies, possessions, and independent nations are Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Republic of Palau, the Republic of the Marshall Islands, the Commonwealth of the Northern Mariana Islands, and the Federated States of Micronesia.

selected coded according to the International Classification of Diseases, 10th revision (ICD-10). Deaths due to HIV disease are not necessarily the same as deaths of persons with AIDS. Persons with AIDS may die from causes unrelated to HIV infection and some persons who die from HIV infection may not meet the surveillance criteria for AIDS diagnosis.