

Pediatric & Adolescent HIV/AIDS

*Surveillance Update
New York City*

Data reported through 12/31/2004

HIV Epidemiology Program

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NOTE TO READERS

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This and other reports are also available from the New York City Department of Health and Mental Hygiene web site on the Internet: <http://www.nyc.gov/html/doh/html/dires/hivepi.shtml>

Message to Health Care Providers

- HIV-infected individuals are reportable by name in New York State: Article 21 Title III
- AIDS is designated as a reportable condition by New York State Sanitary Code Section 24.1
- All reports are kept confidential as required by New York State Sanitary Code Section 24.2
- If assistance is needed to report a case, or to clarify the CDC AIDS case definition, or for further information, please call: (212) 442-3388 or 442-3389

Physician Health Care Provider Hotline

- Call the Provider Access Line at 1-866-NYC-DOH1 during business hours; after 5 PM call the Poison Control Center at 1-800-222-1222
- Provides HIV/AIDS specific information, protocols and guidelines to health care professionals

New York City AIDS Hotline

- Call 1-800-TALKHIV (825-5448) from 9 AM to 9 PM
- Provides counseling, information and referrals to the public and to health care providers
- Assists HIV-infected people in securing referrals for follow-up services
- Refers callers to anonymous HIV testing sites throughout the five boroughs

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BACKGROUND

Pediatric HIV/AIDS surveillance in New York City (NYC) measures trends in prevention of perinatal HIV transmission, trends in perinatal HIV transmission rates, and morbidity and mortality of HIV-infected children who were first diagnosed with HIV infection before 13 years of age. This report contains information on 3,769 children infected through perinatal transmission and diagnosed through December 31, 2004. An additional 79 children were infected through non-perinatal risk (72 through contaminated blood products). Data on 6,173 perinatally HIV-exposed uninfected or indeterminate children from 22 NYC sites are presented with data on trends in perinatal HIV prevention, since they represent about two-thirds of such children in NYC. HIV infection status is defined according to the CDC definition (*MMWR 1999; 48 (RR-13): 1-36*) with a modification for presumed uninfected to include children with at least two negative DNA polymerase chain reaction tests between 1 and 3 months of age, one at 2 months of age or older, and no positive HIV diagnostic tests. This report also contains information on 4,503 HIV-infected adolescents, diagnosed with HIV infection between 13 and 21 years of age.

Data collection systems from which this report was generated include:

- 1. Routine AIDS Surveillance:** AIDS surveillance began in 1981. Pediatric AIDS refers to AIDS first diagnosed in children before 13 years of age. Adult/Adolescent AIDS refers to AIDS first diagnosed at ≥ 13 years of age.
- 2. Routine HIV Surveillance:** On June 1, 2000, New York State (NYS) began named reporting of persons newly identified as HIV-infected or in previously diagnosed persons detectable HIV viral loads and CD4 cell counts ≤ 500 cells/mm³. Since June 2005, undetectable HIV viral loads and all CD4 cell counts are reported.
- 3. Expanded Pediatric HIV/AIDS Surveillance:** Initiated in 1989 as a special adjunct to Pediatric AIDS Surveillance, Expanded Pediatric HIV/AIDS Surveillance collects information on all perinatally exposed children at 22 sites that care for an estimated two-thirds of children exposed to and infected with HIV in NYC. Children are categorized as HIV-infected, with or without AIDS; as uninfected; or as indeterminate (which includes children lost to follow-up before determination of their HIV status). Medical records of HIV-exposed and infected children are reviewed periodically. Most perinatally HIV-exposed children are diagnosed as HIV-infected or uninfected by 4 to 6 months of age.
- 4. Pediatric Spectrum of HIV Disease Project:** Ten of the 22 Expanded Surveillance sites participated in the Pediatric Spectrum of HIV Disease Project (PSD) from 1989-2004. PSD was a CDC-funded, Institutional Review Board-approved longitudinal surveillance project that collected chart review data on children exposed to and infected with HIV.
- 5. New York City Office of Vital Statistics:** Data on mortality are obtained from the NYC Vital Registry. The HIV Epidemiology Program investigates all pediatric deaths in which HIV or AIDS is noted on the death certificates.
- 6. New York State Health Department, Newborn HIV Testing:** Since 1988, NYS Health Department has tested all newborns for HIV, initially as a blinded serosurvey, and since February 1997, through the Comprehensive Newborn Screening Program. Since 1997, data collected through this program are available from the NYS Department of Health, Comprehensive Newborn Screening Program, Annual Summary Report.

Technical note: Prevalent HIV cases, diagnosed before HIV reporting went into effect in NYS, continue to be reported to the DOHMH. Data verification is an ongoing activity. This results in changes in the number of cases reported compared with previous reports.

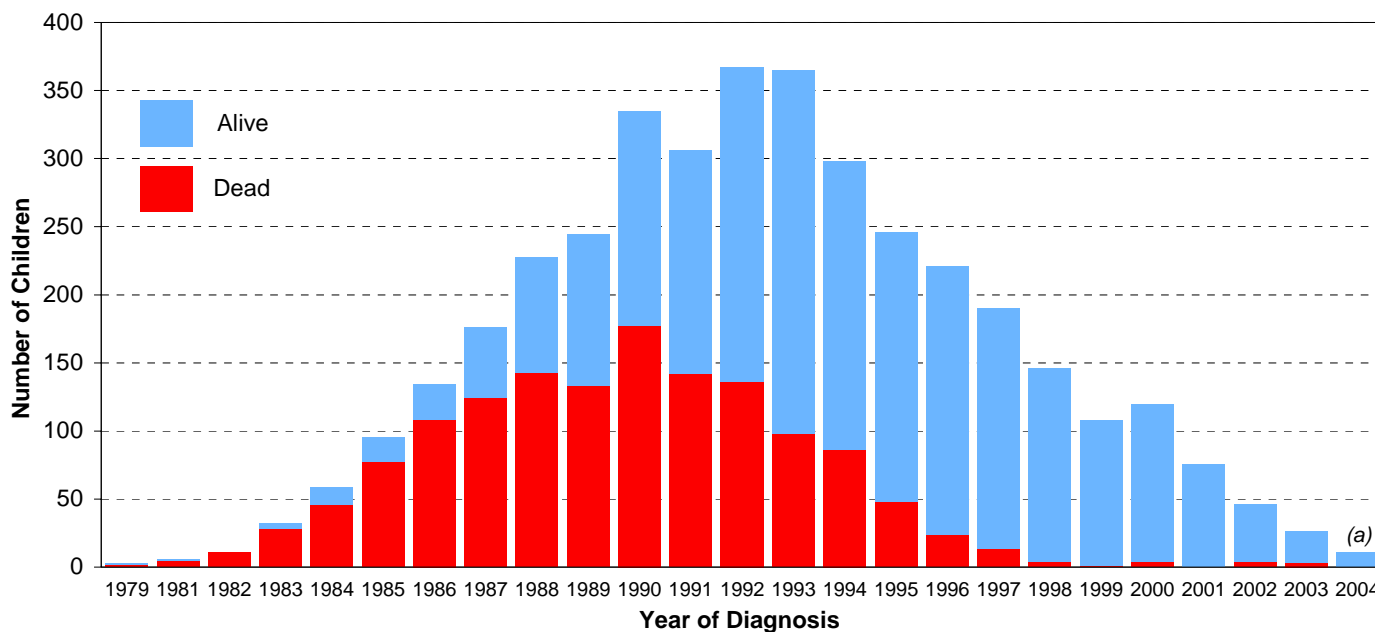
NEW YORK CITY CHILDREN DIAGNOSED WITH PEDIATRIC HIV/AIDS

Table 1: Children Diagnosed with HIV Infection Before 13 Years of Age, by HIV Transmission Risk Category and Latest HIV Status, as of December 31, 2004, NYC

	HIV-infected, non-AIDS	AIDS diagnosed before 13 years	AIDS diagnosed at 13 years or older	Total
Perinatal HIV Risk	1,524	2,053	192	3,769 (98%)
Non-perinatal HIV Risk:				79 (2%)
Receipt of blood products	18	29	25	72
Other ^(a)	4	2	1	7
Total (%)	1,546 (40%)	2,084 (54%)	218(6%)	3,848 (100%)

^(a) Sexual abuse was the reported risk for all 7 children.

Figure 1: Children Diagnosed with HIV infection Before 13 Years of Age (N=3,848), by Year of HIV Diagnosis and Current Vital Status, 1979–2004^(a), NYC

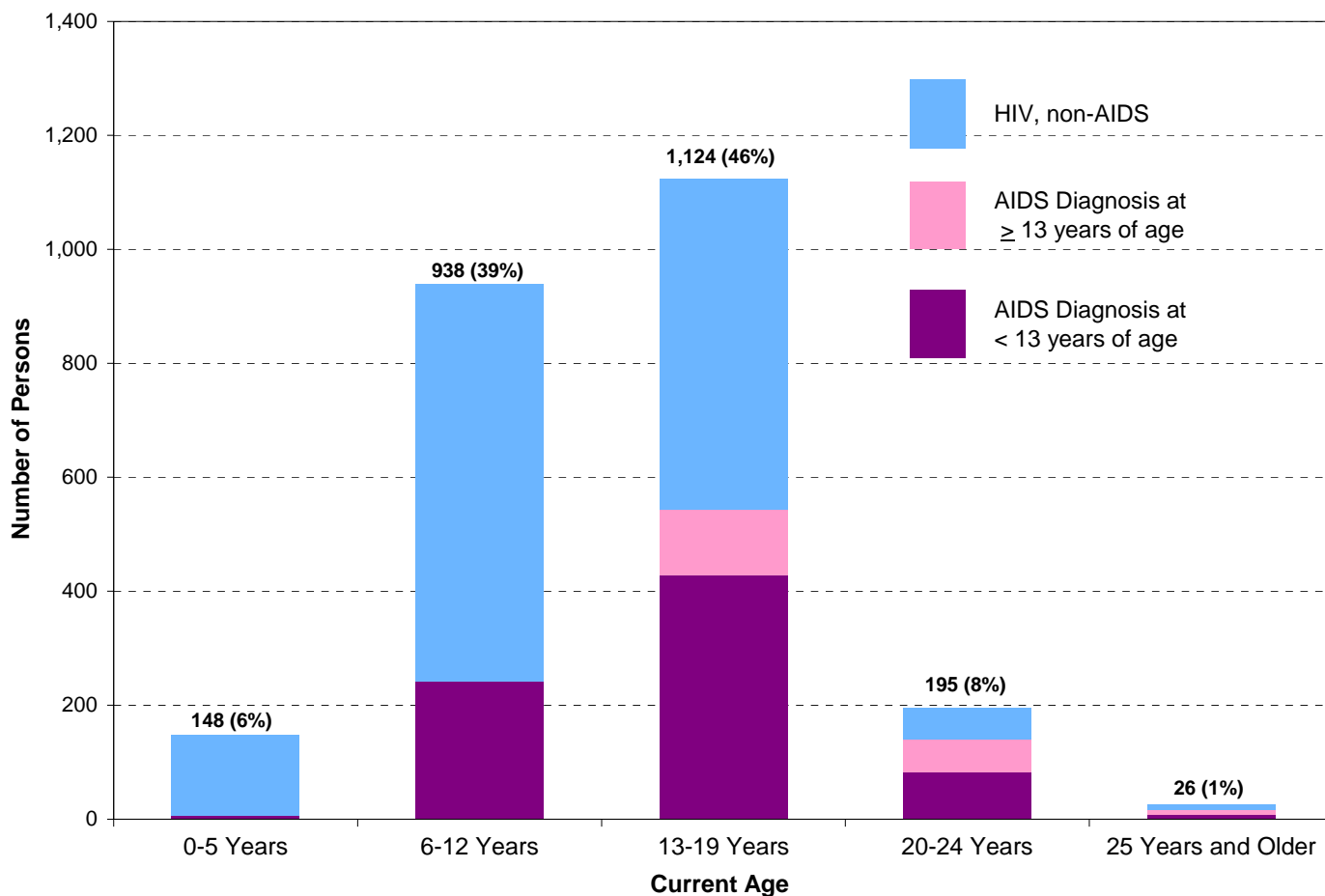


Vital Status	Year of Diagnosis																Total
	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Alive	311	158	164	231	267	212	198	197	177	142	107	116	75	42	23	11	2,431
Dead	677	177	142	136	98	86	48	24	13	4	1	4	0	4	3	0	1,417
Total	988	335	306	367	365	298	246	221	190	146	108	120	75	46	26	11	3,848

^(a) Data are incomplete for 2004 due to reporting lag.

Figure 1 shows the number of children who were diagnosed with HIV infection before 13 years of age and reported to the NYC DOHMH. Two thousand three hundred and two (60%) of the children developed AIDS. Prior to June 2000, only children with AIDS and children enrolled at the 22 expanded pediatric surveillance sites were reported to the NYC DOHMH. The 72 children whose HIV transmission risk was receipt of blood products were diagnosed between 1984 and 1995. Of the 2,302 persons diagnosed with AIDS, 1,353 (59%) have died and of the 1,546 HIV-infected persons without AIDS, 64 (4%) have died.

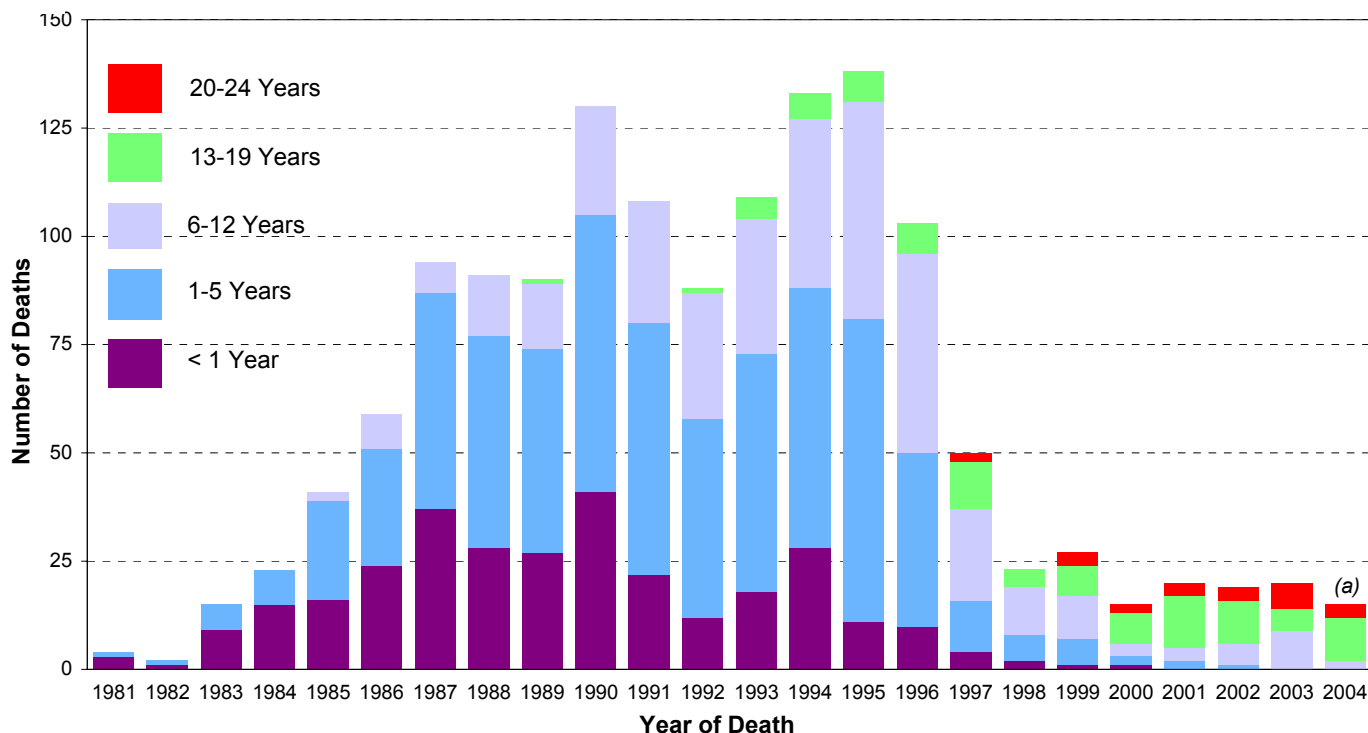
Figure 2. Current Age of Persons Living with HIV/AIDS, Diagnosed with HIV Infection Before 13 Years of Age (N=2,431), by Current Clinical Status, as of December 31, 2004, NYC



Current Age	0-5 years		6-12 years		13-19 years		20-24 years		25-28 years		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
HIV, non-AIDS	141	95	697	74	580	52	55	28	9	35	1,482	61
AIDS at <13 years	7	5	241	26	428	38	83	43	8	31	767	32
AIDS at ≥13 years	-	-	-	-	116	10	57	29	9	35	182	7
Total	148	100	938	100	1,124	100	195	100	26	100	2,431	100

Fifty-five percent of living persons infected with HIV before 13 years of age are currently 13 years of age or older. The oldest person is 28 years of age. HIV-infected children surviving into adolescence and young adulthood are a growing population. Only five percent of 0-5-year-olds have developed AIDS, compared with 26% among 6-12-year-olds, 48% among 13-19-year-olds, 72% of 20-24-year-olds, and 66% of 25-28-year-olds.

Figure 3: Number of Deaths of Persons Diagnosed with HIV Infection Before 13 Years of Age (N=1,417), by Age at Death, 1981–2004^(a), NYC



Age at Death	Year of Death																Total
	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004 ^(a)	
<1 year	160	41	22	12	18	28	11	10	4	2	1	1	0	0	0	0	310
1-5 years	212	64	58	46	55	60	70	40	12	6	6	2	2	1	0	0	634
6-12 years	46	25	28	29	31	39	50	46	21	11	10	3	3	5	9	2	58
13-19 years	1	0	0	1	5	6	7	7	11	4	7	7	12	10	5	10	93
20-24 years	0	0	0	0	0	0	0	0	2	0	3	2	3	3	6	3	22
Total	419	130	108	88	109	133	138	103	50	23	27	15	20	19	20	15	1,417

^(a) Data are incomplete for 2004 due to reporting lag.

Figure 3 shows the number of deaths by year of death in persons first diagnosed with HIV/AIDS before 13 years of age. The number of deaths peaked in 1995. Recent declines in pediatric HIV deaths can be attributed to declining numbers of newly infected children, widespread use of combination antiretroviral therapy and prophylaxis against opportunistic infections. Data on mortality are obtained from HIV/AIDS surveillance and the NYC Office of Vital Statistics.

NEW YORK CITY NON-PERINATALLY HIV-INFECTED CHILDREN

Table 2: Non-Perinatally HIV-infected Children (N=79), by Year of Birth, Current HIV Status and Current Vital Status, NYC

Year of Birth	HIV (non-AIDS)		AIDS		TOTAL		
	Dead	Alive	Dead	Alive	Dead	Alive	Total
1976	0	2	1	0	1	2	3
1977	0	2	7	1	7	3	10
1978	0	1	6	3	6	4	10
1979	0	2	2	4	2	6	8
1980	1	3	1	2	2	5	7
1981	0	3	4	1	4	4	8
1982	0	1	5	8	5	9	14
1983	0	2	4	2	4	4	8
1984	0	1	5	1	5	2	7
1985	-	-	-	-	-	-	-
1986	0	1	0	0	0	1	1
1987	0	1	0	0	0	1	1
1988	-	-	-	-	-	-	-
1989	0	1	0	0	0	1	1
1990	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-
1992	0	1	0	0	0	1	1
Total	1	21	35	22	36	43	79

Among the 79 children infected with HIV through non-perinatal risk, the risk was receipt of blood products for 72 (see also Table 1). Fifty-four of the 72 developed AIDS (75%), of whom 33 died. They were diagnosed with HIV infection between 1984 and 1995.

The risk factor for HIV for the remaining 7 children was sexual abuse; three developed AIDS (43%), of whom 2 died. They were diagnosed with HIV infection between 1986 and 1998.

Among all 79 children, 36 (46%) died. As of December 31, 2004, the oldest surviving person is 28 years of age.

NEW YORK CITY CHILDREN BORN TO HIV-INFECTED MOTHERS

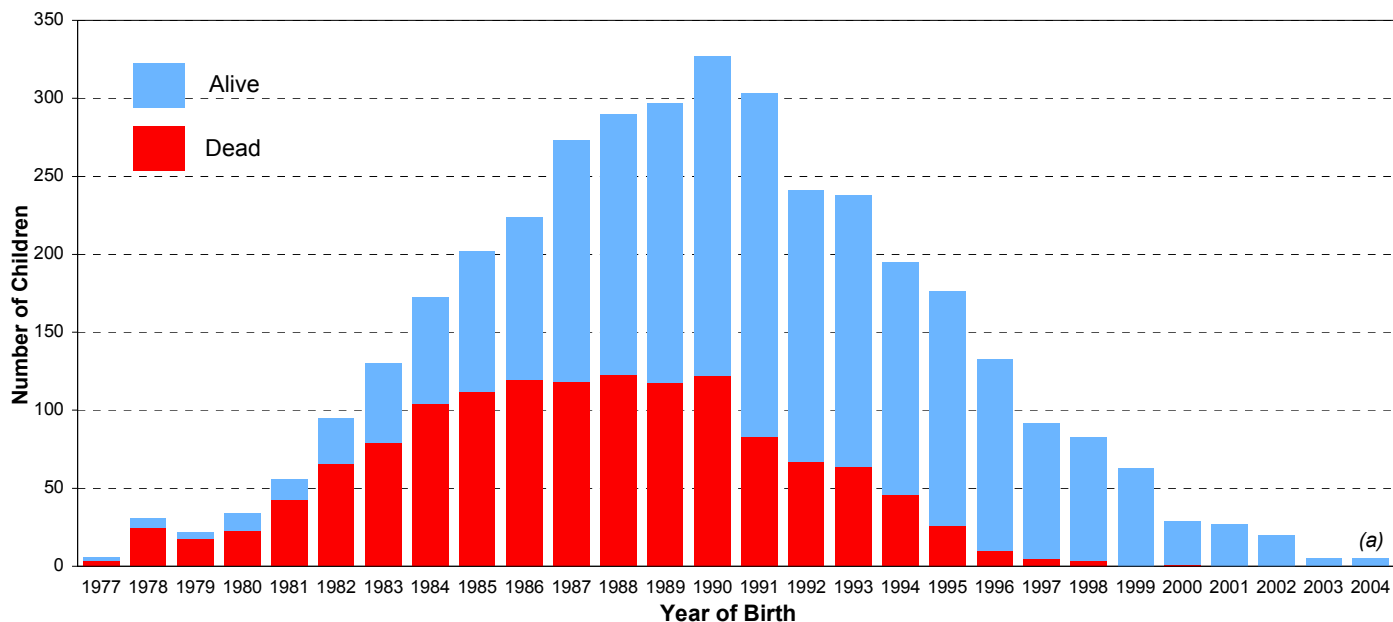
Table 3: HIV Status of Children Born to HIV-infected Women, as of December 31, 2004, NYC

Current HIV status of Child	N
HIV-infected, non-AIDS ^(a)	1,524
AIDS	2,245
<i>Diagnosed before 13 years</i>	2,053
<i>Diagnosed at 13 years or older</i>	192
Total HIV-infected	3,769
HIV-uninfected ^(b)	5,167
Indeterminate ^(b)	1,006
Total Children	9,942

^(a) Reporting of all citywide HIV cases is not yet complete.

^(b) Identified from the 22 IRB-approved Expanded Pediatric HIV/AIDS Surveillance sites only.

Figure 4: Perinatally HIV-infected Children (N=3,769), by Year of Birth and Current Vital Status, 1977–2004^(a), NYC



Vital Status	Year of Birth																Total
	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004 ^(a)	
Alive	879	205	220	174	174	149	150	123	87	79	63	28	27	20	5	5	2,388
Dead	953	122	83	67	64	46	26	10	5	4	0	1	0	0	0	0	1,381
Total	1,832	327	303	241	238	195	176	133	92	83	63	29	27	20	5	5	3,769

^(a) Data are incomplete for 2004 due to reporting lag.

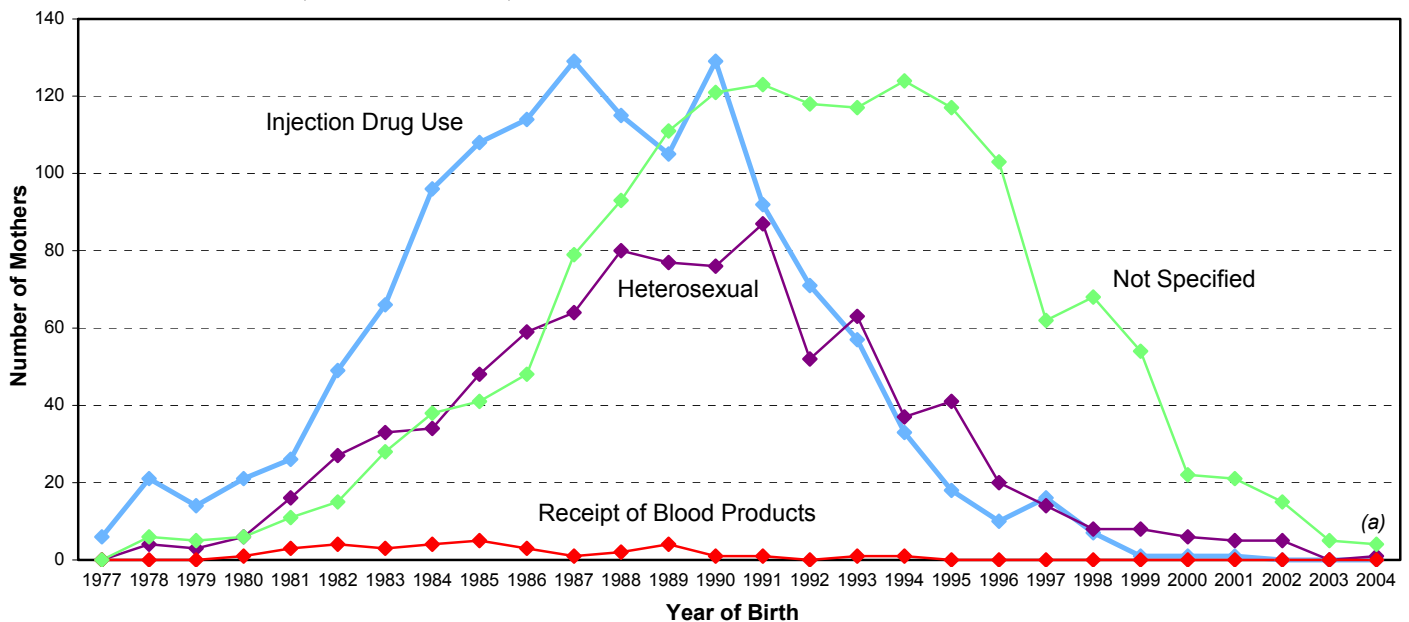
Figure 4 shows the number of perinatally infected children reported to the NYC DOHMH. Prior to June 2000, only children with AIDS and children enrolled at the 22 expanded pediatric surveillance sites were reported to the NYC DOHMH. The number of HIV-exposed births (see Figure 8) and the number of infected infants born both peaked in 1990.

Table 4: Demographics of Perinatally HIV-infected Children (N=3,769) and Maternal HIV Risk Transmission Category, as of December 31, 2004, NYC

Sex	<i>Male</i>	1,857	49%
	<i>Female</i>	1,912	51%
Borough of Residence at Diagnosis	<i>Bronx</i>	1,125	30%
	<i>Brooklyn</i>	1,220	32%
	<i>Manhattan</i>	688	18%
	<i>Queens</i>	478	13%
	<i>Staten Island</i>	81	2%
	<i>Outside NYC</i>	127	3%
	<i>Unknown</i>	50	1%
Race/Ethnicity	<i>Black</i>	2,177	58%
	<i>Hispanic</i>	1,310	35%
	<i>White</i>	234	6%
	<i>Asian/Pacific Islander/Native American/Multiracial</i>	17	<1%
	<i>Unknown</i>	31	<1%
Maternal HIV Transmission Category	<i>Injection drug use (IDU)</i>	1,306	35%
	<i>Sex partner of an IDU man^(a)</i>	409	11%
	<i>Sex partner of man with HIV/AIDS, or with hemophilia, or in receipt of blood products, or a bisexual man^(a)</i>	465	12%
	<i>Receipt of blood products</i>	34	<1%
	<i>Not specified</i>	1,555	41%

^(a) Maternal HIV risk factors that constitute heterosexual risks.

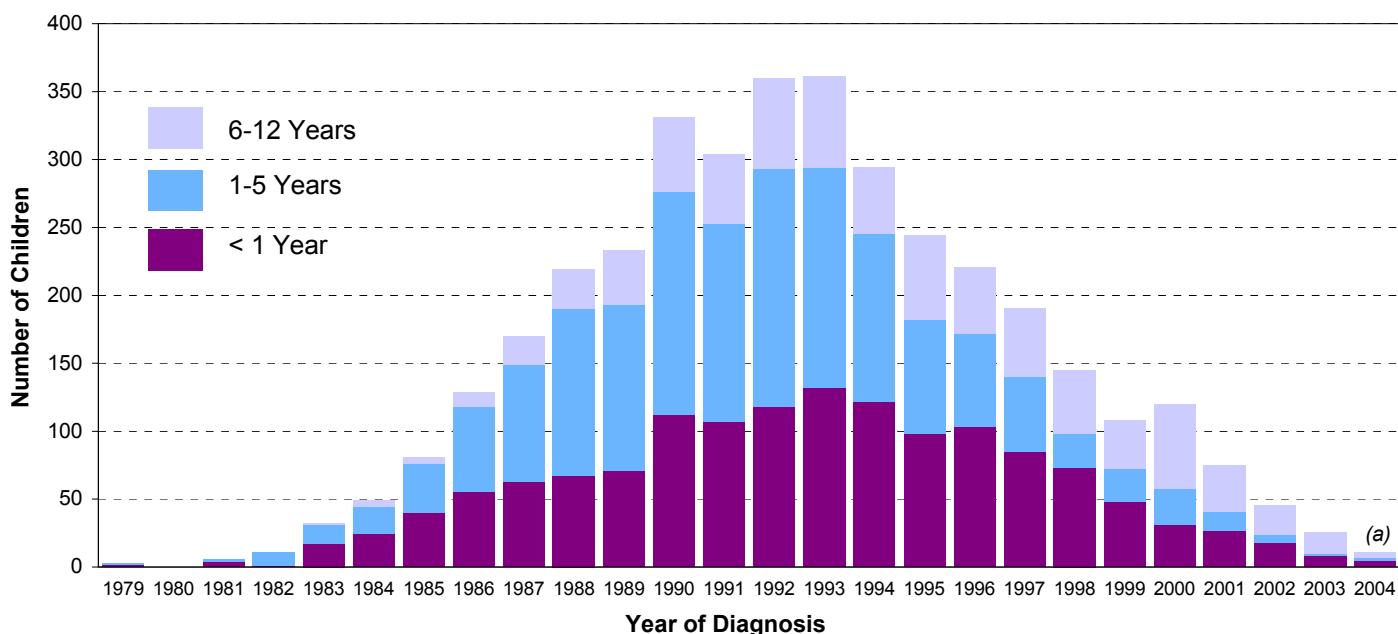
Figure 5: HIV Risk Factors of Mothers of Perinatally HIV-infected Children (N=3,769), by Year of Infant Birth, 1977–2004^(a), NYC



^(a) Data are incomplete for 2004 due to reporting lag.

Maternal HIV risk factor is known for only 59% of women. Among the known risk factors, injection drug was the most common until 1993, and since then heterosexual transmission has been the most common known risk factor.

Figure 6: Age at HIV Diagnosis of Perinatally HIV-infected Children (N=3,769) by Year of Diagnosis, 1979–2004^(a), NYC



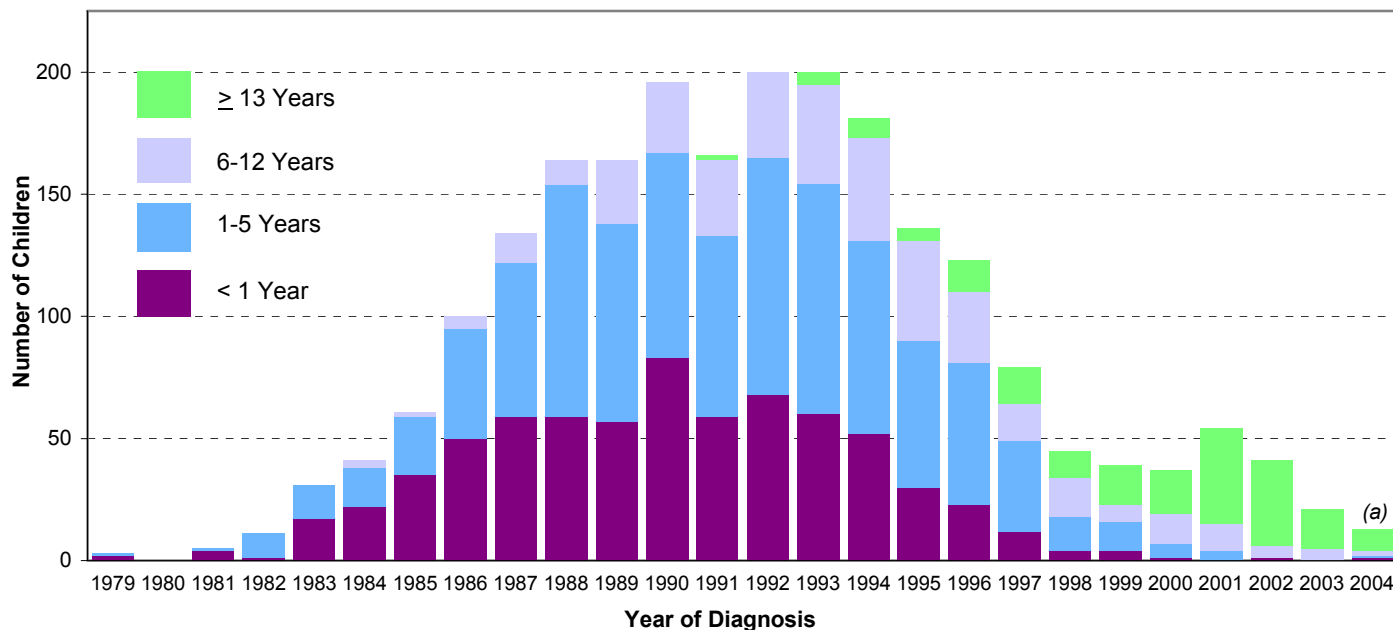
Age at Diagnosis	Year of Diagnosis																Total
	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004 ^(a)	
<1 Year	345	112	107	118	132	122	98	103	85	73	48	31	27	18	8	5	1,432
1-5 Years	476	164	146	175	162	123	84	69	55	25	24	27	14	6	2	2	1,554
6-12 Years	112	55	51	67	67	49	62	49	50	47	36	62	34	22	16	4	783
Total	933	331	304	360	361	294	244	221	190	145	108	120	75	46	26	11	3,769

^(a) Data are incomplete for 2004 due to reporting lag.

Figure 6 shows the number of HIV-infected children by year of initial diagnosis of HIV infection. The number of diagnoses peaked in 1992-93. The small increase in 2000 coincided with the beginning of HIV reporting in New York and is likely an artifact of this change. Declines in HIV diagnoses among children under 13 years of age are due to decreasing numbers of HIV-infected women delivering (see Figure 8) and increasing use of prenatal antiretroviral therapies to prevent transmission (see Figure 10).

Overall, 1,343 children (36%) were concurrently diagnosed with HIV and AIDS (i.e. the AIDS diagnosis was within 60 days of the HIV diagnosis) (data not shown in figure and table). Among children diagnosed before 1990, this occurred in 68% of children.

Figure 7: Age at AIDS Diagnosis of Perinatally HIV-infected Children (N=2,245), by Year of Diagnosis, 1979–2004^(a), NYC



Age at Diagnosis	Year of Diagnosis																Total
	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004 ^(a)	
<1 Year	306	83	59	68	60	52	30	23	12	4	4	1	0	1	0	1	704
1-5 Years	350	84	74	97	94	79	60	58	37	14	12	6	4	0	0	1	970
6-12 Years	58	29	31	35	41	42	41	29	15	16	7	12	11	5	5	2	379
13-23 Years ^(b)	0	0	2	0	5	8	5	13	15	11	16	18	39	35	16	9	192 ^(b)
Total	714	196	166	200	200	181	136	123	79	45	39	37	54	41	21	13	2,245^(c)

^(a) Data are incomplete for 2004 due to reporting lag.

^(b) The oldest was 23 years old at the time of the AIDS diagnosis.

^(c) 167 of 192 cases were diagnosed only on the basis of a CD4 cell count <200 cells/mm³.

Figure 7 shows trends in AIDS cases by age at AIDS diagnosis. Among 3,769 perinatally HIV-infected children, 2,245 (60%) developed AIDS through December 2004. One thousand three hundred and forty-three (60%) were diagnosed concurrently with HIV and AIDS (i.e. the AIDS diagnosis was within 60 days of the HIV diagnosis) (data not shown in figure and table) and 902 (40%) were subsequently diagnosed with AIDS.

Starting in 1994, there have been declining numbers of reported and diagnosed AIDS cases in NYC children under 13 years of age. Declines in children under 13 years of age are due to increasing use of PCP prophylaxis and increasing use of antiretroviral therapy.

Through December 2004, 192 perinatally infected youth were diagnosed with AIDS at age 13 or older; 167 (87%) were diagnosed solely on the basis of a CD4 cell count <200 cells/mm³, without any AIDS-defining illnesses.

Table 5: Cumulative Reported AIDS-Defining Conditions of 2,245 Perinatally HIV-infected Persons with AIDS^(a), by Year of Diagnosis, 1979–2004^(b), NYC

	1979-1986	1987-1994	1995-1998	1999-2002	2003-2004 ^(b)	Total	%
<i>Pneumocystis jirovecii</i> pneumonia ^(c)	112	560	100	29	5	806	21
Lymphoid interstitial pneumonia	65	439	93	10	-	607	16
HIV encephalopathy	8	236	104	28	3	379	10
<i>Mycobacterium avium</i> complex & other species disease	21	203	116	33	4	377	10
Recurrent bacterial infections	30	231	43	6	1	311	8
Wasting syndrome	10	143	62	17	3	235	6
Esophageal candidiasis	26	112	41	25	5	209	5
Cytomegalovirus disease	23	112	25	5	-	165	4
Chronic mucocutaneous herpes simplex	14	69	21	6	-	110	3
Chronic intestinal cryptosporidiosis	10	48	18	3	-	79	2
Pulmonary candidiasis	2	42	7	4	-	55	1
Cytomegalovirus retinitis	0	23	17	5	1	46	1
Extrapulmonary tuberculosis	5	19	7	5	-	36	1
Cryptococcosis	2	16	5	2	1	26	1
Burkitt's lymphoma	4	13	2	0.	1	20	1
Toxoplasmosis, brain	1	12	5	1	-	19	<1
Lymphoma, brain	5	5	2	2	-	14	<1
Immunoblastic lymphoma	0	6	6	2	1	15	<1
Progressive multifocal leukoencephalopathy	0	5	3	2	-	10	<1
Histoplasmosis	0	2	2	0	-	4	<1
Kaposi's sarcoma	0	1	2	0	-	3	<1
Recurrent pneumonia ^(d)	0	1	2	4	-	7	<1
CD4 cell count <200 cells/mm ³ ^(d)	0	31	88	204	35	358	9
Total	338	2,329	771	393	60	3,831	

NA=not applicable

^(a) Some have more than one AIDS-defining condition.

^(b) Data are incomplete for 2004 due to reporting lag.

^(c) Previously named *Pneumocystis carinii pneumonia*

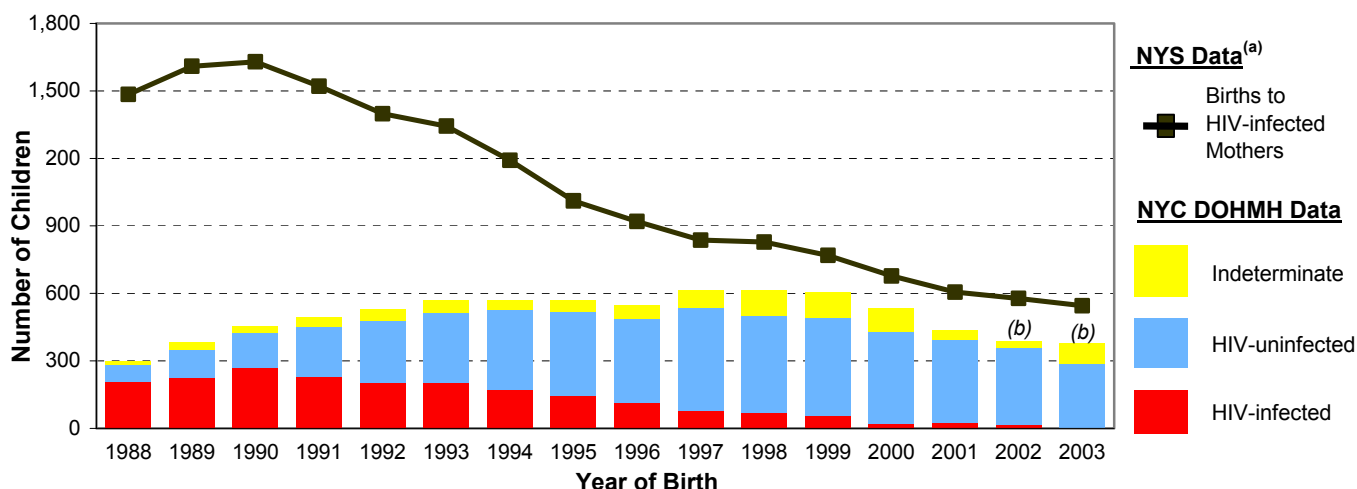
^(d) In 1993, the CDC AIDS case definition was expanded to include CD4 cell counts <200 cells/mm³ or <14%, pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer in adolescents and adults ≥13 years of age.

The number of AIDS-defining conditions declined dramatically after the mid-1990s. *Pneumocystis pneumonia* was the most common AIDS-defining condition during 1979-1994. Declines after 1994 are associated with the publication of revised guidelines for PCP prophylaxis in children [MMWR 1995. 44 (RR-4):1-11]. From 1999-2004, the majority of AIDS-defining conditions occurred among children ≥13 years of age and were based solely on CD4 cell count under 200 cells/mm³ or <14%.

TRENDS IN PREVENTION OF PERINATAL HIV TRANSMISSION (22 NYC SITES)

Since 1988, data on the number of HIV-exposed births in New York have been ascertained through NYS DOH newborn HIV testing data as described on page 3. Data on trends in prevention of perinatal HIV transmission are known from the 22 Expanded Pediatric HIV Surveillance sites where perinatal HIV exposure surveillance has been conducted since 1989. Since 1997, all HIV-exposed children have been identified through the Comprehensive Newborn Screening Program (CNSP) allowing for evaluation of successive birth cohorts.

Figure 8: Current HIV Classification of Children Born to HIV-infected Women in NYC: A Comparison of NYS DOH Newborn HIV Testing and Comprehensive Newborn Screening Program Data and NYC DOHMH Data at 22 NYC Sites, 1988–2003



Children born to HIV-infected Women, by HIV Status, NYC DOHMH Data, 22 NYC Sites

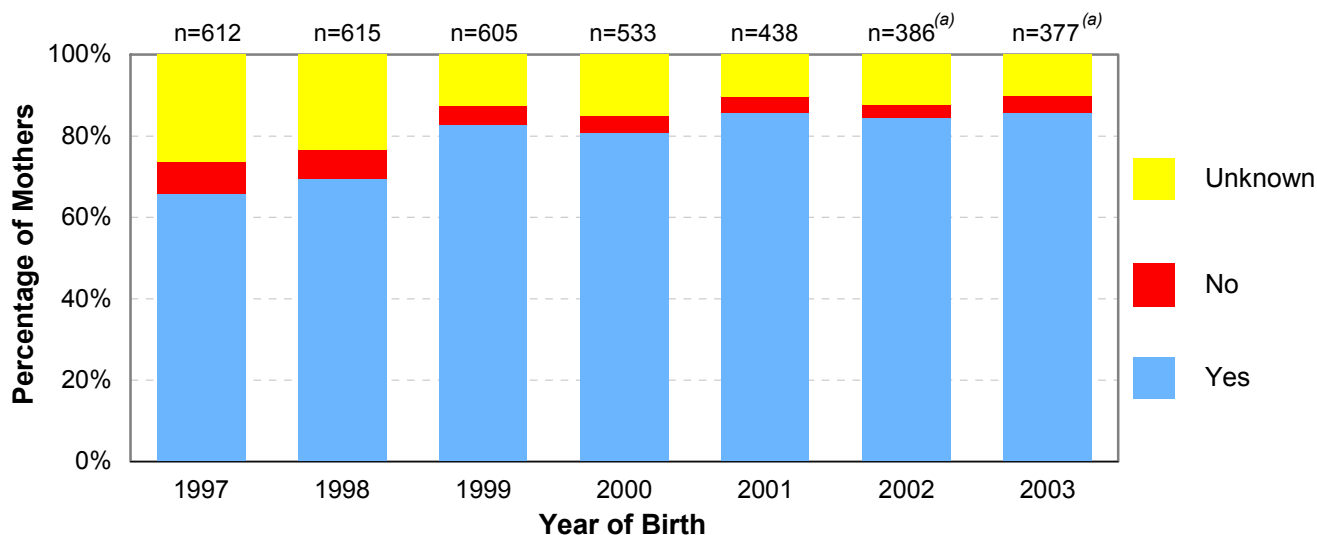
HIV status	Year of Birth															
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 ^(b)	2003 ^(b)
HIV-infected	206	227	268	233	203	201	172	147	113	77	66	53	22	22	16	4
HIV-uninfected	79	123	157	218	275	312	356	371	373	457	436	440	408	374	343	281
Indeterminate	13	32	28	40	53	58	42	53	59	78	113	112	103	42	27	92

^(a) NYS Newborn HIV Testing and Comprehensive Newborn Screening Program data.

^(b) Enrollment decreased to 19 sites in 2002 and 2003.

Figure 8 shows the number of HIV-exposed children born in NYC since 1988 from the NYS Newborn HIV Testing and CNSP data (line), in comparison with the number reported to the NYC DOHMH from the Expanded Pediatric HIV/AIDS Surveillance sites (bars). In 1997, statewide universal newborn screening for HIV began through the CNSP. From 1997-2003, 74% of NYC's HIV-exposed infants were born at and/or were in care at the Expanded Pediatric HIV Surveillance sites.

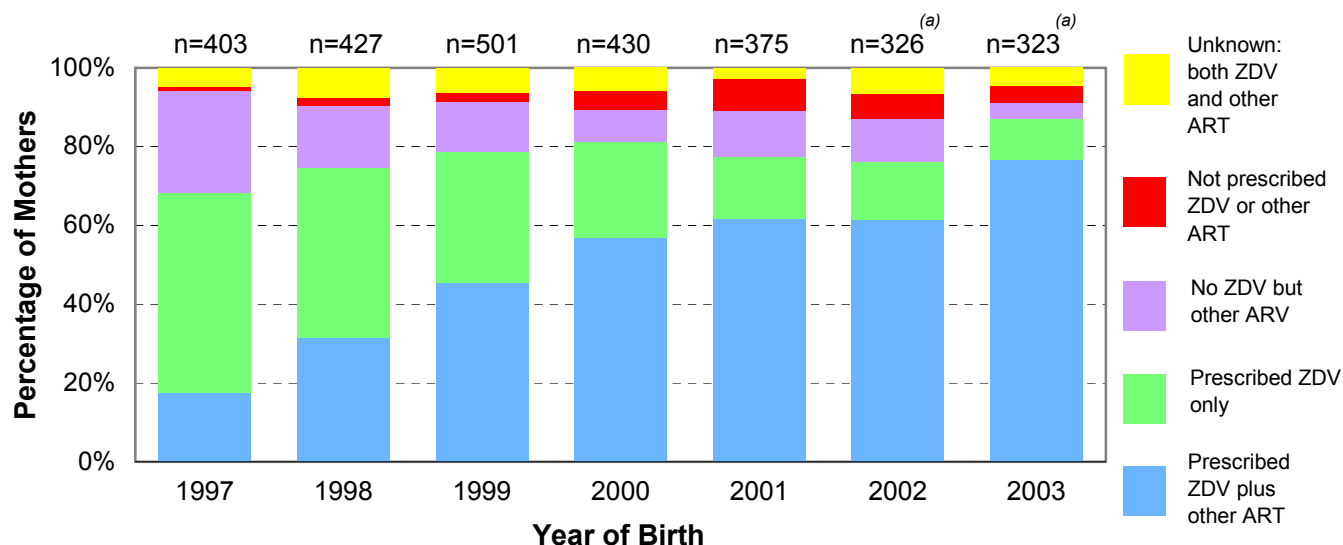
Figure 9: Proportion of HIV-infected Women who Received Prenatal Care (N=3,566), by Year of Infant Birth, 1997–2003, 22 NYC Sites^(a)



^(a) Enrollment decreased to 19 sites in 2002-2003.

Eighty-three percent of the 3,566 HIV-infected women had prenatal care data documented in the pediatric medical records. Among the women with prenatal care data, 2,785 (94%) had prenatal care.

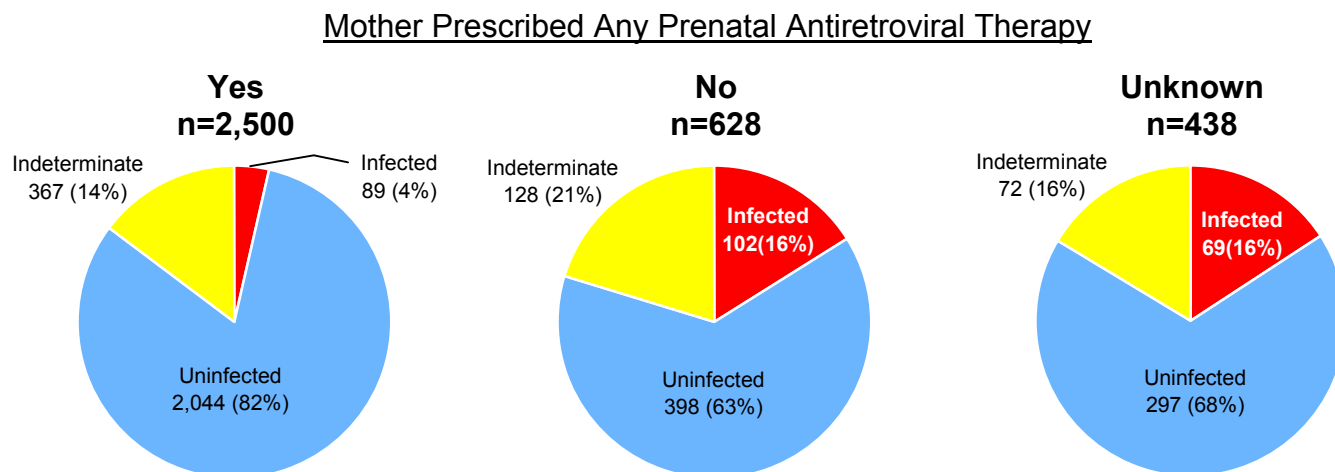
Figure 10: Prenatal Prescription of Antiretroviral Therapies for HIV-infected Women Known to Have Received Prenatal Care (N=2,785), by Year of Infant Birth, 1997–2003, 22 NYC Sites^(a)



^(a) Enrollment decreased to 19 sites in 2002/2003.

In 2003, 91% of women in prenatal care were prescribed antiretroviral therapies (ART): 10% were prescribed prenatal zidovudine (ZDV) alone, 77% were prescribed prenatal ZDV in combination with other antiretroviral therapies (ART), and another 4% were prescribed a prenatal ART regimen that did not contain ZDV. For 4%, no ART was prescribed and for 5% it was unknown. Data on adherence are not collected.

Figure 11: Infant HIV Infection Status by Prenatal Antiretroviral Therapy for 3,566 Infants Born to HIV-infected Women, 1997–2003, 22 NYC Sites^(a)



^(a) Enrollment decreased to 19 sites in 2002. Any prenatal antiretroviral therapy includes zidovudine alone or with other antiretrovirals, or other antiretrovirals without zidovudine, regardless of intrapartum and neonatal antiretroviral therapy.

Among 3,566 infants born to HIV-infected women 1997-2003, 260 (7%) were infected, 2,739 (77%) uninfected, and 567 (16%) indeterminate. Transmission was 4% in infants born to mothers prescribed antiretroviral therapy (ART) and 16% in those born to mothers who did not receive ART.

Table 6: Perinatal HIV Transmission Rates by Prenatal, Intrapartum, and Neonatal Antiretroviral Use Evaluated for 2,346 of the 3,566 Infants Born 1997–2003, 22 NYC Sites^(a)

Timing of ART use	N	% Infected	% Uninfected	% Indeterminate	OR (95% CI) ^(b)
Prenatal ZDV with other ART ^(c) plus intrapartum and neonatal ZDV	1,234	2	85	13	0.06 (0.04-0.11)
Prenatal, intrapartum and neonatal ZDV	762	4	79	16	0.15 (0.09-0.25)
Neonatal ZDV only (started within 24 hours of birth)	95	9	67	23	0.38 (0.17-0.86)
None (no ART) ^(d)	255	22	61	17	Referent

ART=antiretroviral therapy; ZDV=zidovudine; OR=Odds Ratio

^(a) Enrollment decreased to 19 sites in 2002/2003.

^(b) ORs were calculated based on the comparison of HIV-infected and HIV-uninfected infants

^(c) Reverse transcriptase inhibitors and/or protease inhibitors.

^(d) All infants were evaluated for HIV exposure within 3 months of birth.

Table 6 examines the relationship between prenatal, intrapartum, and neonatal antiretroviral prescriptions and infants' HIV infection status. The 2,346 infants are among 3,566 infants born 1997-2003 for whom we have complete information on maternal and neonatal antiretroviral use. Transmission rates were lowest among deliveries with prenatal ZDV with other ART in addition to intrapartum and neonatal ZDV.

NEW YORK CITY ADOLESCENTS DIAGNOSED WITH HIV/AIDS
Table 7: Demographics of Adolescents Diagnosed with HIV Infection Between 13 and 21 Years of Age (N=4,503), by Current Clinical Status, as of December 31, 2004, NYC

		Male				Female				TOTAL	
		HIV	AIDS	Total		HIV	AIDS	Total			
HIV Transmission Category	Men who have sex with men (MSM)	485	974	1,459	55%	–	–	–	–	1,459	32%
	Injection drug use (IDU)	36	316	352	13%	39	285	324	17%	676	15%
	MSM and IDU	14	83	97	4%	–	–	–	–	97	2%
	Heterosexual	48	142	190	7%	257	586	843	45%	1,033	23%
	Receipt of blood products	6	64	70	3%	3	20	23	1%	93	2%
	Perinatal	1	2	3	0%	0	0	0	0%	3	<1%
	Sexually abused	0	0	0	0%	11	15	26	1%	26	1%
	Not specified	194	269	463	18%	348	305	653	35%	1,116	25%
Race/ Ethnicity	Black	327	769	1,096	42%	395	632	1,027	55%	2,123	47%
	Hispanic	305	724	1,029	39%	208	464	672	36%	1,701	38%
	White	131	329	460	18%	43	103	146	8%	606	14%
	Other ^(a)	12	19	31	1%	7	7	14	1%	45	1%
	Unknown	9	9	18	1%	5	5	10	1%	28	1%
Borough of Residence at Diagnosis	Bronx	194	381	575	22%	229	365	594	32%	1,169	26%
	Brooklyn	192	464	656	25%	209	391	600	32%	1,256	28%
	Manhattan	231	535	766	29%	115	228	343	18%	1,109	25%
	Queens	109	263	372	14%	69	154	223	12%	595	13%
	Staten Island	13	33	46	2%	18	25	43	2%	89	2%
	Outside NYC	12	88	100	4%	6	23	29	2%	129	3%
	Unknown	33	86	119	5%	12	25	37	2%	156	4%
Survival Status	Dead	5	601	606	23%	5	422	427	23%	1,033	23%
	Alive	779	1,249	2,028	77%	653	789	1,442	77%	3,470	77%
TOTAL		784	1,850	2,634		658	1,211	1,869		4,503	

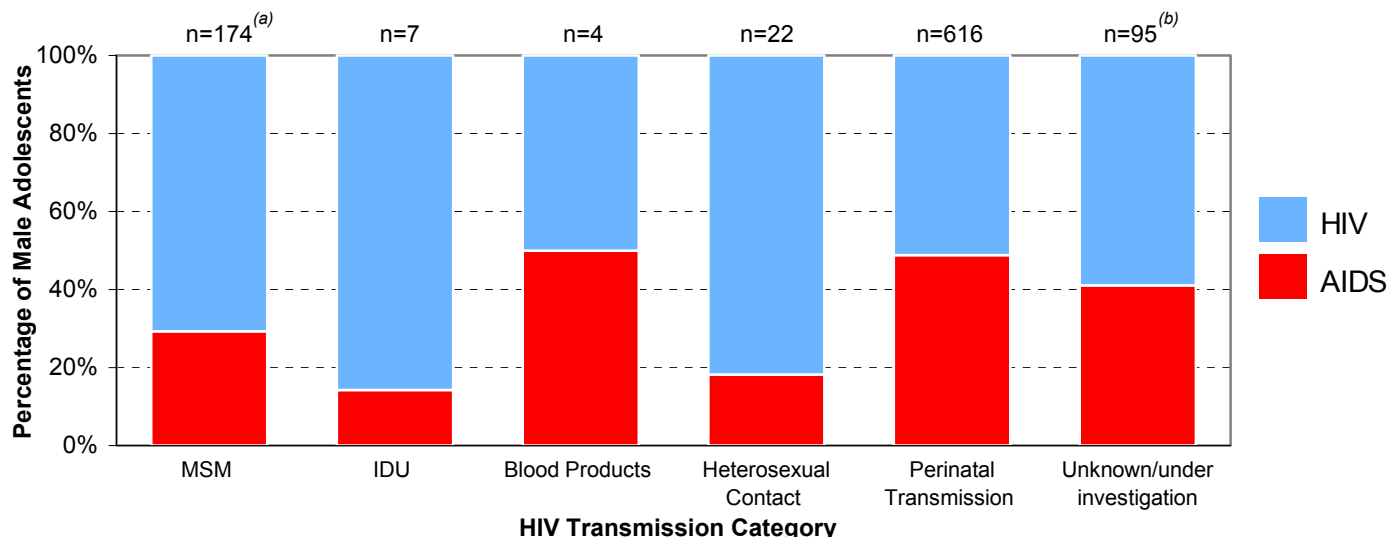
^(a) Includes Asian, Pacific Islander, Native American, multiracial persons

Table 7 shows cumulative data on 4,503 adolescents diagnosed with HIV infection between 13 and 21 years of age [2,634 are males (58%) and 1,869 are females (42%)]. The most common risk factor for males is sex with other men (59%), and for females it is heterosexual sex (45%). AIDS was diagnosed among 1,850 males (70%), and among 1,211 females (65%). Prior to June 2000, only adolescents with AIDS were reported to the NYC DOHMH. Reporting of prevalent HIV cases diagnosed before June 2000 is therefore incomplete.

Among the 4,503 adolescents, 980 were diagnosed with HIV infection from January 2001 through December 2004, of whom 128 were reported with AIDS at the time of diagnosis (13%). Of the 980 adolescents, 15 have died (1.5%).

NEW YORK CITY ADOLESCENTS, LIVING WITH HIV/AIDS

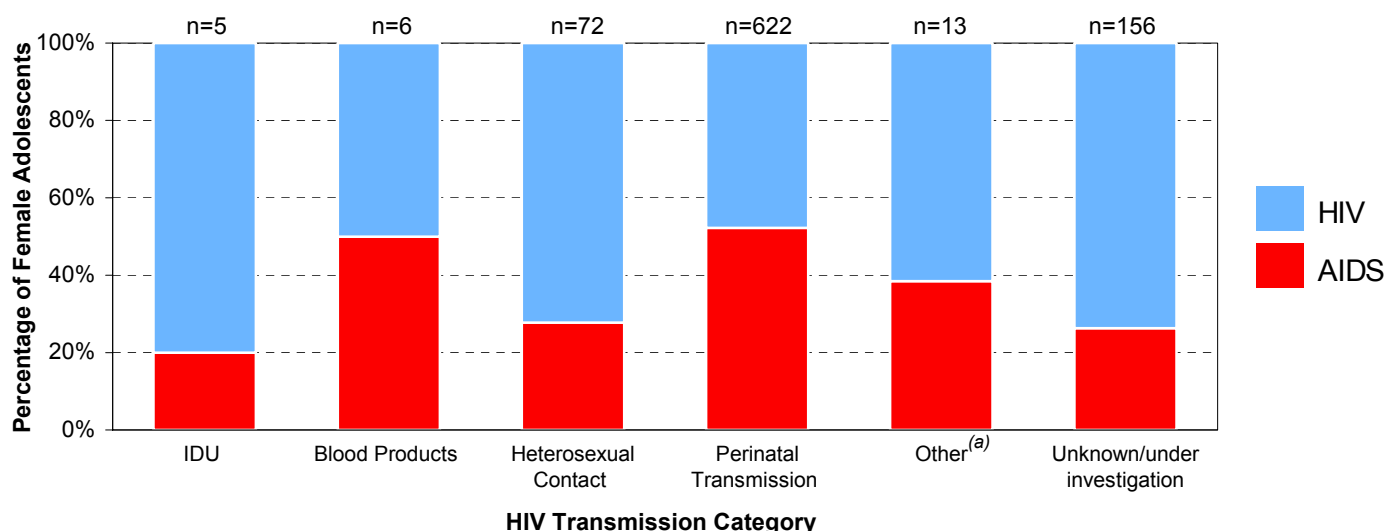
Figure 12: Males Between 13 and 21 Years of Age Living with HIV/AIDS (N=918), by HIV Transmission Category and Current Clinical Status, as of December 31, 2004, NYC



^(a) The transmission risk is MSM and IDU for one person

^(b) The only reported risk is sexual abuse for one person

Figure 13: Females Between 13 and 21 Years of Age Living with HIV/AIDS (N=874), by HIV Transmission Category and Current Clinical Status, as of December 31, 2004, NYC



^(a) The only reported risk is sexual abuse for all 13.

Figures 12 and 13 show data on 1,792 HIV-infected adolescents 13-21 years of age living with HIV/AIDS. They include 1,245 adolescents diagnosed before 13 years of age (1,236 with perinatal risk, 7 for whom the HIV risk is receipt of contaminated blood products, and 2 whose only reported risk was sexual abuse) and 547 adolescents diagnosed at 13-21 years of age (among males the predominant known risk is men who have sex with men, and among females it is heterosexual sex). Overall, 793 of the adolescents (44%) have been diagnosed with AIDS, predominantly those with perinatal HIV transmission risk and receipt of contaminated blood products. Complete reporting of prevalent diagnosed cases and detection of newly infected persons (through early diagnosis) are necessary to more fully describe the extent of the epidemic among adolescents.