

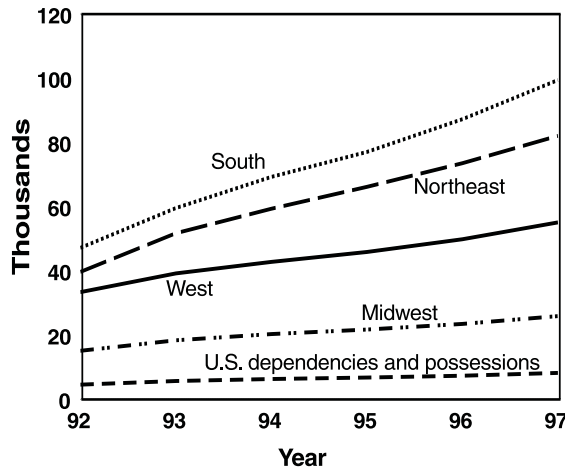
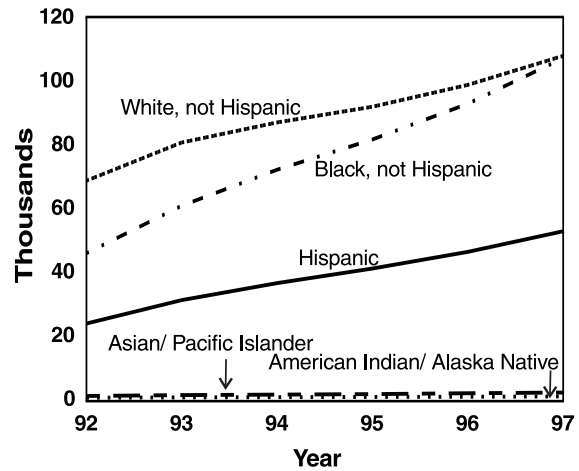
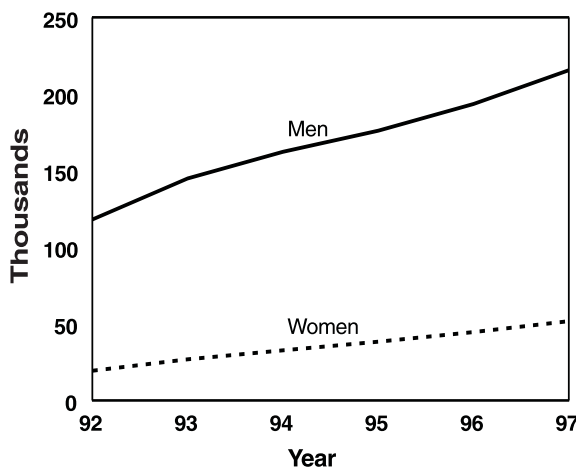
# HIV/AIDS

## Surveillance Report

U.S. HIV and AIDS cases reported through December 1998

Year-end edition Vol. 10, No. 2

Estimated number of persons living with AIDS, 1992 through 1997, by sex, race/ethnicity, and region, United States



Acquired immunodeficiency syndrome (AIDS) is a specific group of diseases or conditions which are indicative of severe immunosuppression related to infection with the human immunodeficiency virus (HIV).



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
**Public Health Service**  
 Centers for Disease Control and Prevention  
 National Center for HIV, STD, and TB Prevention  
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# Commentary

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During 1998, 48,269 persons were reported with AIDS, more than half (57%) from the states of New York, Florida, New Jersey, California, and Texas. A total of 688,200 persons have been reported with AIDS since the beginning of the epidemic. In 1997, the most recent full year for which estimates of the numbers of persons living with AIDS are available (because of the lag time needed to take reporting delays into account, see technical notes), an estimated 270,841 persons were living with AIDS, a 12% increase from 1996. The number of persons living with AIDS increased as a result of improved survival for AIDS patients who were receiving treatment and substantial decreases in the number of deaths in 1997.

Between 1992 and 1997, the number of persons living with AIDS increased in all groups, as a result of the 1993 expanded AIDS case definition and more recently, improved survival. The characteristics of persons living with AIDS have changed, reflecting changes in the populations affected by the HIV/AIDS epidemic. Women accounted for 13.8% of persons living with AIDS in 1992, compared with 19.1% in 1997. By the end of 1997, the number of blacks living with AIDS, which increased from 32.7% of persons living with AIDS in 1992 to 39.2% in 1997, was almost identical to the number of whites living with AIDS. Persons living in the South accounted for 33.6% of cases in 1992 and 36.7% in 1997, and persons living in the Northeast accounted for 28.3% in 1992 and 30.3% in 1997; the proportion living in the West declined from 23.8% to 20.4%. The characteristics of persons living with AIDS (sex, age, race/ethnicity) as of the end of 1997 in all states and metropolitan statistical areas were published in a supplemental report in February 1999, the first in a series of reports intended to provide additional data on selected topics. This report can be accessed at [http://www.cdc.gov/nchstp/hiv\\_aids/stats/hasrsupp.htm](http://www.cdc.gov/nchstp/hiv_aids/stats/hasrsupp.htm).

In the 33 states and territories that report HIV infection, 19,393 persons with HIV infection but not AIDS were reported during 1998. In addition, 1,871 persons were reported first with HIV and then with AIDS during 1998; for this report these persons are counted only once as AIDS cases. In these same states, a total of 97,962 persons are reported as living with HIV infection (table 1); that is, as of the end of 1998, they are not known to have AIDS or to have died. Because not

all HIV-infected persons have been tested, the number of persons reported to be living with HIV represents a minimum estimate of the number of persons living with HIV infection. Differences among states in the relative proportion of prevalent cases reported as HIV compared to AIDS (table 1) are the result of many factors: they may reflect variations in testing patterns, access to care, and survival; differences in the distribution of affected populations in terms of sex, race, and risk; and differences in the stage of the epidemic. In addition, factors related to the implementation of HIV reporting, such as the date of implementation and whether prevalent HIV cases were reportable at implementation, also affect these proportions. For example, the recent implementation of HIV reporting in Florida and New Mexico, initiated in July 1997 and January 1998, respectively, accounts for the low number of persons reported as living with HIV infection compared with the number reported as living with AIDS.

HIV reporting data are increasingly necessary to monitor the effect of the epidemic because of the therapies that have reduced AIDS incidence. By the end of 1998, 29 states and the Virgin Islands had implemented the confidential name-based reporting of HIV infection in adolescents and adults; three additional states report pediatric HIV infection only. States that have initiated confidential name-based HIV reporting in the past 2 years are Florida, Iowa, New Mexico, and Virgin Islands; Alaska, New York, and Texas are beginning HIV case surveillance in 1999. Although AIDS incidence can no longer provide unbiased information on HIV incidence patterns as it has in the past, because of the effect of potent antiretroviral therapies, the monitoring of AIDS incidence nonetheless remains critical. Persons reported with AIDS increasingly represent persons whose diagnosis was too late for them to benefit from treatments, persons who either did not seek or had no access to care, or persons for whom treatment failed. Monitoring this population remains of the utmost importance, and supplemental studies will be needed to determine the reasons for continued AIDS incidence.

Historically, AIDS incidence data have served as the basis for assessing needs for prevention and treatment programs. Because of the effect of treatment on AIDS incidence, incidence is no longer the

most appropriate means of describing the needs of different populations, as areas that are providing care effectively would seem to need fewer resources. AIDS prevalence, rather than AIDS incidence, provides a more accurate measure of the number of persons who require treatment resources because it reflects the total number of persons living with AIDS. AIDS prevalence too, however, will increasingly underestimate the number of persons in care. Because AIDS will not develop in a growing number of HIV-infected persons as they benefit from new therapies, all states should conduct surveillance for persons with a diagnosis of HIV infection as well as those with a diagnosis of AIDS. However, until such data are available, AIDS prevalence will remain the best measure of the impact of the epidemic, and the most accurate, equitable means of estimating the need for patient services.

The effect of treatment on AIDS incidence and the shift in emphasis from AIDS to HIV require new ways of thinking about surveillance data. With respect to AIDS data, year-to-year changes reflect differences in the historic pattern of HIV infection and differences in access to, and utilization of, care; comparisons among groups must take both these factors into account. With respect to HIV surveillance data, reports of diagnosis of HIV infection bear little relationship to the actual time of infection, with the exception of young persons or persons for whom a proxy measure of recency of infection, such as a high CD4+T-lymphocyte count, is available. Information such as CD4+T-lymphocyte count at the initial diagnosis of HIV infection on a representative sample of persons can be used to estimate the proportion of new HIV diagnoses that represent recent HIV infections. Until such information is available, the number and characteristics of persons living with diagnosed HIV infection and those living with AIDS will be helpful in planning for prevention, treatment, and other services needed to further reduce transmission and to improve survival and quality of life for infected persons.

The dramatic decreases in pediatric AIDS clearly demonstrate that the Public Health Service guidelines for zidovudine use during pregnancy and for the counseling and testing of pregnant women have been implemented and are decreasing the perinatal transmission of HIV. States that report pediatric exposure and HIV infection have been especially effective in monitoring the reasons for decreases in perinatal transmission. The swiftness of the decline has suggested that the goal of eliminating perinatal transmission of HIV may be attainable. Pediatric HIV and AIDS surveillance will play an increasingly important role in identifying populations of women in need of outreach

and thus ensuring access to testing and treatment services for these women as well as to ensure that their infants will be healthy.

The next few years will represent a time of transition for HIV/AIDS surveillance. AIDS incidence will continue to be affected by therapy, but the full effect of new therapies on AIDS incidence is not yet known. At the same time, HIV surveillance is gradually being implemented by an increasing number of states. During this transition, the data on prevalence will probably be more useful than data on incidence for public health planning purposes while incidence data will probably be more useful in identifying populations that may require outreach to improve timely access to testing and treatment. To accurately describe affected populations, CDC plans to work closely with state surveillance programs and with the many users of the surveillance data to provide technical assistance in interpreting the data during this time of transition.

### **Suggested reading:**

CDC. HIV/AIDS Surveillance Supplemental Report: Characteristics of Persons Living with AIDS at the End of 1997, 1999;5(No. 1):1-13.

CDC. National HIV Prevalence Surveys, 1997 Summary. Atlanta, GA: CDC; 1998:1-25.

CDC. Success in implementing PHS guidelines to reduce perinatal transmission of HIV. *MMWR* 1998;47:688-91 [published errata appear in *MMWR* 1998;47:718].

All the *MMWR* articles are available at [www.cdc.gov/nchstp/hiv\\_aids/pubs/mmwr.htm](http://www.cdc.gov/nchstp/hiv_aids/pubs/mmwr.htm).

**Table 1. Persons reported to be living with HIV infection<sup>1</sup> and with AIDS, by state and age group, reported through December 1998<sup>2</sup>**

State of residence (Date HIV reporting initiated)	Living with HIV infection <sup>3</sup>			Living with AIDS <sup>4</sup>			Cumulative totals		
	Adults/ adolescents	Children <13 years old	Total	Adults/ adolescents	Children <13 years old	Total	Adults/ adolescents	Children <13 years old	Total
Alabama (Jan. 1988)	4,475	40	4,515	2,493	24	2,517	6,968	64	7,032
Alaska	—	—	—	220	2	222	220	2	222
Arizona (Jan. 1987)	3,556	35	3,591	2,376	6	2,382	5,932	41	5,973
Arkansas (July 1989)	1,717	20	1,737	1,307	23	1,330	3,024	43	3,067
California	—	—	—	39,680	214	39,894	39,680	214	39,894
Colorado (Nov. 1985)	5,107	27	5,134	2,520	6	2,526	7,627	33	7,660
Connecticut (July 1992) <sup>5</sup>	—	97	97	5,187	76	5,263	5,187	173	5,360
Delaware	—	—	—	983	11	994	983	11	994
District of Columbia	—	—	—	5,080	92	5,172	5,080	92	5,172
Florida (July 1997)	8,561	84	8,645	30,223	592	30,815	38,784	676	39,460
Georgia	—	—	—	8,701	84	8,785	8,701	84	8,785
Hawaii	—	—	—	847	5	852	847	5	852
Idaho (June 1986)	257	4	261	189	—	189	446	4	450
Illinois	—	—	—	7,677	114	7,791	7,677	114	7,791
Indiana (July 1988)	3,082	27	3,109	2,438	14	2,452	5,520	41	5,561
Iowa (July 1998)	99	1	100	501	4	505	600	5	605
Kansas	—	—	—	800	4	804	800	4	804
Kentucky	—	—	—	1,277	11	1,288	1,277	11	1,288
Louisiana (Feb. 1993)	5,866	94	5,960	4,649	56	4,705	10,515	150	10,665
Maine	—	—	—	357	7	364	357	7	364
Maryland	—	—	—	8,049	156	8,205	8,049	156	8,205
Massachusetts	—	—	—	4,845	75	4,920	4,845	75	4,920
Michigan (April 1992)	3,944	81	4,025	3,950	35	3,985	7,894	116	8,010
Minnesota (Oct. 1985)	2,273	25	2,298	1,405	12	1,417	3,678	37	3,715
Mississippi (Aug. 1988)	3,741	42	3,783	1,566	27	1,593	5,307	69	5,376
Missouri (Oct. 1987)	3,868	40	3,908	3,628	18	3,646	7,496	58	7,554
Montana	—	—	—	149	—	149	149	—	149
Nebraska (Sept. 1995)	399	6	405	393	3	396	792	9	801
Nevada (Feb. 1992)	2,356	23	2,379	1,935	12	1,947	4,291	35	4,326
New Hampshire	—	—	—	434	3	437	434	3	437
New Jersey (Jan. 1992)	11,254	359	11,613	12,961	251	13,212	24,215	610	24,825
New Mexico (Jan. 1998)	396	3	399	801	6	807	1,197	9	1,206
New York	—	—	—	45,993	799	46,792	45,993	799	46,792
North Carolina (Feb. 1990)	7,787	105	7,892	3,605	52	3,657	11,392	157	11,549
North Dakota (Jan. 1988)	58	1	59	41	—	41	99	1	100
Ohio (June 1990)	4,153	60	4,213	3,717	39	3,756	7,870	99	7,969
Oklahoma (June 1988)	1,950	14	1,964	1,411	10	1,421	3,361	24	3,385
Oregon (Sept. 1988) <sup>5</sup>	—	16	16	1,783	7	1,790	1,783	23	1,806
Pennsylvania	—	—	—	8,705	155	8,860	8,705	155	8,860
Rhode Island	—	—	—	802	6	808	802	6	808
South Carolina (Feb. 1986)	6,331	107	6,438	3,614	28	3,642	9,945	135	10,080
South Dakota (Jan. 1988)	160	5	165	57	1	58	217	6	223
Tennessee (Jan. 1992)	4,739	48	4,787	3,494	18	3,512	8,233	66	8,299
Texas (Feb. 1994) <sup>5</sup>	—	257	257	20,726	144	20,870	20,726	401	21,127
Utah (April 1989)	757	5	762	781	7	788	1,538	12	1,550
Vermont	—	—	—	157	2	159	157	2	159
Virginia (July 1989)	6,788	68	6,856	4,659	83	4,742	11,447	151	11,598
Washington	—	—	—	3,513	15	3,528	3,513	15	3,528
West Virginia (Jan. 1989)	452	3	455	421	3	424	873	6	879
Wisconsin (Nov. 1985)	2,037	30	2,067	1,396	11	1,407	3,433	41	3,474
Wyoming (June 1989)	60	—	60	58	2	60	118	2	120
<b>Subtotal</b>	<b>96,223</b>	<b>1,727</b>	<b>97,950</b>	<b>262,554</b>	<b>3,325</b>	<b>265,879</b>	<b>358,777</b>	<b>5,052</b>	<b>363,829</b>
<b>U.S. dependencies, possessions, and associated nations</b>									
Guam	—	—	—	9	—	9	9	—	9
Pacific Islands, U.S.	—	—	—	2	—	2	2	—	2
Puerto Rico	—	—	—	8,064	172	8,236	8,064	172	8,236
Virgin Islands, U.S. (Dec. 1998)	11	1	12	196	8	204	207	9	216
<b>Total</b>	<b>96,234</b>	<b>1,728</b>	<b>97,962</b>	<b>271,115</b>	<b>3,509</b>	<b>274,624</b>	<b>367,349</b>	<b>5,237</b>	<b>372,586</b>

<sup>1</sup>Includes only persons reported with HIV infection who have not developed AIDS.

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

<sup>3</sup>Includes only persons reported from states with confidential HIV infection reporting. Excludes 1,934 adults/adolescents and 51 children reported from states with confidential HIV infection reporting whose state of residence is unknown or who are residents of other states.

<sup>4</sup>Includes 290 adults/adolescents and 4 children whose state of residence is unknown.

<sup>5</sup>Connecticut and Texas have confidential HIV infection reporting for pediatric cases only; Oregon has confidential HIV infection reporting for children less than 6 years old.

**Table 2. AIDS cases and annual rates per 100,000 population, by state and age group, reported through December 1998, United States**

State of residence	1997		1998		Cumulative totals		
	No.	Rate	No.	Rate	Adults/ adolescents	Children <13 years old	Total
Alabama	568	13.1	484	11.1	5,251	67	5,318
Alaska	51	8.4	29	4.7	435	5	440
Arizona	446	9.8	645	13.8	6,090	21	6,111
Arkansas	242	9.6	203	8.0	2,553	38	2,591
California	6,958	21.6	5,654	17.3	109,481	575	110,056
Colorado	380	9.8	314	7.9	6,416	28	6,444
Connecticut	1,221	37.4	666	20.3	10,231	173	10,404
Delaware	230	31.3	174	23.4	2,163	18	2,181
District of Columbia	997	188.2	989	189.1	11,228	166	11,394
Florida	6,051	41.2	5,448	36.5	68,939	1,337	70,276
Georgia	1,719	23.0	1,295	16.9	19,816	191	20,007
Hawaii	95	8.0	161	13.5	2,234	15	2,249
Idaho	52	4.3	32	2.6	447	2	449
Illinois	1,833	15.3	1,304	10.8	21,442	242	21,684
Indiana	519	8.8	484	8.2	5,382	37	5,419
Iowa	100	3.5	75	2.6	1,138	9	1,147
Kansas	159	6.1	126	4.8	2,082	11	2,093
Kentucky	362	9.3	280	7.1	2,839	22	2,861
Louisiana	1,090	25.0	951	21.8	11,018	118	11,136
Maine	51	4.1	31	2.5	827	9	836
Maryland	1,851	36.3	1,639	31.9	18,430	286	18,716
Massachusetts	850	13.9	924	15.0	13,610	199	13,809
Michigan	880	9.0	714	7.3	9,865	104	9,969
Minnesota	211	4.5	190	4.0	3,372	22	3,394
Mississippi	345	12.6	415	15.1	3,562	53	3,615
Missouri	569	10.5	443	8.1	8,190	55	8,245
Montana	41	4.7	29	3.3	294	3	297
Nebraska	91	5.5	72	4.3	942	9	951
Nevada	588	35.0	258	14.8	3,875	26	3,901
New Hampshire	55	4.7	42	3.5	801	8	809
New Jersey	3,235	40.1	2,134	26.3	37,517	713	38,230
New Mexico	168	9.7	209	12.0	1,812	8	1,820
New York	13,117	72.3	8,714	47.9	126,495	2,180	128,675
North Carolina	850	11.4	788	10.4	8,838	110	8,948
North Dakota	12	1.9	6	0.9	96	—	96
Ohio	851	7.6	685	6.1	10,138	117	10,255
Oklahoma	282	8.5	285	8.5	3,274	26	3,300
Oregon	303	9.3	204	6.2	4,349	16	4,365
Pennsylvania	1,910	15.9	1,740	14.5	20,755	285	21,040
Rhode Island	152	15.4	128	12.9	1,839	20	1,859
South Carolina	770	20.3	777	20.3	7,692	75	7,767
South Dakota	11	1.5	15	2.0	140	4	144
Tennessee	775	14.4	695	12.8	6,940	48	6,988
Texas	4,672	24.1	3,967	20.1	47,994	356	48,350
Utah	152	7.4	139	6.6	1,651	21	1,672
Vermont	29	4.9	20	3.4	344	4	348
Virginia	1,175	17.4	998	14.7	11,110	159	11,269
Washington	634	11.3	441	7.8	8,618	33	8,651
West Virginia	126	6.9	86	4.7	945	8	953
Wisconsin	254	4.9	203	3.9	3,204	26	3,230
Wyoming	16	3.3	6	1.2	157	2	159
<b>Subtotal</b>	<b>58,099</b>	<b>21.7</b>	<b>46,311</b>	<b>17.1</b>	<b>656,861</b>	<b>8,060</b>	<b>664,921</b>
<b>U.S. dependencies, possessions, and associated nations</b>							
Guam	2	1.4	2	1.3	21	—	21
Pacific Islands, U.S.	1	0.3	—	—	4	—	4
Puerto Rico	2,037	53.2	1,711	44.3	21,915	382	22,297
Virgin Islands, U.S.	98	83.8	35	29.6	396	15	411
<b>Total<sup>1</sup></b>	<b>60,270</b>	<b>22.1</b>	<b>48,269</b>	<b>17.6</b>	<b>679,739</b>	<b>8,461</b>	<b>688,200</b>

<sup>1</sup>U.S. totals presented in this report include data from the United States (50 states and the District of Columbia), and from U.S. dependencies, possessions, and independent nations in free association with the United States. See Technical Notes. Totals include 546 persons whose state of residence is unknown.



**Table 3. HIV infection cases<sup>1</sup> by state, reported in 1998; and cumulative totals, by state and age group, through December 1998, from areas with confidential HIV infection reporting**

State of residence (Date HIV reporting initiated)	1998	Cumulative totals		
		Adults/ adolescents	Children <13 years old	Total
Alabama (Jan. 1988)	521	4,660	41	4,701
Arizona (Jan. 1987)	473	3,934	39	3,973
Arkansas (July 1989)	240	1,742	20	1,762
Colorado (Nov. 1985)	285	5,326	28	5,354
Connecticut (July 1992) <sup>2</sup>	10	—	105	105
Florida (July 1997)	6,837	8,714	85	8,799
Idaho (June 1986)	25	309	4	313
Indiana (July 1988)	366	3,193	28	3,221
Iowa (July 1998)	84	100	1	101
Louisiana (Feb. 1993)	1,030	6,181	107	6,288
Michigan (April 1992)	584	4,632	95	4,727
Minnesota (Oct. 1985)	238	2,407	28	2,435
Mississippi (Aug. 1988)	507	3,895	42	3,937
Missouri (Oct. 1987)	465	4,003	40	4,043
Nebraska (Sept. 1995)	84	418	6	424
Nevada (Feb. 1992)	260	2,568	24	2,592
New Jersey (Jan. 1992)	1,473	12,555	370	12,925
New Mexico (Jan. 1998)	388	402	3	405
North Carolina (Feb. 1990)	1,021	8,482	114	8,596
North Dakota (Jan. 1988)	8	66	1	67
Ohio (June 1990)	906	4,521	62	4,583
Oklahoma (June 1988)	280	2,058	15	2,073
Oregon (Sept. 1988) <sup>2</sup>	5	—	16	16
South Carolina (Feb. 1986)	899	6,628	109	6,737
South Dakota (Jan. 1988)	12	177	5	182
Tennessee (Jan. 1992)	756	4,884	48	4,932
Texas (Feb. 1994) <sup>2</sup>	65	—	272	272
Utah (April 1989)	57	770	5	775
Virginia (July 1989)	810	7,252	72	7,324
West Virginia (Jan. 1989)	62	482	3	485
Wisconsin (Nov. 1985)	199	2,168	31	2,199
Wyoming (June 1989)	8	65	—	65
<b>Subtotal</b>	<b>18,958</b>	<b>102,592</b>	<b>1,819</b>	<b>104,411</b>
<b>U.S. dependencies, possessions, and associated nations</b>				
Virgin Islands, U.S. (Dec. 1998)	10	11	1	12
Persons reported from states with confidential HIV reporting who were residents of other states <sup>3</sup>	425	2,097	55	2,152
<b>Total</b>	<b>19,393</b>	<b>104,700</b>	<b>1,875</b>	<b>106,575</b>

<sup>1</sup>Includes only persons reported with HIV infection who have not developed AIDS.

<sup>2</sup>Connecticut and Texas have confidential HIV infection reporting for pediatric cases only; Oregon has confidential HIV infection reporting for children less than 6 years old.

<sup>3</sup>Includes 341 persons reported from states with confidential HIV infection reporting, but whose state of residence is unknown. See Technical Notes.

**Table 4. AIDS cases and annual rates per 100,000 population, by metropolitan area and age group, reported through December 1998, United States**

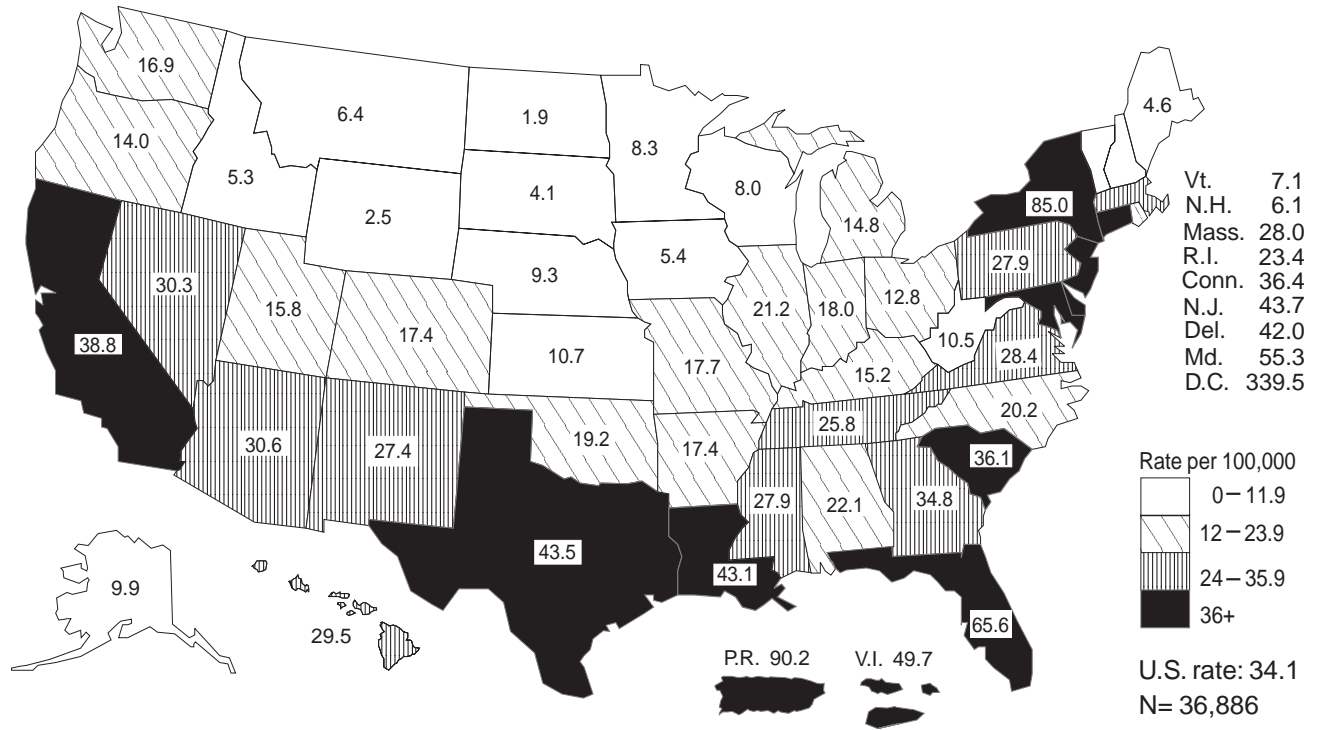
Metropolitan area of residence (with 500,000 or more population)	1997		1998		Cumulative totals		
	No.	Rate	No.	Rate	Adults/ adolescents	Children <13 years old	Total
Akron, Ohio	77	11.2	54	7.8	504	1	505
Albany-Schenectady, N.Y.	218	24.9	118	13.5	1,541	24	1,565
Albuquerque, N.Mex.	102	15.1	88	13.0	986	2	988
Allentown, Pa.	61	9.9	39	6.3	700	8	708
Ann Arbor, Mich.	25	4.6	20	3.7	340	9	349
Atlanta, Ga.	1,168	32.1	941	25.1	14,116	101	14,217
Austin, Tex.	246	23.0	294	26.6	3,427	22	3,449
Bakersfield, Calif.	68	10.9	86	13.6	871	5	876
Baltimore, Md.	1,271	51.3	1,162	46.8	12,333	200	12,533
Baton Rouge, La.	196	34.4	184	32.0	1,560	19	1,579
Bergen-Passaic, N.J.	427	32.0	287	21.3	4,939	75	5,014
Birmingham, Ala.	174	19.3	140	15.4	1,635	22	1,657
Boston, Mass.	755	13.0	828	14.1	12,057	174	12,231
Buffalo, N.Y.	407	35.0	115	10.0	1,555	18	1,573
Charleston, S.C.	114	21.3	113	20.9	1,321	11	1,332
Charlotte, N.C.	145	10.7	193	14.0	1,813	22	1,835
Chicago, Ill.	1,560	19.8	1,111	14.0	18,561	215	18,776
Cincinnati, Ohio	184	11.4	101	6.2	1,770	14	1,784
Cleveland, Ohio	259	11.6	241	10.8	2,984	40	3,024
Columbia, S.C.	153	30.3	155	30.3	1,588	16	1,604
Columbus, Ohio	124	8.5	102	6.9	2,020	12	2,032
Dallas, Tex.	922	29.5	654	20.4	11,116	37	11,153
Dayton, Ohio	63	6.6	55	5.8	887	17	904
Denver, Colo.	292	15.4	235	12.1	5,137	19	5,156
Detroit, Mich.	553	12.4	488	10.9	6,810	72	6,882
El Paso, Tex.	131	19.0	121	17.2	905	10	915
Fort Lauderdale, Fla.	1,004	68.2	836	55.6	10,957	233	11,190
Fort Worth, Tex.	319	20.5	220	13.8	2,924	25	2,949
Fresno, Calif.	61	7.1	63	7.2	1,043	13	1,056
Gary, Ind.	72	11.6	50	8.0	627	3	630
Grand Rapids, Mich.	63	6.1	49	4.7	691	3	694
Greensboro, N.C.	88	7.6	111	9.5	1,400	19	1,419
Greenville, S.C.	107	11.8	125	13.6	1,250	3	1,253
Harrisburg, Pa.	125	20.3	118	19.2	874	6	880
Hartford, Conn.	470	42.5	252	22.7	3,569	46	3,615
Honolulu, Hawaii	76	8.7	106	12.1	1,627	12	1,639
Houston, Tex.	1,767	45.9	1,564	39.8	17,436	149	17,585
Indianapolis, Ind.	223	14.8	219	14.4	2,553	14	2,567
Jacksonville, Fla.	342	33.2	266	25.5	3,853	67	3,920
Jersey City, N.J.	510	92.0	328	58.9	6,019	117	6,136
Kansas City, Mo.	209	12.2	177	10.2	3,565	13	3,578
Knoxville, Tenn.	58	8.9	75	11.4	634	6	640
Las Vegas, Nev.	528	41.8	228	17.3	3,148	25	3,173
Little Rock, Ark.	98	17.7	67	12.0	935	14	949
Los Angeles, Calif.	2,586	28.4	1,851	20.1	38,440	230	38,670
Louisville, Ky.	185	18.6	169	16.9	1,382	14	1,396
McAllen, Tex.	29	5.7	50	9.6	301	9	310
Memphis, Tenn.	277	25.6	285	26.1	2,516	15	2,531
Miami, Fla.	1,666	78.3	1,577	73.3	21,039	463	21,502
Middlesex, N.J.	220	19.9	152	13.6	2,892	67	2,959
Milwaukee, Wis.	156	10.7	115	7.9	1,750	16	1,766
Minneapolis-Saint Paul, Minn.	181	6.5	174	6.1	2,989	17	3,006
Mobile, Ala.	103	19.5	88	16.5	1,005	12	1,017
Monmouth-Ocean, N.J.	197	18.3	126	11.5	2,582	60	2,642
Nashville, Tenn.	281	24.7	189	16.3	2,172	16	2,188
Nassau-Suffolk, N.Y.	551	20.7	429	16.0	6,014	107	6,121
New Haven, Conn.	666	41.0	360	22.1	5,812	121	5,933
New Orleans, La.	562	43.0	457	34.9	6,158	61	6,219
New York, N.Y.	9,865	114.0	7,469	85.9	107,097	1,953	109,050
Newark, N.J.	1,358	69.9	879	45.0	15,120	306	15,426

**Table 4. AIDS cases and annual rates per 100,000 population, by metropolitan area and age group, reported through December 1998, United States (continued)**

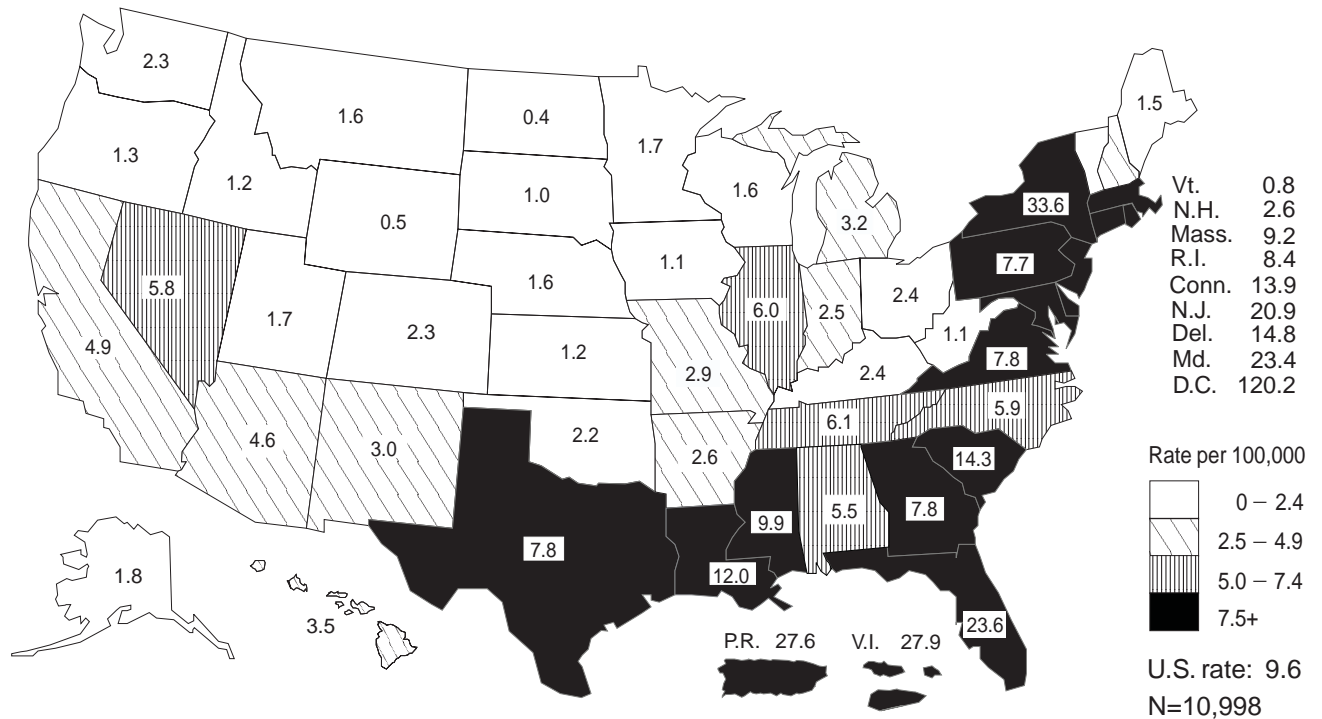
Metropolitan area of residence (with 500,000 or more population)	1997		1998		Cumulative totals		
	No.	Rate	No.	Rate	Adults/ adolescents	Children <13 years old	Total
Norfolk, Va.	410	26.5	346	22.4	3,200	58	3,258
Oakland, Calif.	475	20.9	417	18.0	7,406	41	7,447
Oklahoma City, Okla.	141	13.7	146	14.1	1,530	8	1,538
Omaha, Nebr.	65	9.5	42	6.1	659	3	662
Orange County, Calif.	269	10.1	342	12.6	5,085	31	5,116
Orlando, Fla.	535	36.6	483	32.1	5,165	75	5,240
Philadelphia, Pa.	1,495	30.3	1,311	26.5	15,888	235	16,123
Phoenix, Ariz.	277	9.7	469	16.0	4,308	13	4,321
Pittsburgh, Pa.	141	6.0	121	5.2	2,162	16	2,178
Portland, Oreg.	239	13.4	157	8.6	3,536	8	3,544
Providence, R.I.	143	15.8	123	13.6	1,728	19	1,747
Raleigh-Durham, N.C.	146	13.9	124	11.5	1,713	21	1,734
Richmond, Va.	220	23.2	207	21.6	2,242	25	2,267
Riverside-San Bernardino, Calif.	443	14.5	494	15.9	6,148	51	6,199
Rochester, N.Y.	364	33.6	121	11.2	2,071	13	2,084
Sacramento, Calif.	209	13.9	183	11.9	2,907	24	2,931
Saint Louis, Mo.	314	12.3	200	7.8	4,138	37	4,175
Salt Lake City, Utah	124	9.9	114	9.0	1,438	14	1,452
San Antonio, Tex.	301	20.0	268	17.4	3,575	28	3,603
San Diego, Calif.	798	29.3	538	19.3	9,591	52	9,643
San Francisco, Calif.	1,286	77.0	970	57.6	26,295	37	26,332
San Jose, Calif.	206	12.7	149	9.1	2,870	13	2,883
San Juan, P.R.	1,321	66.3	1,066	53.1	13,758	238	13,996
Sarasota, Fla.	107	20.0	74	13.6	1,224	21	1,245
Scranton, Pa.	39	6.3	42	6.8	400	4	404
Seattle, Wash.	368	16.1	280	12.1	6,140	19	6,159
Springfield, Mass.	94	15.9	98	16.6	1,421	24	1,445
Stockton, Calif.	55	10.2	49	8.9	660	13	673
Syracuse, N.Y.	221	29.9	64	8.7	1,126	9	1,135
Tacoma, Wash.	72	10.8	53	7.8	727	8	735
Tampa-Saint Petersburg, Fla.	595	26.7	549	24.3	7,358	96	7,454
Toledo, Ohio	43	7.0	23	3.8	515	10	525
Tucson, Ariz.	120	15.4	122	15.4	1,316	6	1,322
Tulsa, Okla.	84	11.0	75	9.7	988	8	996
Ventura, Calif.	45	6.2	45	6.1	728	3	731
Washington, D.C.	1,770	38.4	1,594	34.1	19,845	276	20,121
West Palm Beach, Fla.	618	61.0	538	52.1	6,489	193	6,682
Wichita, Kans.	55	10.3	41	7.5	621	2	623
Wilmington, Del.	194	34.7	127	22.5	1,721	12	1,733
Youngstown, Ohio	23	3.9	30	5.1	304	—	304
<b>Metropolitan areas with 500,000 or more population</b>	<b>49,123</b>	<b>29.1</b>	<b>39,344</b>	<b>23.0</b>	<b>570,846</b>	<b>7,164</b>	<b>578,010</b>
<i>Central counties</i>	<i>47,835</i>	<i>31.1</i>	<i>38,337</i>	<i>24.7</i>	<i>559,683</i>	<i>7,037</i>	<i>566,720</i>
<i>Outlying counties</i>	<i>1,288</i>	<i>8.5</i>	<i>1,007</i>	<i>6.5</i>	<i>11,163</i>	<i>127</i>	<i>11,290</i>
<b>Metropolitan areas with 50,000 to 500,000 population</b>	<b>6,325</b>	<b>13.1</b>	<b>5,007</b>	<b>10.3</b>	<b>66,286</b>	<b>790</b>	<b>67,076</b>
<i>Central counties</i>	<i>5,910</i>	<i>13.8</i>	<i>4,636</i>	<i>10.7</i>	<i>62,006</i>	<i>722</i>	<i>62,728</i>
<i>Outlying counties</i>	<i>415</i>	<i>7.5</i>	<i>371</i>	<i>6.7</i>	<i>4,280</i>	<i>68</i>	<i>4,348</i>
<b>Nonmetropolitan areas</b>	<b>4,368</b>	<b>8.0</b>	<b>3,465</b>	<b>6.3</b>	<b>39,373</b>	<b>483</b>	<b>39,856</b>
<b>Total<sup>1</sup></b>	<b>60,270</b>	<b>22.1</b>	<b>48,269</b>	<b>17.6</b>	<b>679,739</b>	<b>8,461</b>	<b>688,200</b>

<sup>1</sup>Totals include 3,258 persons whose area of residence is unknown.

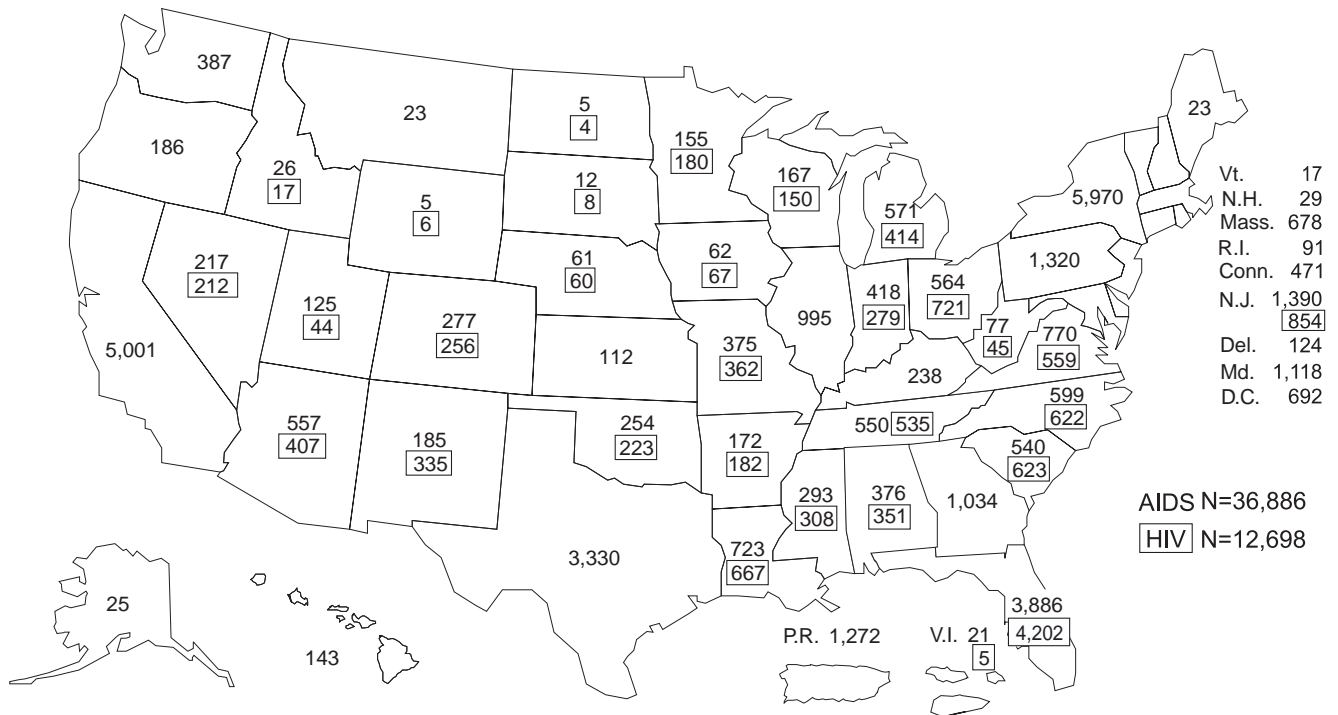
**Figure 1. Male adult/adolescent annual AIDS rates per 100,000 population, for cases reported in 1998, United States**



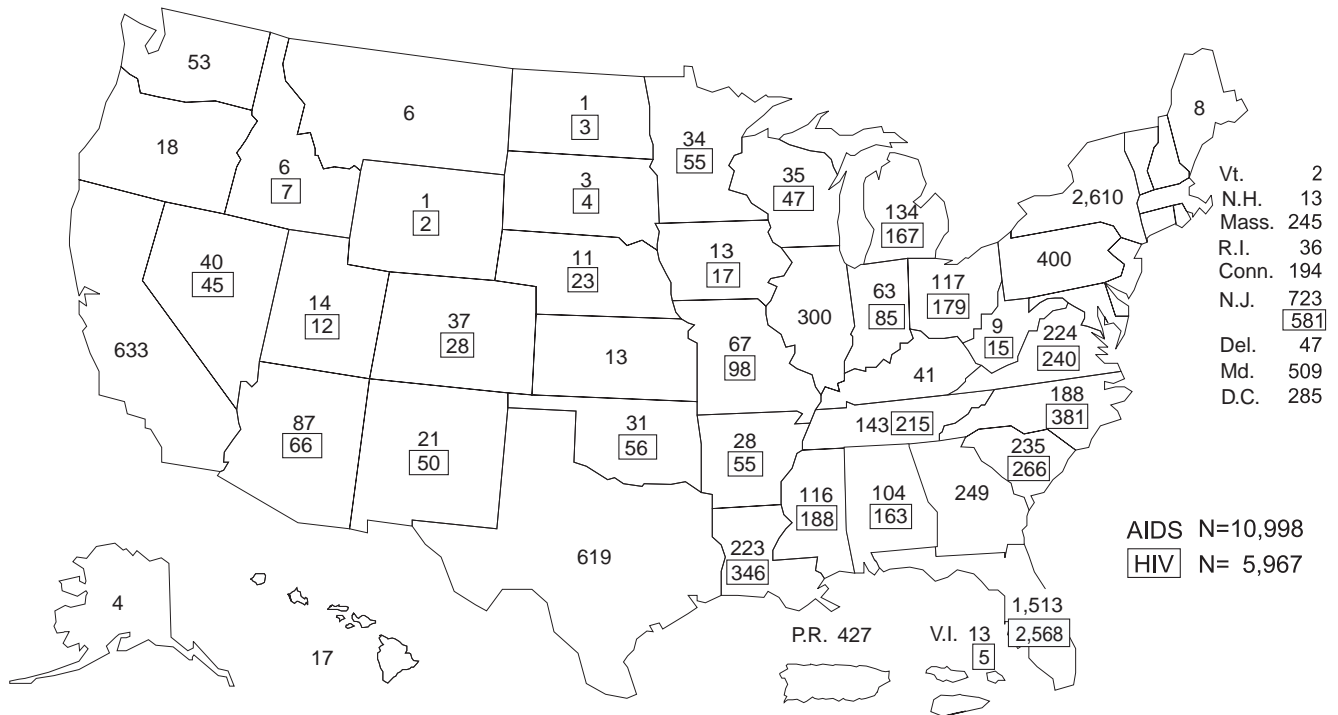
**Figure 2. Female adult/adolescent annual AIDS rates per 100,000 population, for cases reported in 1998, United States**



**Figure 3. Male adult/adolescent HIV infection and AIDS cases reported in 1998, United States**



**Figure 4. Female adult/adolescent HIV infection and AIDS cases reported in 1998, United States**



**Table 5. AIDS cases by age group, exposure category, and sex, reported through December 1998, United States**

Adult/adolescent exposure category	Males				Females				Totals <sup>1</sup>			
	1998		Cumulative total		1998		Cumulative total		1998		Cumulative total <sup>2</sup>	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men who have sex with men	16,642	(45)	326,051	(57)	—	—	—	—	16,642	(35)	326,051	(48)
Injecting drug use	7,869	(21)	126,889	(22)	3,201	(29)	46,804	(43)	11,070	(23)	173,693	(26)
Men who have sex with men and inject drugs	1,984	(5)	43,640	(8)	—	—	—	—	1,984	(4)	43,640	(6)
Hemophilia/coagulation disorder	145	(0)	4,663	(1)	17	(0)	248	(0)	162	(0)	4,911	(1)
Heterosexual contact:	2,610	(7)	23,361	(4)	4,125	(38)	43,128	(39)	6,736	(14)	66,490	(10)
<i>Sex with injecting drug user</i>	631		8,015		1,212		18,231		1,843		26,246	
<i>Sex with bisexual male</i>	—		—		190		3,132		190		3,132	
<i>Sex with person with hemophilia</i>	4		47		28		382		32		429	
<i>Sex with transfusion recipient with HIV infection</i>	23		373		24		562		47		935	
<i>Sex with HIV-infected person, risk not specified</i>	1,952		14,926		2,671		20,821		4,624		35,748	
Receipt of blood transfusion, blood components, or tissue <sup>3</sup>	156	(0)	4,784	(1)	137	(1)	3,598	(3)	293	(1)	8,382	(1)
Other/risk not reported or identified <sup>4</sup>	7,480	(20)	41,037	(7)	3,518	(32)	15,533	(14)	11,000	(23)	56,572	(8)
Adult/adolescent subtotal	36,886	(100)	570,425	(100)	10,998	(100)	109,311	(100)	47,887	(100)	679,739	(100)
<b>Pediatric (&lt;13 years old) exposure category</b>												
Hemophilia/coagulation disorder	—	—	227	(5)	—	—	7	(0)	—	—	234	(3)
Mother with/at risk for HIV infection: <sup>4</sup>	172	(91)	3,818	(88)	169	(88)	3,869	(94)	341	(89)	7,687	(91)
<i>Injecting drug use</i>	42		1,525		41		1,507		83		3,032	
<i>Sex with injecting drug user</i>	26		715		18		685		44		1,400	
<i>Sex with bisexual male</i>	2		82		2		83		4		165	
<i>Sex with person with hemophilia</i>	1		17		—		12		1		29	
<i>Sex with transfusion recipient with HIV infection</i>	—		11		1		14		1		25	
<i>Sex with HIV-infected person, risk not specified</i>	48		555		38		582		86		1,137	
Receipt of blood transfusion, blood components, or tissue	1		73		2		81		3		154	
Has HIV infection, risk not specified	52		840		67		905		119		1,745	
Receipt of blood transfusion, blood components, or tissue <sup>3</sup>	1	(1)	238	(5)	—	—	140	(3)	1	(0)	378	(4)
Risk not reported or identified <sup>4</sup>	17	(9)	75	(2)	23	(12)	87	(2)	40	(10)	162	(2)
Pediatric subtotal	190	(100)	4,358	(100)	192	(100)	4,103	(100)	382	(100)	8,461	(100)
<b>Total</b>	<b>37,076</b>		<b>574,783</b>		<b>11,190</b>		<b>113,414</b>		<b>48,269</b>		<b>688,200</b>	

<sup>1</sup>Includes 3 persons whose sex is unknown.

<sup>2</sup>Includes 12 persons known to be infected with human immunodeficiency virus type 2 (HIV-2). See *MMWR* 1995;44:603-06.

<sup>3</sup>Thirty-seven adults/adolescents and 2 children developed AIDS after receiving blood screened negative for HIV antibody. Thirteen additional adults developed AIDS after receiving tissue, organs, or artificial insemination from HIV-infected donors. Four of the 13 received tissue, organs, or artificial insemination from a donor who was negative for HIV antibody at the time of donation. See *N Engl J Med* 1992;326:726-32.

<sup>4</sup>See table 17 and figure 6 for a discussion of the "other" exposure category. "Other" also includes 113 persons who acquired HIV infection perinatally but were diagnosed with AIDS after age 13. These 113 persons are tabulated under the adult/adolescent, not pediatric, exposure category.

**Table 6. HIV infection cases<sup>1</sup> by age group, exposure category, and sex, reported through December 1998, from the 33 areas with confidential HIV infection reporting<sup>2</sup>**

Adult/adolescent exposure category	Males		Females		Totals <sup>3</sup>	
	1998		1998		1998	
	No.	Cumulative total	No.	Cumulative total	No.	Cumulative total
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
Men who have sex with men	5,163 (40)	34,593 (45)	— —	— —	5,163 (27)	34,593 (33)
Injecting drug use	1,254 (10)	11,315 (15)	689 (11)	6,029 (22)	1,943 (10)	17,344 (17)
Men who have sex with men and inject drugs	476 (4)	4,825 (6)	— —	— —	476 (2)	4,825 (5)
Hemophilia/coagulation disorder	32 (0)	432 (1)	4 (0)	23 (0)	36 (0)	455 (0)
Heterosexual contact:	1,040 (8)	4,937 (6)	2,242 (37)	10,989 (40)	3,282 (17)	15,926 (15)
<i>Sex with injecting drug user</i>	163	1,146	507	3,327	670	4,473
<i>Sex with bisexual male</i>	—	—	128	860	128	860
<i>Sex with person with hemophilia</i>	1	12	14	104	15	116
<i>Sex with transfusion recipient with HIV infection</i>	11	74	13	86	24	160
<i>Sex with HIV-infected person, risk not specified</i>	865	3,705	1,580	6,612	2,445	10,317
Receipt of blood transfusion, blood components, or tissue	30 (0)	347 (0)	41 (1)	379 (1)	71 (0)	726 (1)
Other/risk not reported or identified <sup>4</sup>	5,036 (39)	20,437 (27)	3,075 (51)	10,386 (37)	8,113 (43)	30,831 (29)
<b>Adult/adolescent subtotal</b>	<b>13,031 (100)</b>	<b>76,886 (100)</b>	<b>6,051 (100)</b>	<b>27,806 (100)</b>	<b>19,084 (100)</b>	<b>104,700 (100)</b>
<b>Pediatric (&lt;13 years old) exposure category</b>						
Hemophilia/coagulation disorder	4 (3)	96 (10)	2 (1)	3 (0)	6 (2)	99 (5)
Mother with/at risk for HIV infection:	119 (81)	772 (82)	137 (85)	842 (90)	256 (83)	1,614 (86)
<i>Injecting drug use</i>	19	256	28	245	47	501
<i>Sex with injecting drug user</i>	9	102	11	119	20	221
<i>Sex with bisexual male</i>	1	11	3	15	4	26
<i>Sex with person with hemophilia</i>	—	3	1	4	1	7
<i>Sex with transfusion recipient with HIV infection</i>	—	5	2	5	2	10
<i>Sex with HIV-infected person, risk not specified</i>	40	148	46	198	86	346
<i>Receipt of blood transfusion, blood components, or tissue</i>	3	11	1	10	4	21
<i>Has HIV infection, risk not specified</i>	47	236	45	246	92	482
Receipt of blood transfusion, blood components, or tissue	2 (1)	12 (1)	3 (2)	23 (2)	5 (2)	35 (2)
Risk not reported or identified <sup>4</sup>	22 (15)	59 (6)	20 (12)	68 (7)	42 (14)	127 (7)
<b>Pediatric subtotal</b>	<b>147 (100)</b>	<b>939 (100)</b>	<b>162 (100)</b>	<b>936 (100)</b>	<b>309 (100)</b>	<b>1,875 (100)</b>
<b>Total</b>	<b>13,178</b>	<b>77,825</b>	<b>6,213</b>	<b>28,742</b>	<b>19,393</b>	<b>106,575</b>

<sup>1</sup>Includes only persons reported with HIV infection who have not developed AIDS.

<sup>2</sup>See table 3 for areas with confidential HIV infection reporting.

<sup>3</sup>Includes 8 persons whose sex is unknown.

<sup>4</sup>For HIV infection cases, "risk not reported or identified" refers primarily to persons whose mode of exposure was not reported and who have not been followed up to determine their mode of exposure, and to a smaller number of persons who are not reported with one of the exposures listed above after follow-up. See Technical Notes.

**Table 7. AIDS cases by sex, age at diagnosis, and race/ethnicity, reported through December 1998, United States**

Male Age at diagnosis (years)	White, not Hispanic		Black, not Hispanic		Hispanic		Asian/Pacific Islander		American Indian/ Alaska Native		Total <sup>1</sup>	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Under 5	508	(0)	2,040	(1)	741	(1)	16	(0)	11	(1)	3,319	(1)
5-12	329	(0)	424	(0)	271	(0)	9	(0)	4	(0)	1,039	(0)
13-19	824	(0)	761	(0)	446	(0)	23	(1)	19	(1)	2,075	(0)
20-24	7,323	(3)	6,385	(3)	3,839	(4)	153	(3)	70	(4)	17,797	(3)
25-29	36,485	(13)	23,263	(12)	15,090	(15)	539	(12)	299	(19)	75,773	(13)
30-34	65,304	(23)	39,387	(21)	24,450	(24)	957	(22)	429	(27)	130,672	(23)
35-39	63,280	(23)	42,407	(23)	22,705	(22)	953	(22)	354	(22)	129,884	(23)
40-44	46,052	(17)	33,062	(18)	15,857	(16)	764	(17)	245	(15)	96,120	(17)
45-49	27,663	(10)	18,916	(10)	8,827	(9)	460	(10)	97	(6)	56,034	(10)
50-54	14,875	(5)	9,710	(5)	4,639	(5)	243	(6)	39	(2)	29,550	(5)
55-59	8,097	(3)	5,362	(3)	2,574	(3)	151	(3)	25	(2)	16,236	(3)
60-64	4,513	(2)	2,926	(2)	1,403	(1)	64	(1)	15	(1)	8,935	(2)
65 or older	3,735	(1)	2,420	(1)	1,120	(1)	57	(1)	9	(1)	7,349	(1)
<b>Male subtotal</b>	<b>278,988</b>	<b>(100)</b>	<b>187,063</b>	<b>(100)</b>	<b>101,962</b>	<b>(100)</b>	<b>4,389</b>	<b>(100)</b>	<b>1,616</b>	<b>(100)</b>	<b>574,783</b>	<b>(100)</b>
<b>Female</b>												
<b>Age at diagnosis (years)</b>												
Under 5	474	(2)	2,013	(3)	736	(3)	14	(2)	13	(4)	3,255	(3)
5-12	174	(1)	458	(1)	206	(1)	7	(1)	—	—	848	(1)
13-19	223	(1)	893	(1)	222	(1)	7	(1)	2	(1)	1,348	(1)
20-24	1,481	(6)	3,722	(6)	1,364	(6)	35	(6)	27	(8)	6,640	(6)
25-29	4,202	(17)	9,448	(15)	3,717	(16)	76	(13)	48	(15)	17,507	(15)
30-34	5,719	(23)	14,299	(22)	5,364	(23)	111	(19)	76	(24)	25,617	(23)
35-39	4,990	(20)	14,154	(22)	4,675	(20)	104	(18)	64	(20)	24,023	(21)
40-44	3,230	(13)	9,642	(15)	3,014	(13)	82	(14)	39	(12)	16,025	(14)
45-49	1,703	(7)	4,636	(7)	1,606	(7)	61	(10)	28	(9)	8,060	(7)
50-54	944	(4)	2,284	(4)	885	(4)	26	(4)	14	(4)	4,158	(4)
55-59	638	(3)	1,277	(2)	549	(2)	18	(3)	6	(2)	2,493	(2)
60-64	432	(2)	759	(1)	287	(1)	22	(4)	3	(1)	1,505	(1)
65 or older	894	(4)	760	(1)	254	(1)	22	(4)	3	(1)	1,935	(2)
<b>Female subtotal</b>	<b>25,104</b>	<b>(100)</b>	<b>64,345</b>	<b>(100)</b>	<b>22,879</b>	<b>(100)</b>	<b>585</b>	<b>(100)</b>	<b>323</b>	<b>(100)</b>	<b>113,414</b>	<b>(100)</b>
<b>Total<sup>2</sup></b>	<b>304,094</b>		<b>251,408</b>		<b>124,841</b>		<b>4,974</b>		<b>1,940</b>		<b>688,200</b>	

<sup>1</sup>Includes 765 males and 178 females whose race/ethnicity is unknown.

<sup>2</sup>Includes 3 persons whose sex is unknown.



**Table 8. HIV infection cases<sup>1</sup> by sex, age at diagnosis, and race/ethnicity, reported through December 1998, from the 33 areas with confidential HIV infection reporting<sup>2</sup>**

Male Age at diagnosis (years)	White, not Hispanic		Black, not Hispanic		Hispanic		Asian/Pacific Islander		American Indian/ Alaska Native		Total <sup>3</sup>	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Under 5	154	(0)	477	(1)	79	(1)	3	(1)	2	(0)	719	(1)
5-12	87	(0)	96	(0)	28	(1)	2	(1)	1	(0)	220	(0)
13-19	667	(2)	1,098	(3)	91	(2)	7	(3)	10	(2)	1,894	(2)
20-24	4,492	(13)	4,518	(12)	633	(12)	34	(14)	85	(18)	9,873	(13)
25-29	7,945	(23)	6,791	(19)	1,233	(22)	62	(26)	119	(26)	16,382	(21)
30-34	8,159	(24)	7,833	(21)	1,313	(24)	64	(27)	109	(23)	17,734	(23)
35-39	5,756	(17)	6,721	(18)	1,005	(18)	28	(12)	71	(15)	13,782	(18)
40-44	3,338	(10)	4,544	(12)	567	(10)	19	(8)	38	(8)	8,642	(11)
45-49	1,677	(5)	2,325	(6)	281	(5)	11	(5)	15	(3)	4,381	(6)
50-54	905	(3)	1,095	(3)	122	(2)	6	(2)	8	(2)	2,171	(3)
55-59	375	(1)	544	(1)	70	(1)	1	(0)	4	(1)	1,007	(1)
60-64	201	(1)	261	(1)	42	(1)	2	(1)	2	(0)	516	(1)
65 or older	196	(1)	262	(1)	34	(1)	2	(1)	—	—	504	(1)
<b>Male subtotal</b>	<b>33,952</b>	<b>(100)</b>	<b>36,565</b>	<b>(100)</b>	<b>5,498</b>	<b>(100)</b>	<b>241</b>	<b>(100)</b>	<b>464</b>	<b>(100)</b>	<b>77,825</b>	<b>(100)</b>
<b>Female</b>												
<b>Age at diagnosis (years)</b>												
Under 5	156	(2)	502	(3)	79	(4)	4	(4)	7	(4)	756	(3)
5-12	40	(1)	107	(1)	29	(2)	2	(2)	1	(1)	180	(1)
13-19	479	(7)	1,650	(9)	100	(5)	4	(4)	17	(10)	2,265	(8)
20-24	1,206	(17)	3,198	(16)	268	(14)	23	(25)	28	(17)	4,755	(17)
25-29	1,510	(22)	3,795	(20)	398	(21)	20	(22)	26	(15)	5,807	(20)
30-34	1,395	(20)	3,786	(20)	420	(22)	16	(17)	32	(19)	5,716	(20)
35-39	1,013	(15)	2,851	(15)	272	(14)	10	(11)	28	(17)	4,214	(15)
40-44	497	(7)	1,816	(9)	149	(8)	5	(5)	18	(11)	2,512	(9)
45-49	313	(5)	832	(4)	96	(5)	3	(3)	6	(4)	1,265	(4)
50-54	124	(2)	383	(2)	45	(2)	1	(1)	2	(1)	561	(2)
55-59	75	(1)	214	(1)	26	(1)	3	(3)	2	(1)	324	(1)
60-64	38	(1)	120	(1)	11	(1)	—	—	1	(1)	170	(1)
65 or older	73	(1)	133	(1)	5	(0)	1	(1)	—	—	217	(1)
<b>Female subtotal</b>	<b>6,919</b>	<b>(100)</b>	<b>19,387</b>	<b>(100)</b>	<b>1,898</b>	<b>(100)</b>	<b>92</b>	<b>(100)</b>	<b>168</b>	<b>(100)</b>	<b>28,742</b>	<b>(100)</b>
<b>Total<sup>4</sup></b>	<b>40,871</b>		<b>55,953</b>		<b>7,396</b>		<b>333</b>		<b>632</b>		<b>106,575</b>	

<sup>1</sup>Includes only persons reported with HIV infection who have not developed AIDS.

<sup>2</sup>See table 3 for areas with confidential HIV infection reporting.

<sup>3</sup>Includes 1,105 males, 278 females, and 7 persons of unknown sex whose race/ethnicity is unknown.

<sup>4</sup>Includes 8 persons whose sex is unknown.

**Table 9. Male adult/adolescent AIDS cases by exposure category and race/ethnicity, reported through December 1998, United States**

Exposure category	White, not Hispanic		Black, not Hispanic		Hispanic	
	1998	Cumulative total	1998	Cumulative total	1998	Cumulative total
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
Men who have sex with men	9,082 (65)	208,655 (75)	4,553 (31)	69,741 (38)	2,720 (36)	43,180 (43)
Injecting drug use	1,597 (11)	25,394 (9)	4,041 (27)	64,513 (35)	2,164 (29)	36,353 (36)
Men who have sex with men and inject drugs	927 (7)	22,500 (8)	695 (5)	13,910 (8)	334 (4)	6,790 (7)
Hemophilia/coagulation disorder	101 (1)	3,621 (1)	20 (0)	528 (0)	19 (0)	414 (0)
Heterosexual contact:	451 (3)	4,665 (2)	1,491 (10)	13,162 (7)	638 (8)	5,329 (5)
<i>Sex with injecting drug user</i>	118	1,719	367	4,672	140	1,571
<i>Sex with person with hemophilia</i>	2	26	—	11	2	10
<i>Sex with transfusion recipient with HIV infection</i>	5	147	8	133	10	85
<i>Sex with HIV-infected person, risk not specified</i>	326	2,773	1,116	8,346	486	3,663
Receipt of blood transfusion, blood components, or tissue	65 (0)	3,092 (1)	57 (0)	1,006 (1)	25 (0)	561 (1)
Risk not reported or identified <sup>1</sup>	1,804 (13)	10,224 (4)	3,883 (26)	21,739 (12)	1,611 (21)	8,323 (8)
<b>Total</b>	<b>14,027 (100)</b>	<b>278,151 (100)</b>	<b>14,740 (100)</b>	<b>184,599 (100)</b>	<b>7,511 (100)</b>	<b>100,950 (100)</b>

Exposure category	Asian/Pacific Islander		American Indian/Alaska Native		Cumulative totals <sup>2</sup>	
	1998	Cumulative total	1998	Cumulative total	1998	Cumulative total
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
Men who have sex with men	185 (56)	3,212 (74)	53 (45)	919 (57)	16,642 (45)	326,051 (57)
Injecting drug use	17 (5)	233 (5)	24 (21)	252 (16)	7,869 (21)	126,889 (22)
Men who have sex with men and inject drugs	9 (3)	154 (4)	16 (14)	268 (17)	1,984 (5)	43,640 (8)
Hemophilia/coagulation disorder	2 (1)	64 (1)	2 (2)	28 (2)	145 (0)	4,663 (1)
Heterosexual contact:	22 (7)	139 (3)	3 (3)	39 (2)	2,610 (7)	23,361 (4)
<i>Sex with injecting drug user</i>	6	36	—	13	631	8,015
<i>Sex with person with hemophilia</i>	—	—	—	—	4	47
<i>Sex with transfusion recipient with HIV infection</i>	—	7	—	1	23	373
<i>Sex with HIV-infected person, risk not specified</i>	16	96	3	25	1,952	14,926
Receipt of blood transfusion, blood components, or tissue	9 (3)	108 (2)	— —	8 (0)	156 (0)	4,784 (1)
Risk not reported or identified	85 (26)	454 (10)	19 (16)	87 (5)	7,480 (20)	41,037 (7)
<b>Total</b>	<b>329 (100)</b>	<b>4,364 (100)</b>	<b>117 (100)</b>	<b>1,601 (100)</b>	<b>36,886 (100)</b>	<b>570,425 (100)</b>

<sup>1</sup>See figure 6.

<sup>2</sup>Includes 760 men whose race/ethnicity is unknown.

**Table 10. Male adult/adolescent HIV infection cases<sup>1</sup> by exposure category and race/ethnicity, reported through December 1998, from the 30 areas with confidential HIV infection reporting<sup>2</sup>**

Exposure category	White, not Hispanic				Black, not Hispanic				Hispanic			
	1998		Cumulative total		1998		Cumulative total		1998		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men who have sex with men	2,931	(58)	20,698	(61)	1,564	(25)	11,316	(31)	560	(41)	1,998	(37)
Injecting drug use	394	(8)	2,978	(9)	682	(11)	6,964	(19)	161	(12)	1,233	(23)
Men who have sex with men and inject drugs	280	(6)	2,741	(8)	143	(2)	1,712	(5)	43	(3)	286	(5)
Hemophilia/coagulation disorder	21	(0)	329	(1)	10	(0)	85	(0)	1	(0)	10	(0)
Heterosexual contact:	177	(4)	932	(3)	772	(12)	3,613	(10)	81	(6)	340	(6)
<i>Sex with injecting drug user</i>	39		241		109		791		14		98	
<i>Sex with person with hemophilia</i>	—		3		—		8		1		1	
<i>Sex with transfusion recipient with HIV infection</i>	2		17		9		54		—		2	
<i>Sex with HIV-infected person, risk not specified</i>	136		671		654		2,760		66		239	
Receipt of blood transfusion, blood components, or tissue	10	(0)	165	(0)	17	(0)	149	(0)	2	(0)	24	(0)
Risk not reported or identified <sup>3</sup>	1,202	(24)	5,868	(17)	3,158	(50)	12,153	(34)	532	(39)	1,500	(28)
<b>Total</b>	<b>5,015</b>	<b>(100)</b>	<b>33,711</b>	<b>(100)</b>	<b>6,346</b>	<b>(100)</b>	<b>35,992</b>	<b>(100)</b>	<b>1,380</b>	<b>(100)</b>	<b>5,391</b>	<b>(100)</b>

Exposure category	Asian/Pacific Islander				American Indian/Alaska Native				Cumulative totals <sup>4</sup>			
	1998		Cumulative total		1998		Cumulative total		1998		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men who have sex with men	27	(59)	121	(51)	50	(57)	232	(50)	5,163	(40)	34,593	(45)
Injecting drug use	1	(2)	16	(7)	11	(13)	67	(15)	1,254	(10)	11,315	(15)
Men who have sex with men and inject drugs	2	(4)	5	(2)	6	(7)	61	(13)	476	(4)	4,825	(6)
Hemophilia/coagulation disorder	—	—	2	(1)	—	—	2	(0)	32	(0)	432	(1)
Heterosexual contact:	3	(7)	15	(6)	2	(2)	22	(5)	1,040	(8)	4,937	(6)
<i>Sex with injecting drug user</i>	—		4		1		10		163		1,146	
<i>Sex with person with hemophilia</i>	—		—		—		—		1		12	
<i>Sex with transfusion recipient with HIV infection</i>	—		1		—		—		11		74	
<i>Sex with HIV-infected person, risk not specified</i>	3		10		1		12		865		3,705	
Receipt of blood transfusion, blood components, or tissue	—	—	1	(0)	—	—	2	(0)	30	(0)	347	(0)
Risk not reported or identified	13	(28)	76	(32)	18	(21)	75	(16)	5,036	(39)	20,437	(27)
<b>Total</b>	<b>46</b>	<b>(100)</b>	<b>236</b>	<b>(100)</b>	<b>87</b>	<b>(100)</b>	<b>461</b>	<b>(100)</b>	<b>13,031</b>	<b>(100)</b>	<b>76,886</b>	<b>(100)</b>

<sup>1</sup>Includes only persons reported with HIV infection who have not developed AIDS.

<sup>2</sup>See table 3 for areas with confidential HIV infection reporting for adults and adolescents.

<sup>3</sup>For HIV infection cases, "risk not reported or identified" refers primarily to persons whose mode of exposure was not reported and who have not been followed up to determine their mode of exposure, and to a smaller number of persons who are not reported with one of the exposures listed above after follow-up. See Technical Notes.

<sup>4</sup>Includes 1,095 men whose race/ethnicity is unknown.

**Table 11. Female adult/adolescent AIDS cases by exposure category and race/ethnicity, reported through December 1998, United States**

Exposure category	White, not Hispanic		Black, not Hispanic		Hispanic	
	1998		1998		1998	
	No.	Cumulative total	No.	Cumulative total	No.	Cumulative total
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
Injecting drug use	718 (35)	10,379 (42)	1,876 (28)	27,114 (44)	577 (28)	9,016 (41)
Hemophilia/coagulation disorder	4 (0)	97 (0)	11 (0)	98 (0)	—	45 (0)
Heterosexual contact:	765 (38)	9,690 (40)	2,419 (36)	22,800 (37)	906 (44)	10,220 (47)
<i>Sex with injecting drug user</i>	253	4,023	675	9,200	275	4,866
<i>Sex with bisexual male</i>	62	1,353	92	1,215	33	480
<i>Sex with person with hemophilia</i>	19	272	4	69	4	34
<i>Sex with transfusion recipient with HIV infection</i>	10	292	12	157	1	94
<i>Sex with HIV-infected person, risk not specified</i>	421	3,750	1,636	12,159	593	4,746
Receipt of blood transfusion, blood components, or tissue	42 (2)	1,773 (7)	71 (1)	1,183 (2)	21 (1)	535 (2)
Risk not reported or identified <sup>1</sup>	502 (25)	2,517 (10)	2,398 (35)	10,679 (17)	551 (27)	2,121 (10)
<b>Total</b>	<b>2,031 (100)</b>	<b>24,456 (100)</b>	<b>6,775 (100)</b>	<b>61,874 (100)</b>	<b>2,055 (100)</b>	<b>21,937 (100)</b>

Exposure category	Asian/Pacific Islander		American Indian/Alaska Native		Cumulative totals <sup>2</sup>	
	1998		1998		1998	
	No.	Cumulative total	No.	Cumulative total	No.	Cumulative total
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
Injecting drug use	7 (12)	97 (17)	16 (53)	146 (47)	3,201 (29)	46,804 (43)
Hemophilia/coagulation disorder	—	5 (1)	—	1 (0)	17 (0)	248 (0)
Heterosexual contact:	24 (41)	267 (47)	4 (13)	111 (36)	4,125 (38)	43,128 (39)
<i>Sex with injecting drug user</i>	5	75	3	56	1,212	18,231
<i>Sex with bisexual male</i>	3	63	—	15	190	3,132
<i>Sex with person with hemophilia</i>	1	5	—	2	28	382
<i>Sex with transfusion recipient with HIV infection</i>	1	18	—	—	24	562
<i>Sex with HIV-infected person, risk not specified</i>	14	106	1	38	2,671	20,821
Receipt of blood transfusion, blood components, or tissue	3 (5)	91 (16)	—	13 (4)	137 (1)	3,598 (3)
Risk not reported or identified	25 (42)	104 (18)	10 (33)	39 (13)	3,518 (32)	15,533 (14)
<b>Total</b>	<b>59 (100)</b>	<b>564 (100)</b>	<b>30 (100)</b>	<b>310 (100)</b>	<b>10,998 (100)</b>	<b>109,311 (100)</b>

<sup>1</sup>See figure 6.

<sup>2</sup>Includes 170 women whose race/ethnicity is unknown.

**Table 12. Female adult/adolescent HIV infection cases<sup>1</sup> by exposure category and race/ethnicity, reported through December 1998, from the 30 areas with confidential HIV infection reporting<sup>2</sup>**

Exposure category	White, not Hispanic				Black, not Hispanic				Hispanic			
	1998		Cumulative total		1998		Cumulative total		1998		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Injecting drug use	239	(19)	1,839	(27)	387	(9)	3,689	(20)	55	(12)	418	(23)
Hemophilia/coagulation disorder	1	(0)	11	(0)	3	(0)	12	(0)	—	—	—	—
Heterosexual contact:	519	(41)	2,820	(42)	1,514	(36)	7,290	(39)	184	(40)	741	(41)
<i>Sex with injecting drug user</i>	148		978		302		2,004		50		295	
<i>Sex with bisexual male</i>	45		315		75		505		7		27	
<i>Sex with person with hemophilia</i>	10		68		4		30		—		6	
<i>Sex with transfusion recipient with HIV infection</i>	3		30		7		47		3		9	
<i>Sex with HIV-infected person, risk not specified</i>	313		1,429		1,126		4,704		124		404	
Receipt of blood transfusion, blood components, or tissue	9	(1)	126	(2)	30	(1)	227	(1)	1	(0)	21	(1)
Risk not reported or identified <sup>3</sup>	500	(39)	1,927	(29)	2,296	(54)	7,560	(40)	221	(48)	610	(34)
<b>Total</b>	<b>1,268</b>	<b>(100)</b>	<b>6,723</b>	<b>(100)</b>	<b>4,230</b>	<b>(100)</b>	<b>18,778</b>	<b>(100)</b>	<b>461</b>	<b>(100)</b>	<b>1,790</b>	<b>(100)</b>

Exposure category	Asian/Pacific Islander				American Indian/Alaska Native				Cumulative totals <sup>4</sup>			
	1998		Cumulative total		1998		Cumulative total		1998		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Injecting drug use	1	(5)	6	(7)	6	(26)	57	(36)	689	(11)	6,029	(22)
Hemophilia/coagulation disorder	—	—	—	—	—	—	—	—	4	(0)	23	(0)
Heterosexual contact:	11	(55)	39	(45)	6	(26)	62	(39)	2,242	(37)	10,989	(40)
<i>Sex with injecting drug user</i>	2		8		3		35		507		3,327	
<i>Sex with bisexual male</i>	—		1		1		8		128		860	
<i>Sex with person with hemophilia</i>	—		—		—		—		14		104	
<i>Sex with transfusion recipient with HIV infection</i>	—		—		—		—		13		86	
<i>Sex with HIV-infected person, risk not specified</i>	9		30		2		19		1,580		6,612	
Receipt of blood transfusion, blood components, or tissue	1	(5)	2	(2)	—	—	1	(1)	41	(1)	379	(1)
Risk not reported or identified	7	(35)	39	(45)	11	(48)	40	(25)	3,075	(51)	10,386	(37)
<b>Total</b>	<b>20</b>	<b>(100)</b>	<b>86</b>	<b>(100)</b>	<b>23</b>	<b>(100)</b>	<b>160</b>	<b>(100)</b>	<b>6,051</b>	<b>(100)</b>	<b>27,806</b>	<b>(100)</b>

<sup>1</sup>Includes only persons reported with HIV infection who have not developed AIDS.

<sup>2</sup>See table 3 for areas with confidential HIV infection reporting for adults and adolescents.

<sup>3</sup>For HIV infection cases, "risk not reported or identified" refers primarily to persons whose mode of exposure was not reported and who have not been followed up to determine their mode of exposure, and to a smaller number of persons who are not reported with one of the exposures listed above after follow-up. See Technical Notes.

<sup>4</sup>Includes 269 women whose race/ethnicity is unknown.

**Table 13. AIDS cases in adolescents and adults under age 25, by sex and exposure category, reported through December 1998, United States**

Male exposure category	13-19 years old				20-24 years old			
	1998		Cumulative total		1998		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men who have sex with men	47	(32)	704	(34)	488	(54)	11,079	(62)
Injecting drug use	11	(7)	130	(6)	90	(10)	2,199	(12)
Men who have sex with men and inject drugs	5	(3)	103	(5)	41	(5)	1,853	(10)
Hemophilia/coagulation disorder	16	(11)	740	(36)	23	(3)	623	(4)
Heterosexual contact:	7	(5)	77	(4)	83	(9)	792	(4)
<i>Sex with injecting drug user</i>	—		21		14		256	
<i>Sex with person with hemophilia</i>	—		1		—		4	
<i>Sex with transfusion recipient with HIV infection</i>	—		—		—		10	
<i>Sex with HIV-infected person, risk not specified</i>	7		55		69		522	
Receipt of blood transfusion, blood components, or tissue	8	(5)	90	(4)	2	(0)	105	(1)
Risk not reported or identified <sup>1</sup>	53	(36)	231	(11)	180	(20)	1,146	(6)
<b>Male subtotal</b>	<b>147</b>	<b>(100)</b>	<b>2,075</b>	<b>(100)</b>	<b>907</b>	<b>(100)</b>	<b>17,797</b>	<b>(100)</b>
<b>Female exposure category</b>								
Injecting drug use	14	(9)	190	(14)	87	(15)	1,827	(28)
Hemophilia/coagulation disorder	1	(1)	12	(1)	—	—	13	(0)
Heterosexual contact:	61	(41)	708	(53)	289	(49)	3,614	(54)
<i>Sex with injecting drug user</i>	13		255		62		1,463	
<i>Sex with bisexual male</i>	3		37		11		255	
<i>Sex with person with hemophilia</i>	—		13		3		51	
<i>Sex with transfusion recipient with HIV infection</i>	—		2		1		22	
<i>Sex with HIV-infected person, risk not specified</i>	45		401		212		1,823	
Receipt of blood transfusion, blood components, or tissue	3	(2)	88	(7)	2	(0)	114	(2)
Risk not reported or identified	71	(47)	350	(26)	216	(36)	1,072	(16)
<b>Female subtotal</b>	<b>150</b>	<b>(100)</b>	<b>1,348</b>	<b>(100)</b>	<b>594</b>	<b>(100)</b>	<b>6,640</b>	<b>(100)</b>
<b>Total</b>	<b>297</b>		<b>3,423</b>		<b>1,501</b>		<b>24,437</b>	

<sup>1</sup>See figure 6.

**Table 14. HIV infection cases<sup>1</sup> in adolescents and adults under age 25, by sex and exposure category, reported through December 1998, from the 30 areas with confidential HIV infection reporting<sup>2</sup>**

Male exposure category	13-19 years old				20-24 years old			
	1998		Cumulative total		1998		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men who have sex with men	145	(52)	911	(48)	575	(50)	5,475	(55)
Injecting drug use	7	(3)	99	(5)	50	(4)	562	(6)
Men who have sex with men and inject drugs	4	(1)	95	(5)	53	(5)	655	(7)
Hemophilia/coagulation disorder	5	(2)	104	(5)	4	(0)	83	(1)
Heterosexual contact:	19	(7)	134	(7)	88	(8)	614	(6)
<i>Sex with injecting drug user</i>	2		25		9		94	
<i>Sex with person with hemophilia</i>	—		2		—		1	
<i>Sex with transfusion recipient with HIV infection</i>	—		1		1		7	
<i>Sex with HIV-infected person, risk not specified</i>	17		106		78		512	
Receipt of blood transfusion, blood components, or tissue	—	—	9	(0)	1	(0)	30	(0)
Risk not reported or identified <sup>3</sup>	99	(35)	542	(29)	368	(32)	2,454	(25)
<b>Male subtotal</b>	<b>279</b>	<b>(100)</b>	<b>1,894</b>	<b>(100)</b>	<b>1,139</b>	<b>(100)</b>	<b>9,873</b>	<b>(100)</b>
<b>Female exposure category</b>								
Injecting drug use	16	(4)	158	(7)	42	(5)	611	(13)
Hemophilia/coagulation disorder	—	—	—	—	1	(0)	3	(0)
Heterosexual contact:	183	(41)	1,106	(49)	313	(36)	2,117	(45)
<i>Sex with injecting drug user</i>	21		221		43		545	
<i>Sex with bisexual male</i>	7		73		16		192	
<i>Sex with person with hemophilia</i>	3		19		—		30	
<i>Sex with transfusion recipient with HIV infection</i>	—		4		2		17	
<i>Sex with HIV-infected person, risk not specified</i>	152		789		252		1,333	
Receipt of blood transfusion, blood components, or tissue	—	—	15	(1)	2	(0)	26	(1)
Risk not reported or identified	249	(56)	986	(44)	502	(58)	1,998	(42)
<b>Female subtotal</b>	<b>448</b>	<b>(100)</b>	<b>2,265</b>	<b>(100)</b>	<b>860</b>	<b>(100)</b>	<b>4,755</b>	<b>(100)</b>
<b>Total<sup>4</sup></b>	<b>728</b>		<b>4,161</b>		<b>1,999</b>		<b>14,628</b>	

<sup>1</sup>Includes only persons reported with HIV infection who have not developed AIDS.

<sup>2</sup>See table 3 for areas with confidential HIV infection reporting for adults and adolescents.

<sup>3</sup>For HIV infection cases, "risk not reported or identified" refers primarily to persons whose mode of exposure was not reported and who have not been followed up to determine their mode of exposure, and to a smaller number of persons who are not reported with one of the exposures listed above after follow-up. See Technical Notes.

<sup>4</sup>Includes 2 persons whose sex is unknown.

**Table 15. Pediatric AIDS cases by exposure category and race/ethnicity, reported through December 1998, United States**

Exposure category	White, not Hispanic				Black, not Hispanic				Hispanic			
	1998		Cumulative total		1998		Cumulative total		1998		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Hemophilia/coagulation disorder	—	—	158	(11)	—	—	35	(1)	—	—	37	(2)
Mother with/at risk for HIV infection:	55	(95)	1,116	(75)	209	(88)	4,702	(95)	75	(89)	1,798	(92)
<i>Injecting drug use</i>	19		468		47		1,825		17		718	
<i>Sex with injecting drug user</i>	8		215		23		690		12		482	
<i>Sex with bisexual male</i>	—		65		3		60		1		38	
<i>Sex with person with hemophilia</i>	—		17		—		5		1		7	
<i>Sex with transfusion recipient with HIV infection</i>	—		8		—		8		1		9	
<i>Sex with HIV-infected person, risk not specified</i>	10		135		58		743		18		245	
<i>Receipt of blood transfusion, blood components, or tissue</i>	—		43		2		77		1		33	
<i>Has HIV infection, risk not specified</i>	18		165		76		1,294		24		266	
Receipt of blood transfusion, blood components, or tissue	—	—	187	(13)	—	—	89	(2)	1	(1)	92	(5)
Risk not reported or identified <sup>1</sup>	3	(5)	24	(2)	28	(12)	109	(2)	8	(10)	27	(1)
<b>Total</b>	<b>58</b>	<b>(100)</b>	<b>1,485</b>	<b>(100)</b>	<b>237</b>	<b>(100)</b>	<b>4,935</b>	<b>(100)</b>	<b>84</b>	<b>(100)</b>	<b>1,954</b>	<b>(100)</b>

Exposure category	Asian/Pacific Islander				American Indian/ Alaska Native				Cumulative totals <sup>2</sup>			
	1998		Cumulative total		1998		Cumulative total		1998		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Hemophilia/coagulation disorder	—	—	3	(7)	—	—	1	(4)	—	—	234	(3)
Mother with/at risk for HIV infection:	1	(50)	31	(67)	—	—	27	(96)	341	(89)	7,687	(91)
<i>Injecting drug use</i>	—		4		—		12		83		3,032	
<i>Sex with injecting drug user</i>	1		5		—		7		44		1,400	
<i>Sex with bisexual male</i>	—		2		—		—		4		165	
<i>Sex with person with hemophilia</i>	—		—		—		—		1		29	
<i>Sex with transfusion recipient with HIV infection</i>	—		—		—		—		1		25	
<i>Sex with HIV-infected person, risk not specified</i>	—		9		—		3		86		1,137	
<i>Receipt of blood transfusion, blood components, or tissue</i>	—		1		—		—		3		154	
<i>Has HIV infection, risk not specified</i>	—		10		—		5		119		1,745	
Receipt of blood transfusion, blood components, or tissue	—	—	10	(22)	—	—	—	—	1	(0)	378	(4)
Risk not reported or identified	1	(50)	2	(4)	—	—	—	—	40	(10)	162	(2)
<b>Total</b>	<b>2</b>	<b>(100)</b>	<b>46</b>	<b>(100)</b>	<b>—</b>	<b>—</b>	<b>28</b>	<b>(100)</b>	<b>382</b>	<b>(100)</b>	<b>8,461</b>	<b>(100)</b>

<sup>1</sup>See figure 6, footnote 1.

<sup>2</sup>Includes 13 children whose race/ethnicity is unknown.



**Table 16. Pediatric HIV infection cases<sup>1</sup> by exposure category and race/ethnicity, reported through December 1998, from the 33 areas with confidential HIV infection reporting<sup>2</sup>**

Exposure category	White, not Hispanic				Black, not Hispanic				Hispanic			
	1998		Cumulative total		1998		Cumulative total		1998		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Hemophilia/coagulation disorder	2	(4)	70	(16)	3	(1)	21	(2)	1	(2)	5	(2)
Mother with/at risk for HIV infection:	41	(89)	331	(76)	177	(84)	1,069	(90)	34	(79)	191	(89)
<i>Injecting drug use</i>	12		106		28		337		7		50	
<i>Sex with injecting drug user</i>	8		67		10		119		2		32	
<i>Sex with bisexual male</i>	1		4		3		15		—		3	
<i>Sex with person with hemophilia</i>	1		4		—		2		—		—	
<i>Sex with transfusion recipient with HIV infection</i>	—		4		—		4		2		2	
<i>Sex with HIV-infected person, risk not specified</i>	7		61		65		239		11		43	
<i>Receipt of blood transfusion, blood components, or tissue</i>	—		6		4		13		—		2	
<i>Has HIV infection, risk not specified</i>	12		79		67		340		12		59	
Receipt of blood transfusion, blood components, or tissue	1	(2)	18	(4)	1	(0)	9	(1)	3	(7)	7	(3)
Risk not reported or identified <sup>3</sup>	2	(4)	18	(4)	30	(14)	83	(7)	5	(12)	12	(6)
<b>Total</b>	<b>46</b>	<b>(100)</b>	<b>437</b>	<b>(100)</b>	<b>211</b>	<b>(100)</b>	<b>1,182</b>	<b>(100)</b>	<b>43</b>	<b>(100)</b>	<b>215</b>	<b>(100)</b>

Exposure category	Asian/Pacific Islander				American Indian/ Alaska Native				Cumulative totals <sup>4</sup>			
	1998		Cumulative total		1998		Cumulative total		1998		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Hemophilia/coagulation disorder	—	—	1	(9)	—	—	1	(9)	6	(2)	99	(5)
Mother with/at risk for HIV infection:	3	(100)	7	(64)	—	—	8	(73)	256	(83)	1,614	(86)
<i>Injecting drug use</i>	—		2		—		3		47		501	
<i>Sex with injecting drug user</i>	—		—		—		2		20		221	
<i>Sex with bisexual male</i>	—		2		—		1		4		26	
<i>Sex with person with hemophilia</i>	—		—		—		1		1		7	
<i>Sex with transfusion recipient with HIV infection</i>	—		—		—		—		2		10	
<i>Sex with HIV-infected person, risk not specified</i>	2		2		—		—		86		346	
<i>Receipt of blood transfusion, blood components, or tissue</i>	—		—		—		—		4		21	
<i>Has HIV infection, risk not specified</i>	1		1		—		1		92		482	
Receipt of blood transfusion, blood components, or tissue	—	—	1	(9)	—	—	—	—	5	(2)	35	(2)
Risk not reported or identified	—	—	2	(18)	—	—	2	(18)	42	(14)	127	(7)
<b>Total</b>	<b>3</b>	<b>(100)</b>	<b>11</b>	<b>(100)</b>	<b>—</b>	<b>—</b>	<b>11</b>	<b>(100)</b>	<b>309</b>	<b>(100)</b>	<b>1,875</b>	<b>(100)</b>

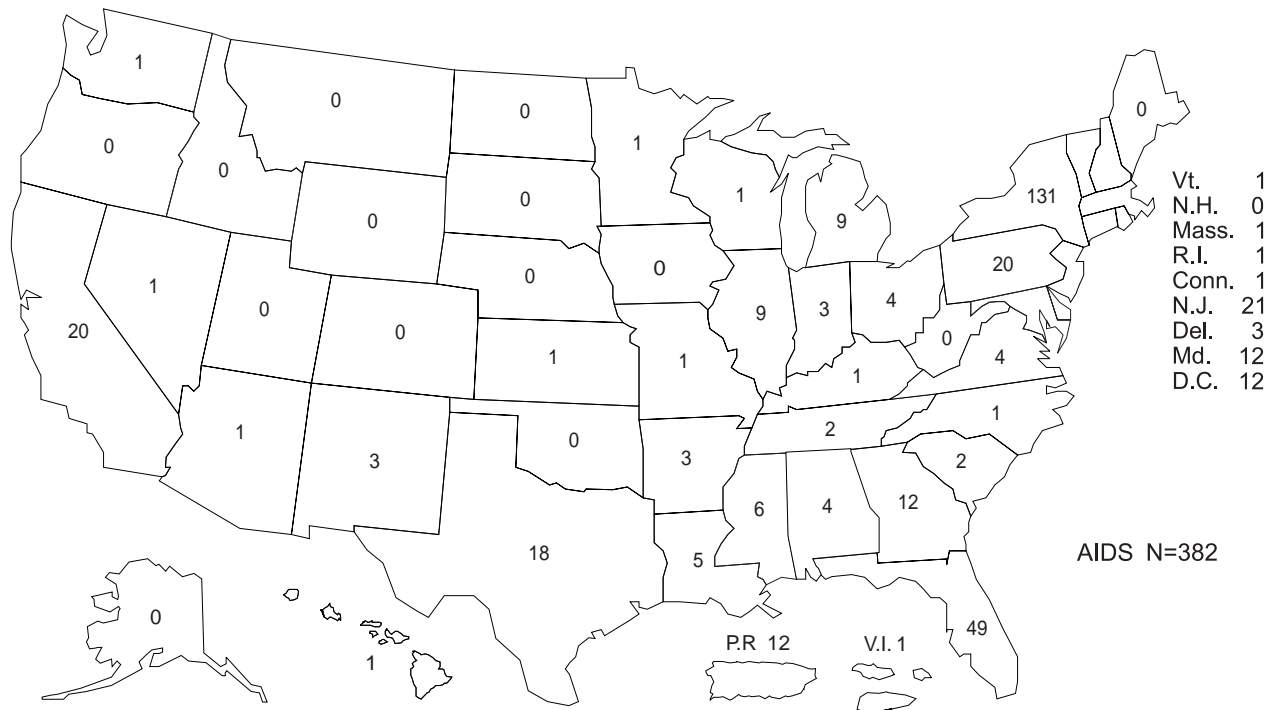
<sup>1</sup>Includes only persons reported with HIV infection who have not developed AIDS.

<sup>2</sup>See table 3 for areas with confidential HIV infection reporting.

<sup>3</sup>For HIV infection cases, "risk not reported or identified" refers primarily to persons whose mode of exposure was not reported and who have not been followed up to determine their mode of exposure, and to a smaller number of persons who are not reported with one of the exposures listed above after follow-up. See Technical Notes.

<sup>4</sup>Includes 19 children whose race/ethnicity is unknown.

**Figure 5. Pediatric AIDS cases reported in 1998, United States**



**Table 17. Health care workers with documented and possible occupationally acquired AIDS/HIV infection, by occupation, reported through December 1998, United States<sup>1</sup>**

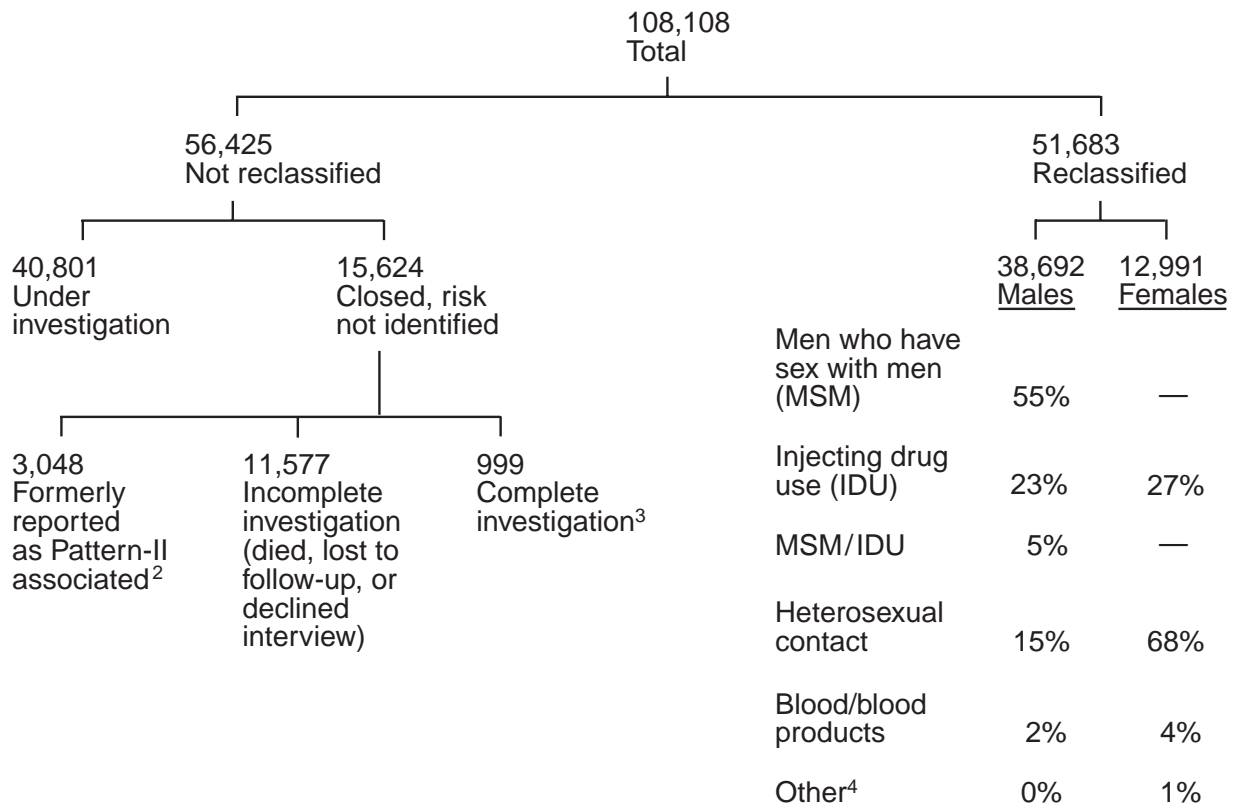
Occupation	Documented occupational transmission <sup>2</sup>	Possible occupational transmission <sup>3</sup>
	No.	No.
Dental worker, including dentist	—	6
Embalmer/morgue technician	1	2
Emergency medical technician/paramedic	—	12
Health aide/attendant	1	14
Housekeeper/maintenance worker	1	12
Laboratory technician, clinical	16	16
Laboratory technician, nonclinical	3	—
Nurse	22	33
Physician, nonsurgical	6	12
Physician, surgical	—	6
Respiratory therapist	1	2
Technician, dialysis	1	3
Technician, surgical	2	2
Technician/therapist, other than those listed above	—	10
Other healthcare occupations	—	4
<b>Total</b>	<b>54</b>	<b>134</b>

<sup>1</sup>Health care workers are defined as those persons, including students and trainees, who have worked in a health care, clinical, or HIV laboratory setting at any time since 1978. See *MMWR* 1992;41:823-25.

<sup>2</sup>Health care workers who had documented HIV seroconversion after occupational exposure or had other laboratory evidence of occupational infection: 46 had percutaneous exposure, 5 had mucocutaneous exposure, 2 had both percutaneous and mucocutaneous exposures, and 1 had an unknown route of exposure. Forty-nine exposures were to blood from an HIV-infected person, 1 to visibly bloody fluid, 1 to an unspecified fluid, and 3 to concentrated virus in a laboratory. Twenty-five of these health care workers developed AIDS.

<sup>3</sup>These health care workers have been investigated and are without identifiable behavioral or transfusion risks; each reported percutaneous or mucocutaneous occupational exposures to blood or body fluids, or laboratory solutions containing HIV, but HIV seroconversion specifically resulting from an occupational exposure was not documented.

**Figure 6. Results of investigations of adult/adolescent AIDS cases ever classified as risk not reported or identified, through December 1998, United States<sup>1</sup>**



<sup>1</sup>Excludes 162 children under 13 years of age classified as "other/risk not reported or identified" in table 3; 150 whose risk is not identified, 2 who were exposed to HIV-infected blood in a household setting, as supported by seroconversion, epidemiologic, and/or laboratory evidence (see *MMWR* 1992;41:228-31 and *N Engl J Med* 1993;329:1835-41) and 10 children who had sexual contact with an adult with or at high risk for HIV infection (*Pediatrics* 1998;102:e46). An additional 472 children who were initially reported without risk information have been reclassified after investigation.

<sup>2</sup>Cases associated with persons born in Pattern-II countries are no longer classified as heterosexual transmission. See Technical Notes.

<sup>3</sup>Investigations of these persons included patient interviews. Based on available information, these persons could not be reclassified into an exposure category. This group includes persons possibly infected through heterosexual contact with a partner who is not known to be HIV infected or at risk for HIV infection; persons who may choose not to disclose high-risk information; and persons with possible occupational exposure. These 999 persons report heterosexual contact, sexually transmitted disease infections, non-injecting drug use, hepatitis infections, and occupational exposures to blood or body fluids.

<sup>4</sup>One hundred forty-nine adults/adolescents are included in the "other" exposure category listed here and in table 5, and were exposed to HIV-infected blood, body fluids, or concentrated virus in health care, laboratory, or household settings, as supported by seroconversion, epidemiologic, and/or laboratory evidence. See table 17, *MMWR* 1993;42:329-31, *MMWR* 1993;42:948-51, and XI International Conference on AIDS; Vancouver, Canada; Jul. 7-12, 1996;1:179 [abstract Mo.D.1728]. Three persons were infected following intentional inoculation with HIV-infected blood. One hundred thirteen persons acquired HIV infection perinatally and were diagnosed with AIDS after age 13.

**Table 18. Adult/adolescent AIDS cases by single and multiple exposure categories, reported through December 1998, United States**

Exposure category	AIDS cases	
	No.	(%)
<b>Single mode of exposure</b>		
Men who have sex with men	312,148	(46)
Injecting drug use	138,503	(20)
Hemophilia/coagulation disorder	3,969	(1)
Heterosexual contact	64,844	(10)
Receipt of transfusion <sup>1</sup>	8,369	(1)
Receipt of transplant of tissues, organs, or artificial insemination <sup>2</sup>	13	(0)
Other <sup>3</sup>	147	(0)
<b>Single mode of exposure subtotal</b>	<b>527,993</b>	<b>(78)</b>
<b>Multiple modes of exposure</b>		
Men who have sex with men; injecting drug use	37,315	(5)
Men who have sex with men; hemophilia/coagulation disorder	168	(0)
Men who have sex with men; heterosexual contact	9,988	(1)
Men who have sex with men; receipt of transfusion/transplant	3,405	(1)
Injecting drug use; hemophilia/coagulation disorder	191	(0)
Injecting drug use; heterosexual contact	32,203	(5)
Injecting drug use; receipt of transfusion/transplant	1,642	(0)
Hemophilia/coagulation disorder; heterosexual contact	103	(0)
Hemophilia/coagulation disorder; receipt of transfusion/transplant	803	(0)
Heterosexual contact; receipt of transfusion/transplant	1,646	(0)
Men who have sex with men; injecting drug use; hemophilia/coagulation disorder	47	(0)
Men who have sex with men; injecting drug use; heterosexual contact	5,468	(1)
Men who have sex with men; injecting drug use; receipt of transfusion/transplant	606	(0)
Men who have sex with men; hemophilia/coagulation disorder; heterosexual contact	21	(0)
Men who have sex with men; hemophilia/coagulation disorder; receipt of transfusion/transplant	38	(0)
Men who have sex with men; heterosexual contact; receipt of transfusion/transplant	278	(0)
Injecting drug use; hemophilia/coagulation disorder; heterosexual contact	81	(0)
Injecting drug use; hemophilia/coagulation disorder; receipt of transfusion/transplant	36	(0)
Injecting drug use; heterosexual contact; receipt of transfusion/transplant	1,014	(0)
Hemophilia/coagulation disorder; heterosexual contact; receipt of transfusion/transplant	36	(0)
Men who have sex with men; injecting drug use; hemophilia/coagulation disorder; heterosexual contact	13	(0)
Men who have sex with men; injecting drug use; hemophilia/coagulation disorder; receipt of transfusion/transplant	14	(0)
Men who have sex with men; injecting drug use; heterosexual contact; receipt of transfusion/transplant	171	(0)
Men who have sex with men; hemophilia/coagulation disorder; heterosexual contact; receipt of transfusion/transplant	5	(0)
Injecting drug use; hemophilia/coagulation disorder; heterosexual contact; receipt of transfusion/transplant	23	(0)
Men who have sex with men; injecting drug use; hemophilia/coagulation disorder; heterosexual contact; receipt of transfusion/transplant	6	(0)
<b>Multiple modes of exposure subtotal</b>	<b>95,321</b>	<b>(14)</b>
<b>Risk not reported or identified<sup>4</sup></b>	<b>56,425</b>	<b>(8)</b>
<b>Total</b>	<b>679,739</b>	<b>(100)</b>

<sup>1</sup>Includes 37 adult/adolescents who developed AIDS after receiving blood screened negative for HIV antibody.

<sup>2</sup>Thirteen adults developed AIDS after receiving tissue, organs, or artificial insemination from HIV-infected donors. Four of the 12 received tissue or organs from a single donor who was negative for HIV antibody at the time of donation. See *N Engl J Med* 1992;326:726-32.

<sup>3</sup>See table 17 and figure 6 for a discussion of the "other" exposure category. "Other" also includes 113 persons who acquired HIV infection perinatally, but were diagnosed with AIDS after age 13.

<sup>4</sup>See figure 6.

**Table 19. AIDS cases and annual rates per 100,000 population, by race/ethnicity, age group, and sex, reported in 1998, United States**

Race/ethnicity	Adults/adolescents						Children <13 years		Total	
	Males		Females		Total		No.	Rate	No.	Rate
	No.	Rate	No.	Rate	No.	Rate				
White, not Hispanic	14,027	17.8	2,031	2.4	16,060	9.9	58	0.2	16,118	8.2
Black, not Hispanic	14,740	125.2	6,775	49.8	21,515	84.7	237	3.2	21,752	66.4
Hispanic	7,511	58.2	2,055	16.6	9,566	37.8	84	0.9	9,650	28.1
Asian/Pacific Islander	329	8.5	59	1.4	388	4.8	2	0.1	390	3.8
American Indian/Alaska Native	117	15.7	30	3.8	148	9.7	0	0.0	148	7.4
<b>Total<sup>1</sup></b>	<b>36,886</b>	<b>34.1</b>	<b>10,998</b>	<b>9.6</b>	<b>47,887</b>	<b>21.5</b>	<b>382</b>	<b>0.7</b>	<b>48,269</b>	<b>17.6</b>

<sup>1</sup>Totals include 211 persons whose race/ethnicity is unknown, and 3 persons whose sex is unknown.

**Table 20. Adult/adolescent AIDS cases among Hispanics, by exposure category and place of birth, reported in 1998, United States**

Adult/adolescent exposure category	Place of birth						Total <sup>2</sup>					
	United States <sup>1</sup>		Central/South America		Cuba	Mexico		Puerto Rico				
	No.	(%)	No.	(%)	No.	(%)		No.	(%)			
Men who have sex with men	1,023	(37)	241	(36)	68	(34)	476	(48)	354	(14)	2,720	(28)
Injecting drug use	777	(28)	29	(4)	15	(8)	75	(8)	1,194	(46)	2,741	(29)
Men who have sex with men and inject drugs	123	(4)	14	(2)	7	(4)	27	(3)	98	(4)	334	(3)
Heterosexual contact	321	(12)	113	(17)	15	(8)	114	(11)	655	(25)	1,544	(16)
Hemophilia/coagulation disorder or receipt of blood transfusion, blood components, or tissue	24	(1)	5	(1)	1	(1)	14	(1)	11	(0)	65	(1)
Risk not reported or identified <sup>3</sup>	514	(18)	272	(40)	94	(47)	287	(29)	282	(11)	2,162	(23)
<b>Total</b>	<b>2,782</b>	<b>(100)</b>	<b>674</b>	<b>(100)</b>	<b>200</b>	<b>(100)</b>	<b>993</b>	<b>(100)</b>	<b>2,594</b>	<b>(100)</b>	<b>9,566</b>	<b>(100)</b>

<sup>1</sup>Excludes persons born in U.S. dependencies, possessions, and independent nations in free association with the United States. Ancestry data for U.S.-born Hispanics are not collected.

<sup>2</sup>Includes 238 Hispanics born in locations other than those listed, and 2,085 Hispanics whose place of birth is unknown.

<sup>3</sup>See figure 6.

**Table 21. Deaths in persons with AIDS, by race/ethnicity, age at death, and sex, occurring in 1996 and 1997, and cumulative totals reported through December 1998, United States<sup>1</sup>**

Race/ethnicity and age at death <sup>2</sup>	Males			Female			Both sexes		
	1996	1997	Cumulative total	1996	1997	Cumulative total	1996	1997	Cumulative total
<b>White, not Hispanic</b>									
Under 15	34	21	591	30	10	410	64	31	1,001
15-24	81	34	2,475	34	20	453	115	54	2,928
25-34	2,994	1,248	52,833	422	239	4,367	3,416	1,487	57,200
35-44	5,635	2,552	76,298	580	330	4,563	6,215	2,882	80,861
45-54	2,717	1,328	34,256	218	139	1,728	2,935	1,467	35,984
55 or older	968	552	14,432	107	53	1,612	1,075	605	16,044
All ages	12,429	5,735	181,017	1,391	791	13,154	13,820	6,526	194,171
<b>Black, not Hispanic</b>									
Under 15	133	70	1,394	117	56	1,366	250	126	2,760
15-24	127	79	2,336	114	96	1,303	241	175	3,639
25-34	2,616	1,465	31,647	1,125	701	10,705	3,741	2,166	42,352
35-44	4,896	2,797	45,742	1,751	1,136	13,042	6,647	3,933	58,784
45-54	2,489	1,690	19,435	675	516	4,362	3,164	2,206	23,797
55 or older	1,042	738	8,225	247	182	1,923	1,289	920	10,148
All ages	11,303	6,839	108,874	4,029	2,687	32,733	15,332	9,526	141,607
<b>Hispanic</b>									
Under 15	44	24	614	43	15	552	87	39	1,166
15-24	60	49	1,288	43	23	462	103	72	1,750
25-34	1,403	740	19,274	414	208	4,209	1,817	948	23,483
35-44	2,247	1,293	24,266	583	336	4,402	2,830	1,629	28,668
45-54	1,071	583	9,625	215	127	1,517	1,286	710	11,142
55 or older	411	256	3,916	101	76	748	512	332	4,664
All ages	5,236	2,945	59,033	1,399	785	11,901	6,635	3,730	70,934
<b>Asian/Pacific Islander</b>									
Under 15	—	—	18	2	—	15	2	—	33
15-24	1	—	34	—	—	5	1	—	39
25-34	47	26	676	12	4	71	59	30	747
35-44	113	53	1,046	10	7	94	123	60	1,140
45-54	52	17	506	5	8	58	57	25	564
55 or older	23	18	223	5	3	41	28	21	264
All ages	236	114	2,504	34	22	286	270	136	2,790
<b>American Indian/Alaska Native</b>									
Under 15	1	—	12	—	—	8	1	—	20
15-24	3	—	24	—	—	3	3	—	27
25-34	28	17	344	8	6	61	36	23	405
35-44	44	28	352	11	6	56	55	34	408
45-54	12	7	104	6	4	23	18	11	127
55 or older	2	—	38	—	—	7	2	—	45
All ages	90	52	877	25	16	158	115	68	1,035
<b>All racial/ethnic groups</b>									
Under 15	214	115	2,632	192	81	2,352	406	196	4,984
15-24	272	162	6,162	191	139	2,228	463	301	8,390
25-34	7,091	3,499	104,832	1,982	1,158	19,416	9,073	4,657	124,248
35-44	12,939	6,727	147,815	2,936	1,816	22,166	15,875	8,543	169,981
45-54	6,346	3,627	63,966	1,121	794	7,693	7,467	4,421	71,659
55 or older	2,450	1,564	26,855	460	314	4,334	2,910	1,878	31,189
All ages	29,312	15,694	352,545	6,882	4,302	58,255	36,194	19,996	410,800

<sup>1</sup>Data tabulations for 1996 and 1997 are based on date of death occurrence. Data for deaths occurring in 1998 are incomplete and not tabulated separately, but are included in the cumulative totals. Tabulations for 1996 and 1997 may increase as additional deaths are reported to CDC.

<sup>2</sup>Data tabulated under "all ages" include 349 persons whose age at death is unknown. Data tabulated under "all racial/ethnic groups" include 263 persons whose race/ethnicity is unknown.

**Table 22. Estimated male adult/adolescent AIDS incidence, by exposure category and race/ethnicity, diagnosed in 1997, and cumulative totals through 1997, United States<sup>1</sup>**

Exposure category	White, not Hispanic				Black, not Hispanic				Hispanic			
	1997		Cumulative total		1997		Cumulative total		1997		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men who have sex with men	10,236	(73)	212,890	(78)	6,561	(40)	74,930	(42)	3,543	(45)	45,264	(46)
Injecting drug use	1,826	(13)	26,228	(10)	5,926	(37)	69,396	(39)	2,827	(36)	38,625	(39)
Men who have sex with men and inject drugs	1,009	(7)	22,671	(8)	991	(6)	14,585	(8)	447	(6)	7,065	(7)
Hemophilia/coagulation disorder	113	(1)	3,704	(1)	42	(0)	644	(0)	25	(0)	471	(0)
Heterosexual contact:	657	(5)	5,338	(2)	2,554	(16)	16,110	(9)	1,026	(13)	6,491	(7)
<i>Sex with injecting drug user</i>	196		1,936		656		5,425		254		1,878	
<i>Sex with person with hemophilia</i>	1		28		2		13		1		9	
<i>Sex with transfusion recipient with HIV infection</i>	5		165		20		158		9		94	
<i>Sex with HIV-infected person, risk not specified</i>	455		3,209		1,876		10,514		762		4,510	
Receipt of blood transfusion, blood components, or tissue	98	(1)	3,243	(1)	83	(1)	1,131	(1)	51	(1)	626	(1)
Risk not reported or identified	34	(0)	519	(0)	47	(0)	2,561	(1)	28	(0)	282	(0)
<b>Total</b>	<b>13,973</b>	<b>(100)</b>	<b>274,593</b>	<b>(100)</b>	<b>16,204</b>	<b>(100)</b>	<b>179,357</b>	<b>(100)</b>	<b>7,947</b>	<b>(100)</b>	<b>98,824</b>	<b>(100)</b>

Exposure category	Asian/Pacific Islander				American Indian/Alaska Native				Cumulative totals <sup>2</sup>			
	1997		Cumulative total		1997		Cumulative total		1997		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men who have sex with men	225	(68)	3,311	(78)	76	(55)	945	(61)	20,704	(53)	337,745	(60)
Injecting drug use	50	(15)	371	(9)	34	(25)	260	(17)	10,722	(28)	135,109	(24)
Men who have sex with men and inject drugs	8	(2)	167	(4)	12	(9)	262	(17)	2,469	(6)	44,774	(8)
Hemophilia/coagulation disorder	3	(1)	67	(2)	1	(1)	28	(2)	184	(0)	4,923	(1)
Heterosexual contact:	37	(11)	200	(5)	14	(10)	51	(3)	4,302	(11)	28,252	(5)
<i>Sex with injecting drug user</i>	7		50		2		17		1,118		9,319	
<i>Sex with person with hemophilia</i>	—		—		—		—		3		50	
<i>Sex with transfusion recipient with HIV infection</i>	—		8		—		1		34		427	
<i>Sex with HIV-infected person, risk not specified</i>	30		142		12		33		3,147		18,456	
Receipt of blood transfusion, blood components, or tissue	6	(2)	107	(3)	—	(0)	9	(1)	239	(1)	5,126	(1)
Risk not reported or identified	1	(0)	27	(1)	1	(1)	5	(0)	112	(0)	3,400	(1)
<b>Total</b>	<b>330</b>	<b>(100)</b>	<b>4,250</b>	<b>(100)</b>	<b>138</b>	<b>(100)</b>	<b>1,560</b>	<b>(100)</b>	<b>38,732</b>	<b>(100)</b>	<b>559,329</b>	<b>(100)</b>

<sup>1</sup>These numbers do not represent actual cases of men with AIDS. Rather, these numbers are point estimates adjusted for delays in the reporting of AIDS cases and for redistribution of cases initially reported with no identified risk, but not adjusted for incomplete reporting of cases. See Technical Notes.

<sup>2</sup>Totals include estimates of men whose race/ethnicity is unknown.

**Table 23. Estimated female adult/adolescent AIDS incidence, by exposure category and race/ethnicity, diagnosed in 1997, and cumulative totals through 1997, United States<sup>1</sup>**

Exposure category	White, not Hispanic				Black, not Hispanic				Hispanic			
	1997		Cumulative total		1997		Cumulative total		1997		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Injecting drug use	862	(41)	10,762	(45)	2,799	(39)	29,113	(49)	756	(35)	9,502	(44)
Hemophilia/coagulation disorder	7	(0)	123	(1)	40	(1)	200	(0)	12	(1)	80	(0)
Heterosexual contact:	1,156	(55)	10,938	(46)	4,226	(58)	27,636	(47)	1,364	(63)	11,195	(52)
<i>Sex with injecting drug user</i>	370		4,476		1,208		10,695		428		5,184	
<i>Sex with bisexual male</i>	111		1,515		169		1,439		53		528	
<i>Sex with person with hemophilia</i>	11		282		8		77		3		34	
<i>Sex with transfusion recipient with HIV infection</i>	15		316		19		183		4		100	
<i>Sex with HIV-infected person, risk not specified</i>	649		4,349		2,822		15,241		876		5,349	
Receipt of blood transfusion, blood components, or tissue	43	(2)	1,862	(8)	149	(2)	1,376	(2)	33	(2)	574	(3)
Risk not reported or identified	18	(1)	207	(1)	41	(1)	1,063	(2)	13	(1)	75	(0)
<b>Total</b>	<b>2,086</b>	<b>(100)</b>	<b>23,892</b>	<b>(100)</b>	<b>7,255</b>	<b>(100)</b>	<b>59,388</b>	<b>(100)</b>	<b>2,178</b>	<b>(100)</b>	<b>21,426</b>	<b>(100)</b>

Exposure category	Asian/Pacific Islander				American Indian/Alaska Native				Cumulative totals <sup>2</sup>			
	1997		Cumulative total		1997		Cumulative total		1997		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Injecting drug use	15	(28)	117	(22)	13	(43)	145	(49)	4,464	(38)	49,718	(47)
Hemophilia/coagulation disorder	1	(2)	6	(1)	—	(0)	1	(0)	61	(1)	414	(0)
Heterosexual contact:	34	(63)	317	(58)	16	(53)	128	(44)	6,824	(59)	50,302	(48)
<i>Sex with injecting drug user</i>	9		93		7		61		2,030		20,537	
<i>Sex with bisexual male</i>	4		66		2		17		341		3,574	
<i>Sex with person with hemophilia</i>	—		4		—		2		22		399	
<i>Sex with transfusion recipient with HIV infection</i>	1		19		—		—		39		619	
<i>Sex with HIV-infected person, risk not specified</i>	20		135		7		48		4,391		25,173	
Receipt of blood transfusion, blood components, or tissue	2	(4)	94	(17)	1	(3)	14	(5)	229	(2)	3,924	(4)
Risk not reported or identified	2	(4)	10	(2)	—	(0)	5	(2)	74	(1)	1,362	(1)
<b>Total</b>	<b>54</b>	<b>(100)</b>	<b>544</b>	<b>(100)</b>	<b>30</b>	<b>(100)</b>	<b>293</b>	<b>(100)</b>	<b>11,651</b>	<b>(100)</b>	<b>105,720</b>	<b>(100)</b>

<sup>1</sup>These numbers do not represent actual cases of women with AIDS. Rather, these numbers are point estimates adjusted for delays in the reporting of AIDS cases and for redistribution of cases initially reported with no identified risk, but not adjusted for incomplete reporting of cases. See Technical Notes.

<sup>2</sup>Totals include estimates of women whose race/ethnicity is unknown.

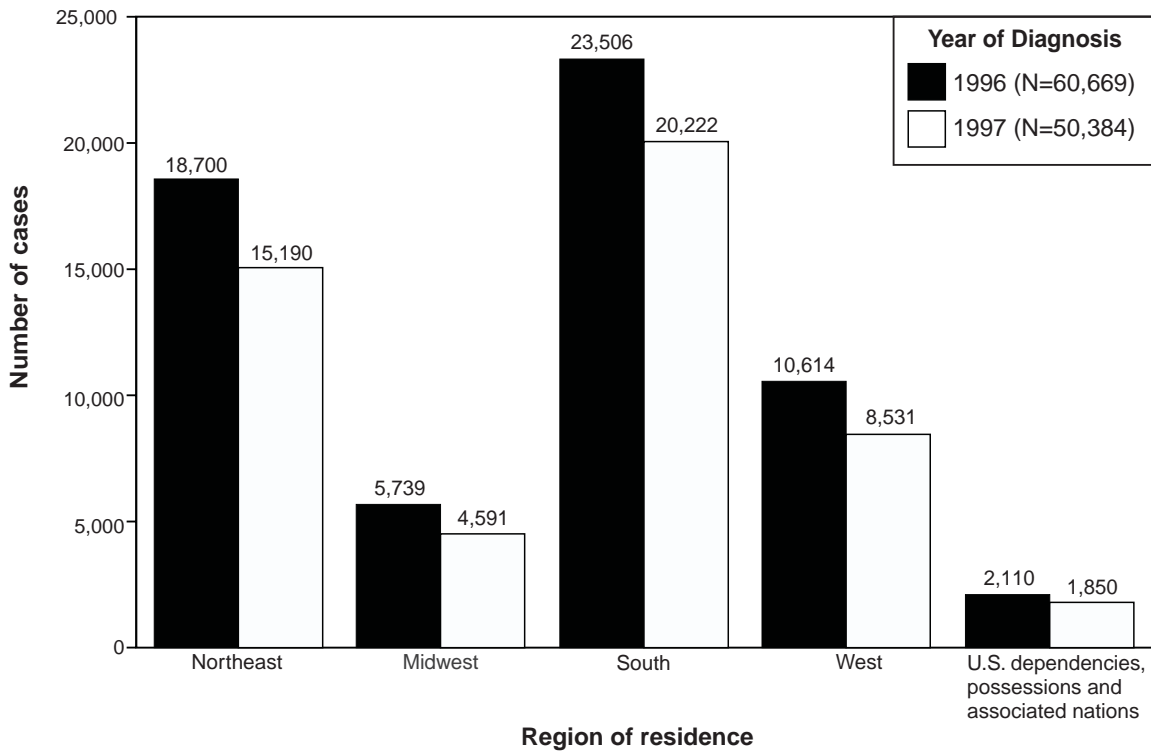


**Table 24. Estimated AIDS incidence in adolescents and adults under age 25, by sex and exposure category, diagnosed in 1997, and cumulative totals through 1997, United States<sup>1</sup>**

Male exposure category	13-19 years old				20-24 years old			
	1997		Cumulative total		1997		Cumulative total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men who have sex with men	77	(50)	751	(37)	601	(65)	11,387	(65)
Injecting drug use	20	(13)	180	(9)	154	(17)	2,461	(14)
Men who have sex with men and inject drugs	6	(4)	109	(5)	44	(5)	1,890	(11)
Hemophilia/coagulation disorder	11	(7)	742	(36)	21	(2)	626	(4)
Heterosexual contact:	21	(14)	104	(5)	103	(11)	917	(5)
<i>Sex with injecting drug user</i>	6		29		21		292	
<i>Sex with person with hemophilia</i>	—		1		—		4	
<i>Sex with transfusion recipient with HIV infection</i>	—		—		—		12	
<i>Sex with HIV-infected person, risk not specified</i>	15		74		82		609	
Receipt of blood transfusion, blood components, or tissue	6	(4)	88	(4)	3	(0)	116	(1)
Risk not reported or identified	12	(8)	66	(3)	2	(0)	118	(1)
<b>Male subtotal</b>	<b>153</b>	<b>(100)</b>	<b>2,040</b>	<b>(100)</b>	<b>928</b>	<b>(100)</b>	<b>17,515</b>	<b>(100)</b>
<b>Female exposure category</b>								
Injecting drug use	30	(19)	262	(20)	136	(22)	2,066	(32)
Hemophilia/coagulation disorder	—	(0)	14	(1)	2	(0)	22	(0)
Heterosexual contact:	100	(65)	861	(66)	471	(75)	4,133	(64)
<i>Sex with injecting drug user</i>	23		305		117		1,633	
<i>Sex with bisexual male</i>	5		44		16		287	
<i>Sex with person with hemophilia</i>	—		13		1		53	
<i>Sex with transfusion recipient with HIV infection</i>	—		3		1		25	
<i>Sex with HIV-infected person, risk not specified</i>	72		496		336		2,135	
Receipt of blood transfusion, blood components, or tissue	8	(5)	96	(7)	13	(2)	143	(2)
Risk not reported or identified	17	(11)	80	(6)	3	(0)	85	(1)
<b>Female subtotal</b>	<b>155</b>	<b>(100)</b>	<b>1,313</b>	<b>(100)</b>	<b>625</b>	<b>(100)</b>	<b>6,449</b>	<b>(100)</b>
<b>Total</b>	<b>308</b>		<b>3,353</b>		<b>1,553</b>		<b>23,964</b>	

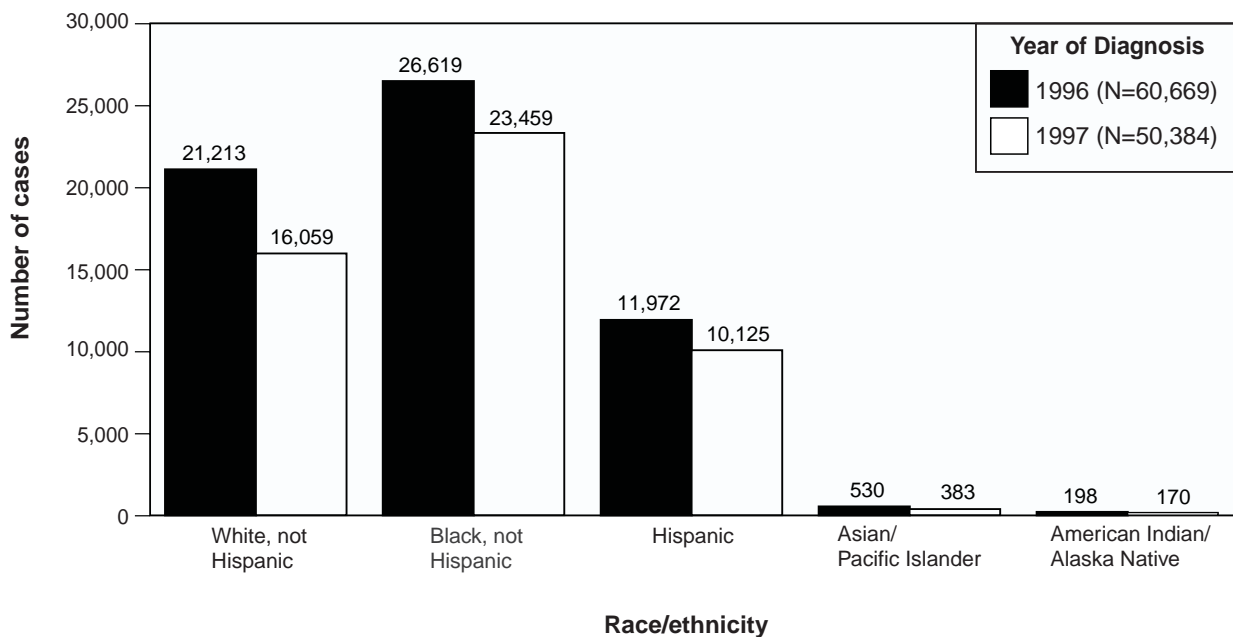
<sup>1</sup>These numbers do not represent actual cases of persons with AIDS. Rather, these numbers are point estimates adjusted for delays in the reporting of AIDS cases and for redistribution of cases initially reported with no identified risk, but not adjusted for incomplete reporting of cases. See Technical Notes.

**Figure 7. Estimated AIDS incidence, by region of residence and year of diagnosis, 1996 and 1997, United States<sup>1</sup>**



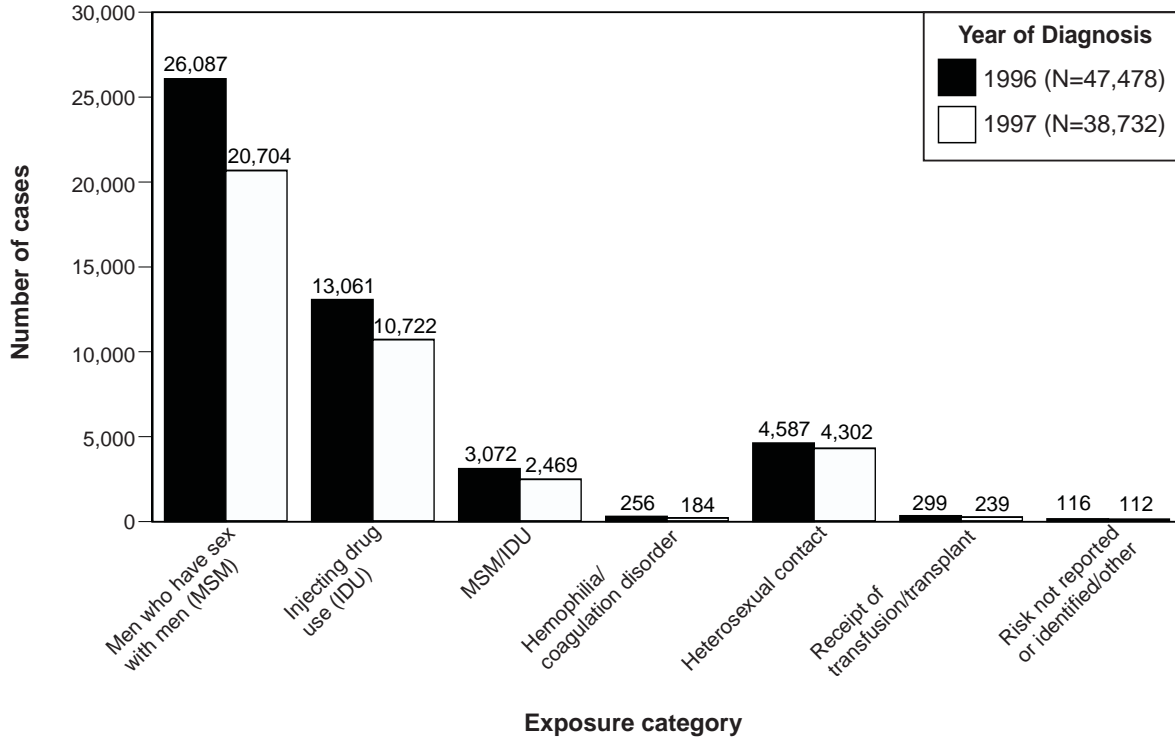
<sup>1</sup>These numbers do not represent actual cases of persons diagnosed with AIDS. Rather, these numbers are point estimates of persons diagnosed with AIDS adjusted for reporting delays, but not for incomplete reporting. See Technical Notes for a list of states or U.S. dependencies, possessions, and associated nations which comprise each region of residence.

**Figure 8. Estimated AIDS incidence, by race/ethnicity and year of diagnosis, 1996 and 1997, United States<sup>1</sup>**



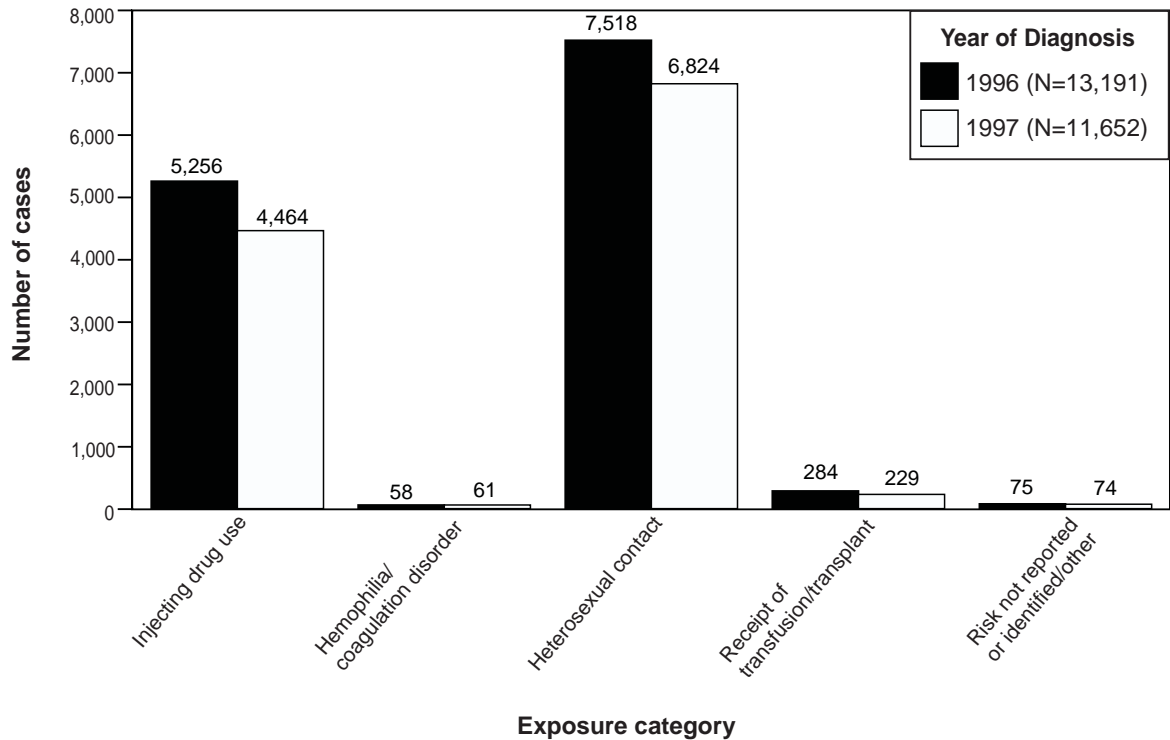
<sup>1</sup>These numbers do not represent actual cases of persons diagnosed with AIDS. Rather, these numbers are point estimates of persons diagnosed with AIDS adjusted for reporting delays, but not for incomplete reporting. Cases with missing or unknown race/ethnicity data are included in the totals. See Technical Notes.

**Figure 9. Estimated male adult/adolescent AIDS incidence, by exposure category and year of diagnosis, 1996 and 1997, United States<sup>1</sup>**



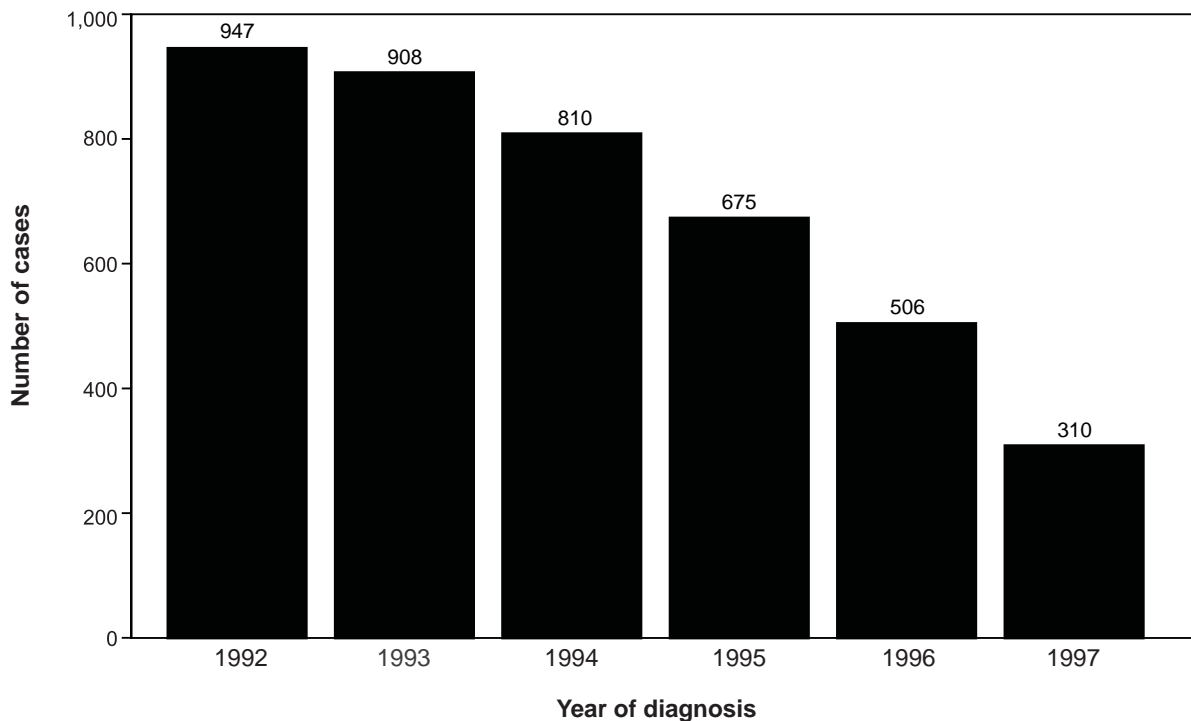
<sup>1</sup>These numbers do not represent actual cases of men diagnosed with AIDS. Rather, these numbers are point estimates of men diagnosed with AIDS adjusted for reporting delays and for redistribution of cases initially reported with no identified risk, but not for incomplete reporting. See Technical Notes.

**Figure 10. Estimated female adult/adolescent AIDS incidence, by exposure category and year of diagnosis, 1996 and 1997, United States<sup>1</sup>**



<sup>1</sup>These numbers do not represent actual cases of women diagnosed with AIDS. Rather, these numbers are point estimates of women diagnosed with AIDS adjusted for reporting delays and for redistribution of cases initially reported with no identified risk, but not for incomplete reporting. See Technical Notes.

**Figure 11. Estimated pediatric AIDS incidence, by year of diagnosis, 1992 through 1997, United States<sup>1</sup>**



<sup>1</sup>These numbers do not represent actual cases of children diagnosed with AIDS. Rather, these numbers are point estimates based on cases diagnosed using the 1987 definition, adjusted for reporting delays. The 1993 AIDS surveillance case definition change affected only the adult/adolescent cases, not pediatric cases.

**Table 25. Estimated persons living with AIDS, by region of residence and year, 1992 through 1997, United States<sup>1</sup>**

Region of residence <sup>2</sup>	Year					
	1992	1993	1994	1995	1996	1997
Northeast	39,725	51,760	59,383	66,201	73,553	82,073
Midwest	15,157	18,410	20,350	21,766	23,506	25,943
South	47,210	59,598	69,309	77,068	87,256	99,442
West	33,426	39,251	42,827	45,912	49,876	55,126
U.S. dependencies, possessions, and associated nations	4,608	5,736	6,352	6,819	7,392	8,255
<b>Total<sup>3</sup></b>	<b>140,126</b>	<b>174,755</b>	<b>198,221</b>	<b>217,766</b>	<b>241,583</b>	<b>270,839</b>

<sup>1</sup>These numbers do not represent actual cases of persons living with AIDS. Rather, these numbers are point estimates of persons living with AIDS derived by subtracting the estimated cumulative number of deaths in persons with AIDS from the estimated cumulative number of persons with AIDS. Estimated AIDS cases and estimated deaths are adjusted for reporting delays, but not for incomplete reporting. Annual estimates are through the most recent year for which reliable estimates are available. See Technical Notes.

<sup>2</sup>See Technical Notes for a list of states or U.S. dependencies, possessions, and associated nations which comprise each region of residence.

<sup>3</sup>Totals may vary between tables due to rounding.

**Table 26. Estimated persons living with AIDS, by race/ethnicity and year, 1992 through 1997, United States<sup>1</sup>**

Race/ethnicity	Year					
	1992	1993	1994	1995	1996	1997
White, not Hispanic	68,687	80,692	87,147	92,281	99,294	108,398
Black, not Hispanic	45,928	60,806	72,150	81,644	92,764	106,240
Hispanic	23,840	31,195	36,543	41,149	46,378	52,537
Asian/Pacific Islander	1,010	1,283	1,442	1,602	1,859	2,100
American Indian/Alaska Native	461	555	655	706	789	886
<b>Total<sup>2</sup></b>	<b>140,126</b>	<b>174,755</b>	<b>198,220</b>	<b>217,766</b>	<b>241,584</b>	<b>270,841</b>

<sup>1</sup>These numbers do not represent actual cases of persons living with AIDS. Rather, these numbers are point estimates of persons living with AIDS derived by subtracting the estimated cumulative number of deaths in persons with AIDS from the estimated cumulative number of persons with AIDS. Estimated AIDS cases and estimated deaths are adjusted for reporting delays, but not for incomplete reporting. Annual estimates are through the most recent year for which reliable estimates are available. See Technical Notes.

<sup>2</sup>Totals include estimates of persons whose race/ethnicity is unknown. Totals may vary between tables due to rounding.

**Table 27. Estimated persons living with AIDS, by age group, sex, exposure category, and year, 1992 through 1997, United States<sup>1</sup>**

Male adult/adolescent exposure category	Year					
	1992	1993	1994	1995	1996	1997
Men who have sex with men	73,139	87,138	95,833	102,492	112,056	124,413
Injecting drug use	26,176	34,544	40,367	44,802	49,414	54,858
Men who have sex with men and inject drugs	11,325	13,383	14,330	15,003	15,588	16,708
Hemophilia/coagulation disorder	1,426	1,620	1,703	1,733	1,752	1,802
Heterosexual contact	4,096	6,090	7,920	9,850	12,380	15,259
Receipt of blood transfusion, blood components, or tissue	847	935	982	1,052	1,134	1,254
Risk not reported or identified	1,071	1,169	1,117	1,123	1,175	1,240
Male subtotal	118,080	144,879	162,252	176,055	193,499	215,534
<b>Female adult/adolescent exposure category</b>						
Injecting drug use	10,245	13,706	16,094	18,187	20,199	22,551
Hemophilia/coagulation disorder	68	94	114	141	172	211
Heterosexual contact	8,008	11,827	15,186	18,593	22,689	27,241
Receipt of blood transfusion, blood components, or tissue	666	787	879	953	1,064	1,194
Risk not reported or identified	403	437	440	443	486	539
Female subtotal	19,390	26,851	32,713	38,317	44,610	51,736
<b>Pediatric (&lt;13 years old) exposure category</b>						
	2,654	3,024	3,258	3,396	3,478	3,573
<b>Total<sup>2</sup></b>	<b>140,124</b>	<b>174,754</b>	<b>198,223</b>	<b>217,768</b>	<b>241,587</b>	<b>270,843</b>

<sup>1</sup>These numbers do not represent actual cases of persons living with AIDS. Rather, these numbers are point estimates of persons living with AIDS derived by subtracting the estimated cumulative number of deaths in persons with AIDS from the estimated cumulative number of persons with AIDS. Estimated AIDS cases and estimated deaths are adjusted for reporting delays and for redistribution of cases initially reported with no identified risk, but not for incomplete reporting. Annual estimates are through the most recent year for which reliable estimates are available. See Technical Notes.

<sup>2</sup>Totals may vary between tables due to rounding.

**Table 28. Estimated deaths of persons with AIDS, by region of residence and year of death, 1992 through 1997, United States<sup>1</sup>**

Region of residence <sup>2</sup>	Year of death					
	1992	1993	1994	1995	1996	1997
Northeast	12,905	13,966	15,821	15,792	11,554	6,775
Midwest	4,223	4,738	5,142	5,391	4,031	2,185
South	13,119	14,369	16,025	16,980	13,539	8,166
West	9,610	10,271	10,575	10,055	6,682	3,311
U.S. dependencies, possessions, and associated nations	1,413	1,553	1,749	1,679	1,554	1,001
<b>Total</b>	<b>41,270</b>	<b>44,896</b>	<b>49,311</b>	<b>49,897</b>	<b>37,359</b>	<b>21,437</b>

<sup>1</sup>These numbers do not represent actual deaths of persons with AIDS. Rather, these numbers are point estimates adjusted for delays in the reporting of deaths, but not for incomplete reporting of deaths. Annual estimates are through the most recent year for which reliable estimates are available. See Technical Notes.

<sup>2</sup>See Technical Notes for a list of states or U.S. dependencies, possessions, and associated nations which comprise each region of residence.

**Table 29. Estimated deaths of persons with AIDS, by race/ethnicity and year of death, 1992 through 1997, United States<sup>1</sup>**

Race/ethnicity	Year of death					
	1992	1993	1994	1995	1996	1997
White, not Hispanic	20,411	21,438	22,221	21,550	14,264	6,992
Black, not Hispanic	13,373	15,320	17,747	18,813	15,827	10,183
Hispanic	7,106	7,666	8,768	8,949	6,848	4,034
Asian/Pacific Islander	270	306	404	357	278	144
American Indian/Alaska Native	77	132	144	186	119	74
<b>Total<sup>2</sup></b>	<b>41,270</b>	<b>44,896</b>	<b>49,311</b>	<b>49,897</b>	<b>37,359</b>	<b>21,437</b>

<sup>1</sup>These numbers do not represent actual deaths of persons with AIDS. Rather, these numbers are point estimates adjusted for delays in the reporting of deaths, but not for incomplete reporting of deaths. Annual estimates are through the most recent year for which reliable estimates are available. See Technical Notes.

<sup>2</sup>Totals include estimates of persons whose race/ethnicity is unknown.

**Table 30. Estimated deaths of persons with AIDS, by age group, sex, exposure category, and year of death, 1992 through 1997, United States<sup>1</sup>**

Male adult/adolescent exposure category	Year of death					
	1992	1993	1994	1995	1996	1997
Men who have sex with men	22,791	23,634	24,919	24,369	16,523	8,348
Injecting drug use	8,105	9,204	10,266	10,674	8,449	5,278
Men who have sex with men and inject drugs	2,783	3,072	3,382	3,321	2,488	1,349
Hemophilia/coagulation disorder	333	352	345	327	237	134
Heterosexual contact	1,195	1,552	1,956	2,319	2,058	1,423
Receipt of blood transfusion, blood components, or tissue	328	315	301	262	217	118
Risk not reported or identified	230	188	155	106	64	47
<b>Male subtotal</b>	<b>35,762</b>	<b>38,317</b>	<b>41,320</b>	<b>41,375</b>	<b>30,036</b>	<b>16,697</b>
<b>Female adult/adolescent exposure category</b>						
Injecting drug use	2,724	3,100	3,657	3,755	3,245	2,112
Hemophilia/coagulation disorder	20	16	25	30	27	21
Heterosexual contact	1,978	2,608	3,437	3,912	3,422	2,271
Receipt of blood transfusion, blood components, or tissue	246	234	229	226	173	98
Risk not reported or identified	115	83	62	59	33	21
<b>Female subtotal</b>	<b>5,083</b>	<b>6,041</b>	<b>7,411</b>	<b>7,982</b>	<b>6,900</b>	<b>4,523</b>
<b>Pediatric (&lt;13 years old) exposure category</b>	<b>423</b>	<b>537</b>	<b>576</b>	<b>537</b>	<b>424</b>	<b>217</b>
<b>Total</b>	<b>41,270</b>	<b>44,896</b>	<b>49,311</b>	<b>49,897</b>	<b>37,359</b>	<b>21,437</b>

<sup>1</sup>These numbers do not represent actual deaths of persons with AIDS. Rather, these numbers are point estimates adjusted for delays in the reporting of deaths and for redistribution of cases initially reported with no identified risk, but not for incomplete reporting of deaths. Annual estimates are through the most recent year for which reliable estimates are available. See Technical Notes.

# Technical Notes

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## Surveillance of AIDS

All 50 states, the District of Columbia, U.S. dependencies, and possessions, and independent nations in free association with the United States<sup>1</sup> report AIDS cases to CDC using a uniform surveillance case definition and case report form. The original definition was modified in 1985 (*MMWR* 1985;34:373-75) and 1987 (*MMWR* 1987;36[*suppl.* no. 1S]:1S-15S). The case definition for adults and adolescents was modified again in 1993 (*MMWR* 1992;41[no. RR-17]:1-19; see also *MMWR* 1995;44:64-67). The revisions incorporated a broader range of AIDS-indicator diseases and conditions and used HIV diagnostic tests to improve the sensitivity and specificity of the definition. The laboratory and diagnostic criteria for the 1987 pediatric case definition (*MMWR* 1987;36:225-30, 235) were updated in 1994 (*MMWR* 1994;43[no. RR-12]:1-19).

For persons with laboratory-confirmed HIV infection, the 1987 revision incorporated HIV encephalopathy, wasting syndrome, and other indicator diseases that are diagnosed presumptively (i.e., without confirmatory laboratory evidence of opportunistic disease). In addition to the 23 clinical conditions in the 1987 definition, the 1993 case definition for adults and adolescents includes HIV-infected persons with CD4<sup>+</sup> T-lymphocyte counts of less than 200/ $\mu$ L or a CD4<sup>+</sup> percentage of less than 14, and persons diagnosed with pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer.

The pediatric case definition incorporates the revised 1994 pediatric classification system for evidence of HIV infection. Children with their first positive results on Western blot or HIV detection tests before October 1994 were categorized based on the 1987 classification system. Those tested during or after October 1994 are categorized under the revised 1994 pediatric classification system. For children of any age with an AIDS-defining condition that requires evidence of HIV infection, a single positive HIV-detection test (i.e., HIV culture, HIV PCR, or HIV antigen [p24]) is sufficient for a reportable AIDS diagnosis if the diagnosis is confirmed by a physician.

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<sup>1</sup>Included 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. The latter 5 comprise the category "Pacific Islands, U.S." listed in tables 1 and 2.

Although completeness of reporting of diagnosed AIDS cases to state and local health departments varies by geographic region and patient population, studies conducted by state and local health departments indicate that reporting of AIDS cases in most areas of the United States is more than 85% complete (*J Acquir Immune Def Syndr*, 1992;5:257-64 and *Am J Public Health* 1992;82:1495-99). In addition, multiple routes of exposure, opportunistic diseases diagnosed after the initial AIDS case report was submitted to CDC, and vital status may not be determined or reported for all cases. However, among persons reported with AIDS, reporting of deaths is estimated to be more than 90% complete (*JAMA* 1996;276:126-31). CDC estimates that fewer than 3% of AIDS cases are duplicates based on matching of the national coded surveillance database.

Included in this report are persons known to be infected with human immunodeficiency virus type 2 (HIV-2). See *MMWR* 1995;44:603-06.

## Surveillance of HIV infection

Through December 31, 1998, 29 states and the Virgin Islands had laws or regulations requiring confidential reporting by name of all persons with confirmed HIV infection, in addition to reporting of persons with AIDS. Two other states, Connecticut and Texas, required reporting by name of HIV infection only for children less than 13 years of age; and Oregon required reporting for children less than 6 years of age. These states initiated reporting at various times after the development of serum HIV-antibody tests. Before 1991, surveillance of HIV infection was not standardized and reporting of HIV infections was based primarily on passive surveillance. Consequently, many cases reported before 1991 do not have complete information. Since then, CDC has assisted states in conducting active surveillance of HIV infections using standardized report forms and software. However, collection of demographic and risk information still varies among states.

HIV infection data should be interpreted with caution. HIV surveillance reports may not be representative of all persons infected with HIV since not all infected persons have been tested. Many HIV-reporting states offer anonymous HIV testing and home collection HIV test kits are widely available in the United States. Anonymous test results are not reported to



state and local health departments' confidential name-based HIV registries. Therefore, confidential HIV infection reports may not represent all persons testing positive for HIV infection. Furthermore, many factors may influence testing patterns, including the extent that testing is targeted or routinely offered to specific groups and the availability of and access to medical care and testing services. These data provide a minimum estimate of the number of persons known to be HIV infected in states with confidential HIV reporting.

A few states use codes in lieu of names to conduct surveillance for HIV infection. These data are not included in the HIV data tables pending evaluations demonstrating acceptable performance under CDC guidelines and the development of methods to report such data to CDC.

For this report, persons greater than 18 months of age were considered HIV infected if they had at least one positive Western blot or positive detection test (culture, antigen, or other detection test) or had a diagnosis of HIV infection documented by a physician. Before October 1994, children less than 15 months of age were considered HIV infected if they met the definition stated in the 1987 pediatric classification system for HIV infection (*MMWR* 1987;36:225-30, 235). Beginning October 1994, children less than 18 months of age are considered HIV infected if they meet the definition stated in the 1994 pediatric classification system for HIV infection (*MMWR* 1994;43[no. RR-12]:1-10). This report also includes children who were diagnosed by a physician as HIV infected. Although many states monitor reports of children born to infected mothers, only those with documented diagnosis of HIV infection are included in this report.

Because states initiated reporting on different dates, the length of time reporting has been in place will influence the number of HIV infection cases reported. For example, data presented for a given annual period may include cases reported only during a portion of the year. Prior to statewide HIV reporting, some states collected reports of HIV infection in selected populations. Therefore, these states have reports prior to initiation of statewide confidential reporting. A state with confidential HIV infection reporting also may report persons testing positive in that state who are residents of other states. Therefore, when HIV data are presented by state of residence, persons reported prior to the date a state initiated reporting may have been reported from other states with confidential HIV infection reporting.

Over time, persons with HIV infection will be diagnosed and reported with AIDS. HIV infection cases later reported with AIDS are deleted from the HIV infection tables and added to the AIDS tables. Persons

with HIV infection may be tested at any point in the clinical spectrum of disease; therefore, the time between diagnosis of HIV infection and AIDS will vary. In addition, because surveillance practices differ, reporting and updating of clinical and vital status of cases vary among states. Completeness of reporting for HIV is estimated to be more than 85% complete (*MMWR* 1998;47:309-14). CDC estimates that fewer than 2% of HIV cases are duplicates based on matching of the national coded surveillance database.

Included in this report are persons known to be infected with human immunodeficiency virus type 2 (HIV-2). See *MMWR* 1995;44:603-06.

## Tabulation and presentation of data

Data in this report are provisional. Each issue of this report includes information received by CDC through the last day of the reporting period. In the first part of the report, HIV and AIDS data are tabulated by date of report to CDC. In the second part of the report, data are statistically adjusted to correct for temporal delays in the reports of cases, deaths, and unreported risk/exposure data in order to improve the presentation of trends in the epidemic and the risk characteristics of affected populations. Data for U.S. dependencies and possessions and for associated independent nations are included in the totals.

Age group tabulations are based on the person's age at first documented positive HIV-antibody test for HIV infection cases, and age at diagnosis of AIDS for AIDS cases. Adult/adolescent cases include persons 13 years of age and older; pediatric cases include children under 13 years of age.

Tabulations of persons living with HIV infection and AIDS (table 1) include persons whose vital status was reported "alive" as of last update; persons whose vital status is missing or unknown are not included. Tabulations of deaths in persons with AIDS include persons whose vital status was reported "dead" as of last update; persons whose vital status is missing or unknown are not included. Caution should be used in interpreting these data because states vary in the frequency with which they review the vital status of persons reported with HIV infection and AIDS. In addition, some cases may be lost to follow-up.

Table 4 lists AIDS case counts for each metropolitan area with an estimated 1997 population of 500,000 or more. AIDS case counts for metropolitan areas with 50,000 to 500,000 population are reported as a combined subtotal. On December 31, 1992, the Office of Management and Budget announced new Metropolitan Statistical Area (MSA) definitions, which reflect changes in the U.S. population as determined

by the 1990 census. These definitions were updated most recently on June 30, 1998. The cities and counties which compose each metropolitan area listed in table 4 are provided in the publication "Metropolitan Areas as of June 30, 1998" (available by calling the National Technical Information Service, 1-703-487-4650, and ordering accession no. PB98-502198 or by visiting [www.census.gov/population/www/estimates/metrodef.html](http://www.census.gov/population/www/estimates/metrodef.html)). Standards for defining central and outlying counties of metropolitan areas were published in the Federal Register (*FR* 1990;55:12154-60).

The metropolitan area definitions are the MSAs for all areas except the 6 New England states. For these states, the New England County Metropolitan Areas (NECMA) are used. Metropolitan areas are named for a central city in the MSA or NECMA, may include several cities or counties, and may cross state boundaries. For example, AIDS cases and annual rates presented for the District of Columbia in table 2 include only persons residing within the geographic boundaries of the District. AIDS cases and annual rates for Washington, D.C., in table 4, include persons residing within the several counties in the metropolitan area, including counties in Maryland, Virginia, and West Virginia. State or metropolitan area data tabulations are based on the person's residence at first positive HIV-antibody test result for HIV infection cases, and residence at diagnosis for the first AIDS indicator condition(s) for AIDS cases.

Regions of residence included in this report are defined as follows. Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming; Territories: Guam, Puerto Rico, the U.S. Pacific Islands listed in the footnote on the first page of these technical notes, and the U.S. Virgin Islands.

Estimated AIDS incidence (tables 22, 23, and 24), estimated AIDS incidence trends (figures 7 through 11), estimated persons living with AIDS (tables 25, 26, and 27), and estimated deaths (tables 28, 29, and 30) are not actual counts of persons reported to the surveillance system. The estimates are adjusted for delays in reporting of cases and deaths and are based

on a number of assumptions. While these tables use the best estimates currently available, there is inherent uncertainty in these estimates (*Lecture Notes in Biomathematics* 1989;83:58-88). Small numbers must be interpreted with caution because the inherent uncertainty in estimates is greater for small numbers.

## Exposure categories

For surveillance purposes, HIV infection cases and AIDS cases are counted only once in a hierarchy of exposure categories. Persons with more than one reported mode of exposure to HIV are classified in the exposure category listed first in the hierarchy, except for men with both a history of sexual contact with other men and injecting drug use. They make up a separate exposure category.

"Men who have sex with men" cases include men who report sexual contact with other men (i.e., homosexual contact) and men who report sexual contact with both men and women (i.e., bisexual contact). "Heterosexual contact" cases are in persons who report specific heterosexual contact with a person with, or at increased risk for, HIV infection (e.g., an injecting drug user).

Adults/adolescents born, or who had sex with someone born, in a country where heterosexual transmission was believed to be the predominant mode of HIV transmission (formerly classified as Pattern-II countries by the World Health Organization) are no longer classified as having heterosexually-acquired AIDS. Similar to case reports for other persons who are reported without behavioral or transfusion risks for HIV, these reports are now classified (in the absence of other risk information which would classify them in another exposure category) as "no risk reported or identified" (*MMWR* 1994;43:155-60). Children whose mother was born, or whose mother had sex with someone born, in a Pattern II country are now classified (in the absence of other risk information which would classify them into another exposure category) as "Mother with/at risk for HIV infection: has HIV infection, risk not specified."

"No risk reported or identified" (NIR) cases are in persons with no reported history of exposure to HIV through any of the routes listed in the hierarchy of exposure categories. NIR cases include persons who are currently under investigation by local health department officials; persons whose exposure history is incomplete because they died, declined to be interviewed, or were lost to follow up; and persons who were interviewed or for whom other follow-up information was available and no exposure mode was identified. Persons who have an exposure mode identified

at the time of follow-up are reclassified into the appropriate exposure category. Historically, investigations and follow up for modes of exposure by state health departments were conducted routinely for persons reported with AIDS and as resources allowed for persons reported with HIV infection. Therefore, the percentage of HIV infected persons with risk not reported or identified is substantially higher than for those reported with AIDS.

Because recently reported AIDS cases are more likely to be reported as NIR, recent AIDS incidence in some exposure categories will be underestimated unless an adjustment is made. For estimated AIDS incidence tables and estimated AIDS trends figures, the adjustment of NIR adult/adolescent cases is based on sex-, race-, and region-specific exposure category redistributions of cases diagnosed from 1989 through 1996 that were initially assigned to the NIR category but have subsequently been reclassified. Similar adjustment of NIR pediatric cases are based on exposure category redistribution of all cases diagnosed between 1989 through 1996 and subsequently reclassified. See *J Acquir Immune Def Syndr*, 1992;5:547-55 and *J Acquir Immune Def Syndr*, 1997;14:465-74.

## Trends in AIDS incidence

Because of the temporary distortion caused by the 1993 expansion of the case definition, trends in AIDS incidence were estimated by statistically adjusting cases reported based on the criteria added to the case definition in 1993. This adjustment estimated when persons reported on the basis of immunologic criteria (CD4<sup>+</sup> T-lymphocytes counts less than 200/ $\mu$ L or percentage less than 14) would develop an AIDS-related opportunistic illness (AIDS-OI), and thereby approximated trends in AIDS-OI incidence as if the case definition had not changed (*J Acquir Immune Defic Syndr* 1997;16:116-21). However, by the end of 1996, the temporary distortion caused by reporting prevalent as well as incident cases that met criteria added in 1993 had almost entirely waned. In addition, after the end of 1996, the incidence of AIDS-OIs could no longer be reliably estimated because data are not currently available to model the increasing effects of therapy on rate of disease progression. Therefore, from 1996 forward, trends in AIDS incidence will be adjusted for reporting delay, but not for the 1993 expansion of the case definition. These trends represent the incidence of AIDS (1993 criteria) in the population and represent persons newly diagnosed with HIV at the time of AIDS, those identified with HIV who did not seek or receive treatment, and those for whom treatment has failed. Thus, despite the effects of treatment

on AIDS incidence, AIDS incidence remains an important measure of the impact and need for resources for the severely ill.

## Reporting delays

Reporting delays (time between diagnosis of HIV infection or AIDS and report to CDC) may vary among exposure, geographic, racial/ethnic, age, and sex categories, and have been as long as several years for some AIDS cases. About 50% of all AIDS cases were reported to CDC within 3 months of diagnosis and about 80% were reported within 1 year. Among persons with AIDS, estimates in delay of reporting of deaths show that approximately 90% of deaths are reported within 1 year. For HIV infection cases diagnosed since implementation of uniform reporting through the HIV/AIDS reporting system on January 1, 1994, about 70% of all HIV infection cases were reported to CDC within 3 months of diagnosis and about 95% were reported within 1 year. See *MMWR* 1998;47:309-14.

Reporting delay adjustments to estimated AIDS data are calculated by a maximum likelihood statistical procedure, taking into account differences in reporting delays among exposure, geographic, racial/ethnic, age, sex, and vital status categories, but assuming that reporting delays within these groups have not changed over time (*Statist Med* 1998;17:143-54 and *Lecture Notes in Biomathematics* 1989;83:58-88).

## Rates

Rates are calculated for the 12-month period per 100,000 population for AIDS cases. Population denominators for computing AIDS rates for the 50 states and the District of Columbia are based on official post-census estimates from the U.S. Bureau of Census. Denominators for U.S. dependencies and possessions and associated independent nations are linear extrapolations of official 1980 and 1990 census counts. Each 12-month rate is the number of cases reported during the 12-month period, divided by the 1996 or 1997 population, multiplied by 100,000. The denominators used for computing the table of race-specific rates (year-end edition only) are based on 1997 census estimates published in the U.S. Bureau of Census publication PPL-91, "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1990-1997." Race-specific rates are the number of cases reported for a particular racial/ethnic group during the preceding 12-month period divided by the projected population for that race/ethnicity, multiplied by 100,000.