

Pediatric & Adolescent HIV/AIDS

*Surveillance Update
New York City*

Data reported through 12/31/2005

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 3,828 children infected through perinatal transmission and diagnosed through December 31, 2005. An additional 82 children were infected through non-perinatal risk (74 through contaminated blood products). Data on 6,455 perinatally HIV-exposed uninfected or indeterminate children from 22 NYC sites are presented with data on trends in perinatal HIV prevention; 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 12,136 HIV-infected youth, diagnosed with HIV infection between 13 and 24 years of age, of whom 2,646 were diagnosed during 2001-2005.

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) during 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

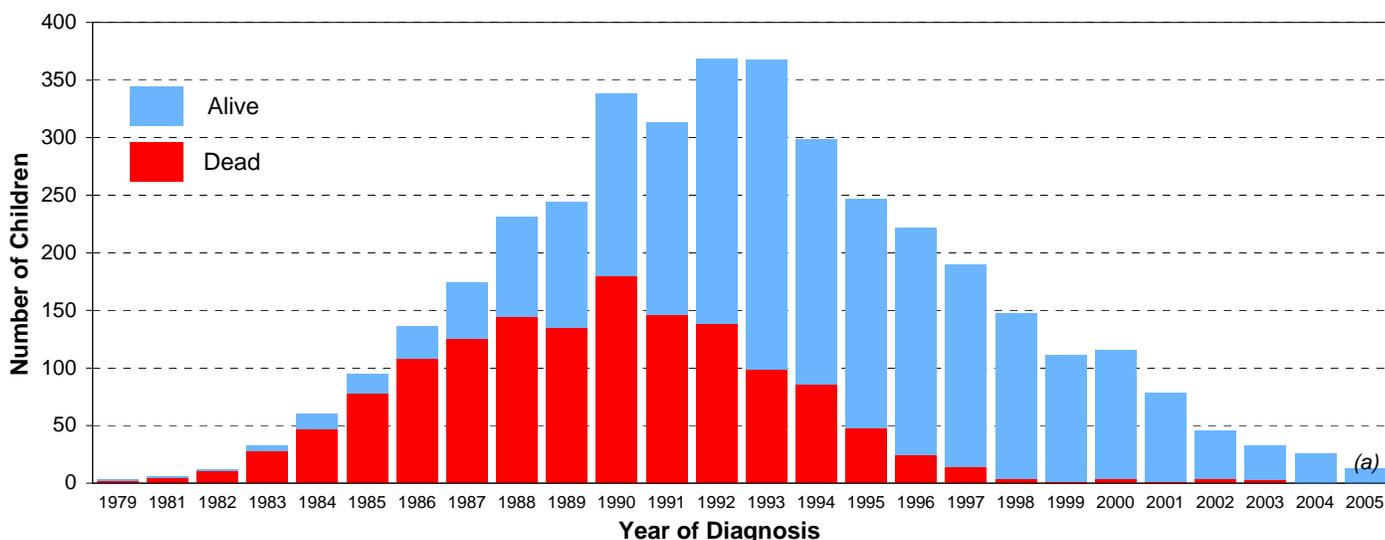
Table 1: Children Diagnosed with HIV Infection Before 13 Years of Age, by HIV Transmission Risk Category and Latest HIV Status, as of December 31, 2005, NYC

	HIV-infected, non-AIDS	AIDS diagnosed before 13 years	AIDS diagnosed at 13 years or older	Total
Perinatal HIV Risk	1,526	2,056	246	3,828 (98%)
Non-perinatal HIV Risk:				82 (2%)
Receipt of blood products ^(a)	19	29	26	74
Other ^(b)	5	2	1	8
Total (%)	1,550 (40%)	2,087 (53%)	273 (7%)	3,910 (100%)

^(a) Year of diagnosis was between 1984-1995 except for one child diagnosed in 1999 in a foreign country.

^(b) Sexual abuse was the reported risk for all 8 children.

Figure 1: Children Diagnosed with HIV Infection Before 13 Years of Age (N=3,910), by Year of HIV Diagnosis and Current Vital Status, 1979–2005^(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	2005 ^(a)	
Alive	311	158	167	230	269	213	199	197	176	144	110	112	77	42	30	26	13	2,474
Dead	683	180	146	138	99	86	48	25	14	4	1	4	1	4	3	0	0	1,436
Total	994	338	313	368	368	299	247	222	190	148	111	116	78	46	33	26	13	3,910

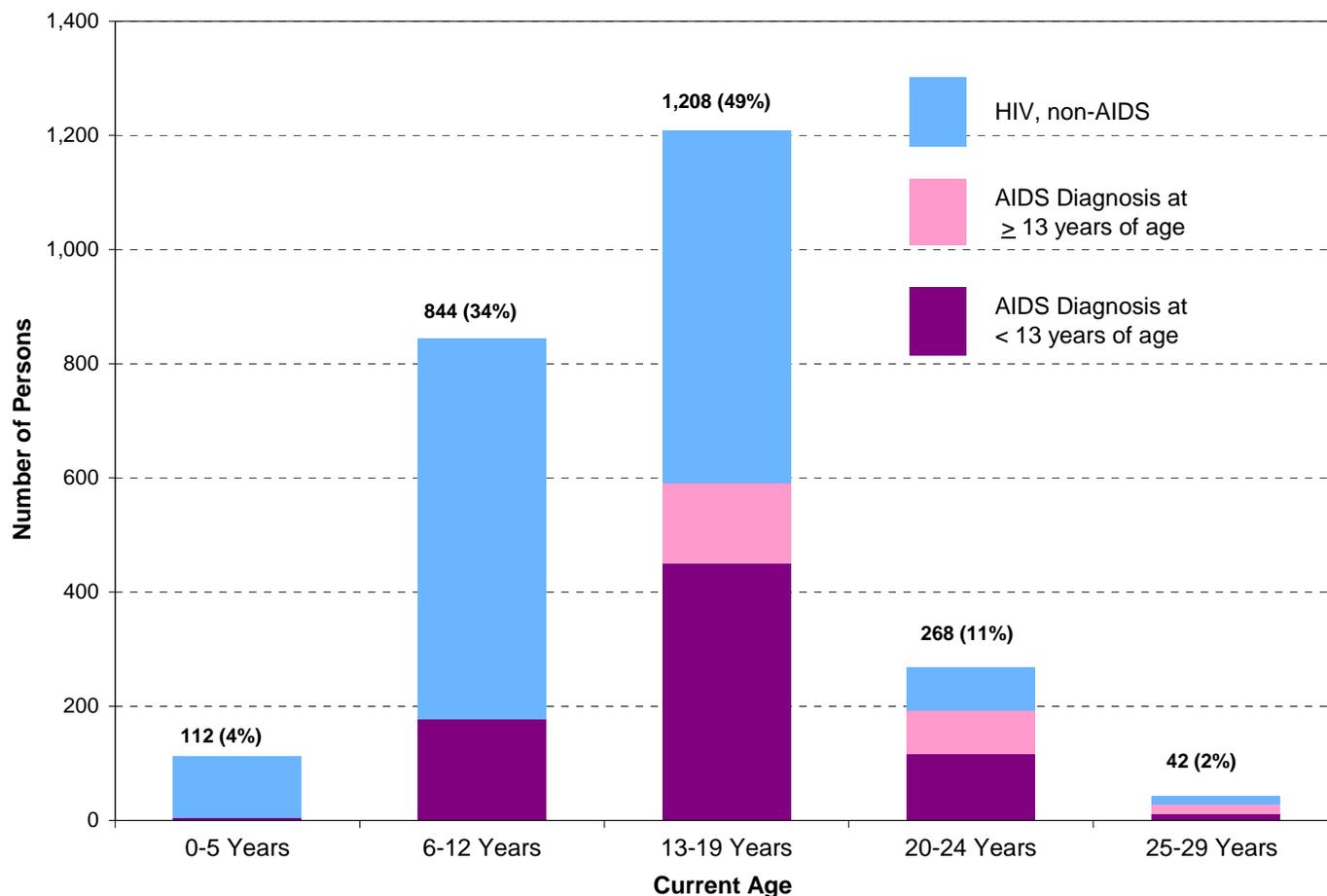
^(c) Data are incomplete for 2005 due to reporting lag.

Table 1 and Figure 1 show data on 3,910 children diagnosed with HIV infection before 13 years of age and reported to the NYC DOHMH. Two thousand three hundred and sixty (60%) developed AIDS (the majority before 13 years of age).

Of the 3,910 children, 1,436 (37%) have died [1,368 (58%) of the 2,360 diagnosed with AIDS and 68 (4%) of the 1,550 diagnosed with HIV infection without 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.

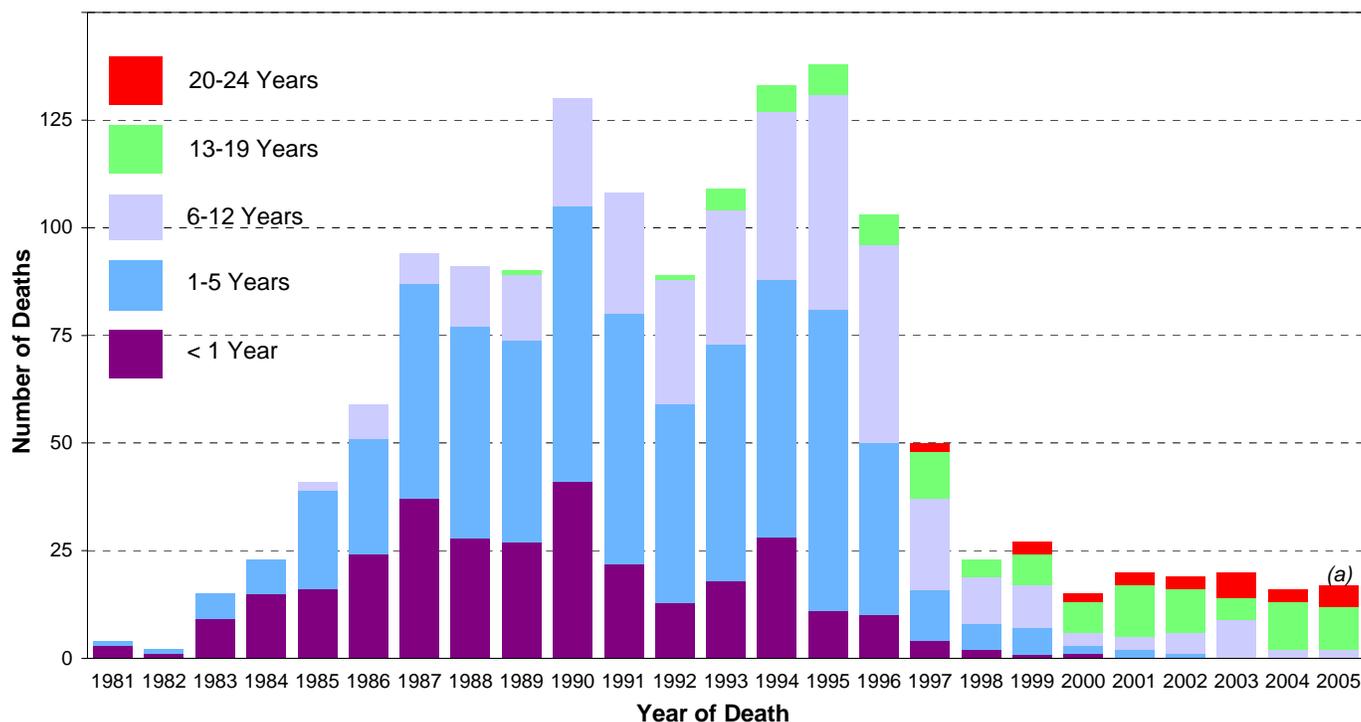
Figure 2: Current Age of Persons Living with HIV/AIDS, Diagnosed with HIV Infection Before 13 Years of Age (N=2,474), by Current Clinical Status, as of December 31, 2005, NYC



Current Age	0-5 years		6-12 years		13-19 years		20-24 years		25-29 years		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
HIV, non-AIDS	108	96	667	79	617	51	76	28	14	33	1,482	60
AIDS at <13 years	4	4	177	21	450	37	117	44	12	29	760	31
AIDS at ≥ 13 years	–	–	–	–	141	12	75	28	16	38	232	9
Total	112	100	844	100	1,208	100	268	100	42	100	2,474	100

Sixty-two percent of living persons diagnosed with HIV infection before 13 years of age are currently 13 years of age or older. The oldest person is 29 years of age. HIV-infected children surviving into adolescence and young adulthood are a growing population. Only four percent of 0-5-year-olds have developed AIDS, compared with 21% among 6-12-year-olds, 49% among 13-19-year-olds, 72% of 20-24-year-olds, and 67% of 25-29-year-olds.

Figure 3: Number of Deaths of Persons Diagnosed with HIV Infection Before 13 Years of Age (N=1,436), by Age at Death, 1981–2005^(a), NYC



Age at Death (Years)	Year of Death																	Total
	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005 ^(a)	
<1	160	41	22	13	18	28	11	10	4	2	1	1	0	0	0	0	0	311
1-5	212	64	58	46	55	60	70	40	12	6	6	2	2	1	0	0	0	634
6-12	46	25	28	29	31	39	50	46	21	11	10	3	3	5	9	2	2	360
13-19	1	0	0	1	5	6	7	7	11	4	7	7	12	10	5	11	10	104
20-24	0	0	0	0	0	0	0	0	2	0	3	2	3	3	6	3	5	27
Total	419	130	108	89	109	133	138	103	50	23	27	15	20	19	20	16	17	1,436

^(a) Data are incomplete for 2005 due to reporting lag.

Figure 3 shows the number of deaths by year of death in persons first diagnosed with HIV infection 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=82), 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	2	6	3	6	5	11
1979	0	2	2	4	2	6	8
1980	1	4	1	2	2	6	8
1981	0	3	4	1	4	4	8
1982	0	1	5	8	5	9	14
1983	0	1	4	3	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	0	1	0	0	0	1	1
1989	0	1	0	0	0	1	1
1990	–	–	–	–	–	–	–
1991	–	–	–	–	–	–	–
1992	0	1	0	0	0	1	1
Total	1	23	35	23	36	46	82

Among the 82 children infected with HIV through non-perinatal risk, the risk was receipt of blood products for 74 (see also Table 1). Fifty-five of the 74 developed AIDS (74%), of whom 34 died. They were diagnosed with HIV infection between 1984 and 1995 except one child who diagnosed in 1999 in a foreign country.

The risk factor for HIV for the remaining 8 children was sexual abuse; three developed AIDS (38%), of whom 2 died. They were diagnosed with HIV infection between 1986 and 1998.

Among all 82 children, 36 (44%) died. As of December 31, 2005, the oldest surviving person is 29 years of age.

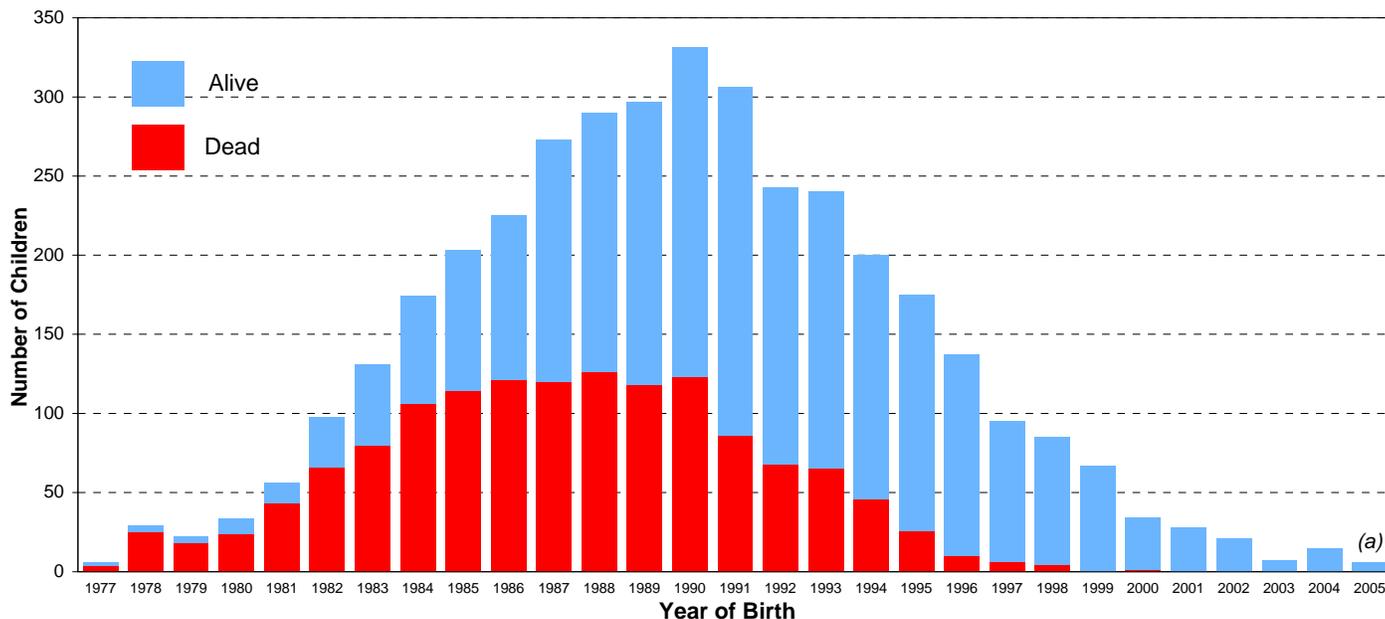
NEW YORK CITY CHILDREN BORN TO HIV-INFECTED MOTHERS

Table 3: Current HIV Status of Children Born to HIV-infected Women, as of December 31, 2005, NYC

Perinatally HIV-infected Children (Citywide)		N
HIV-infected, non-AIDS		1,526
AIDS		2,302
<i>Diagnosed before 13 years</i>		2,056
<i>Diagnosed at 13 years or older</i>		246
Total HIV-infected Children		3,828
Children with Perinatal HIV Exposure (22 NYC sites) ^(a)		N
HIV-uninfected		5,480
Indeterminate status		975
Total Children		10,283

^(a) From the 22 Expanded Pediatric HIV/AIDS Surveillance sites only who represent about 67% of exposed children overall.

Figure 4: Perinatally HIV-infected Children (N=3,828), by Year of Birth and Current Vital Status, 1977–2005^(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	2005 ^(a)	
Alive	873	208	220	175	175	154	149	127	89	81	67	33	28	21	7	15	6	2,428
Dead	965	123	86	68	65	46	26	10	6	4	0	1	0	0	0	0	0	1,400
Total	1,838	331	306	243	240	200	175	137	95	85	67	34	28	21	7	15	6	3,828

^(a) Data are incomplete for 2005 due to reporting lag.

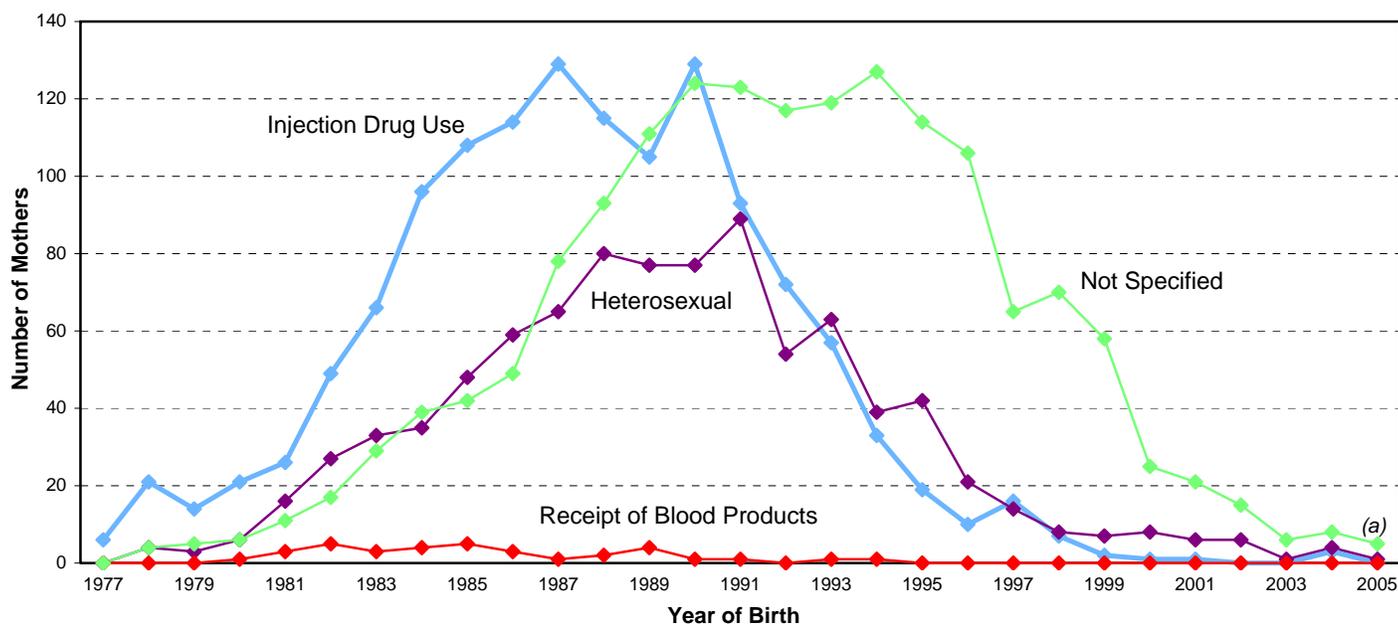
Figure 4 shows the number of perinatally HIV-infected children reported to the NYC DOHMH. Prior to June 2000, only children with AIDS and children enrolled at the 22 expanded pediatric surveillance sites were reported to the NYC DOHMH. The number of HIV-exposed births (see Figure 8) and the number of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

Table 4: Demographics of Perinatally HIV-infected Children (N=3,828) and Maternal HIV Risk Transmission Categories, as of December 31, 2005, NYC

Sex	Male	1,886	49%
	Female	1,942	51%
Borough of Residence at Diagnosis	Bronx	1,153	30%
	Brooklyn	1,228	32%
	Manhattan	696	18%
	Queens	485	13%
	Staten Island	81	2%
	Outside NYC	136	4%
	Unknown	49	1%
	Race/Ethnicity	Black	2,212
Hispanic		1,336	35%
White		237	6%
Asian/Pacific Islander/Native American/Multiracial		19	<1%
Unknown		24	<1%
CDC-defined Maternal HIV Transmission Risk Categories	Injection drug use (IDU)	1,313	34%
	Sex partner of an IDU man ^(a)	411	11%
	Sex partner of man with HIV/AIDS, or with hemophilia, or in receipt of blood products, or a bisexual man ^(a)	482	13%
	Receipt of blood products	35	1%
	Not specified	1,587	41%

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

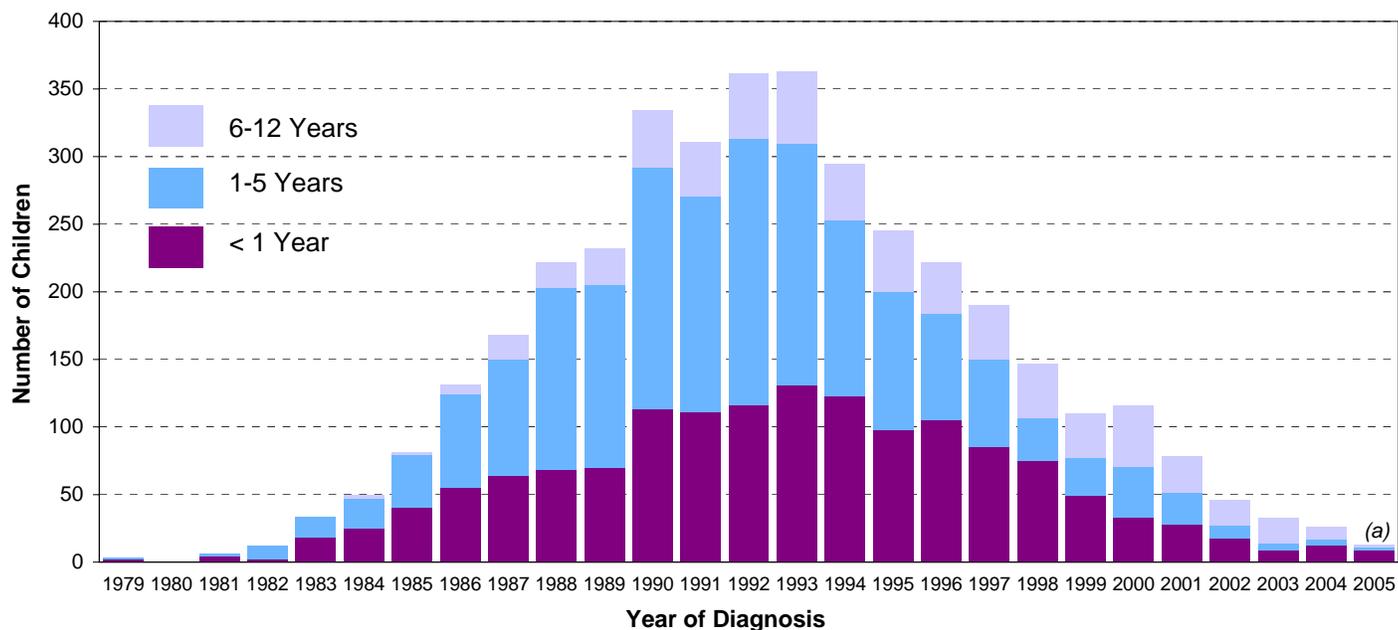
Figure 5: HIV Risk Factors of Mothers of Perinatally HIV-infected Children (N=3,828), by Year of Infant Birth, 1977–2005^(a), NYC



^(a) Data are incomplete for 2005 due to reporting lag.

CDC-defined 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=3,828) by Year of Diagnosis, 1979–2005^(a), NYC



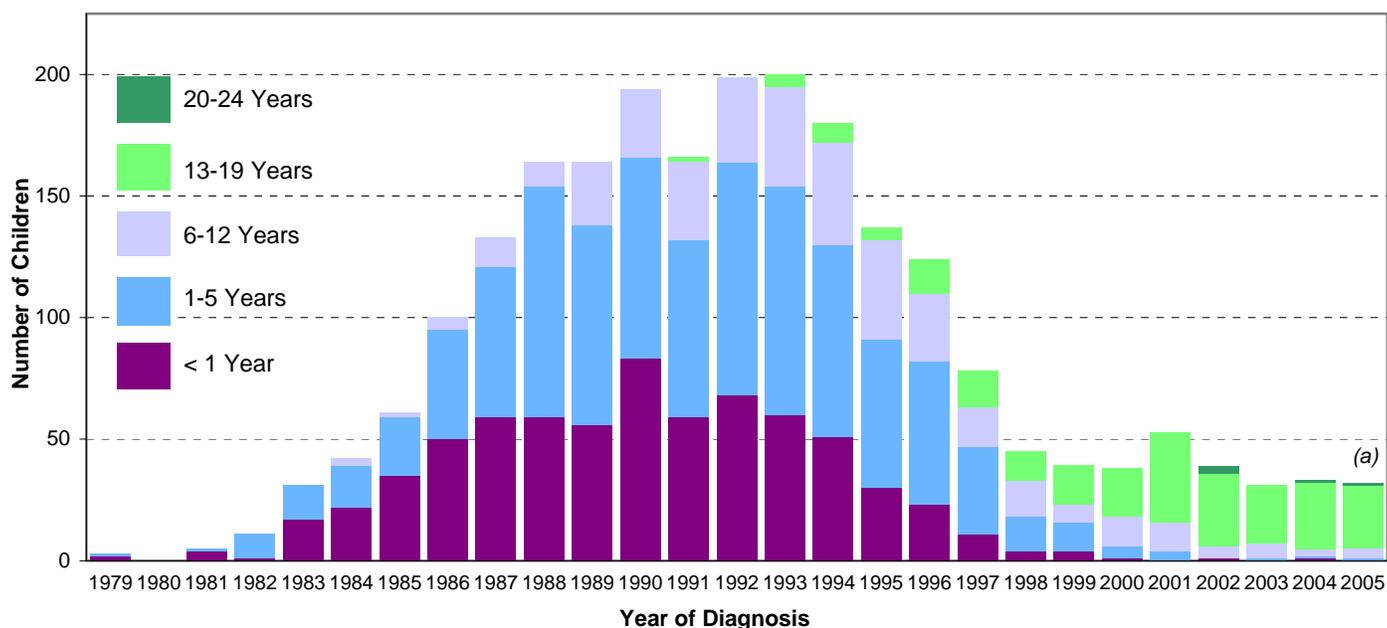
Age at Diagnosis (Years)	Year of Diagnosis																	Total
	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005 ^(a)	
<1	348	113	111	116	131	123	98	105	85	75	49	33	28	18	9	12	9	1463
1-5	514	179	160	197	179	130	102	79	65	32	28	38	23	9	5	5	2	1,747
6-12	76	42	40	48	53	42	45	38	40	40	33	45	27	19	19	9	2	618
Total	938	334	311	361	363	295	245	222	190	147	110	116	78	46	33	26	13	3,828

^(a) Data are incomplete for 2005 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 (35%) 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 67% of children; this occurred in only 8% of children diagnosed during 2001-2005.

Figure 7: Age at AIDS Diagnosis of Perinatally HIV-infected Children (N=2,302), by Year of Diagnosis, 1979–2005^(a), NYC



Age at Diagnosis (Years)	Year of Diagnosis																	Total
	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005 ^(a)	
<1	305	83	59	68	60	51	30	23	11	4	4	1	0	1	0	1	0	701
1-5	351	83	73	96	94	79	61	59	36	14	12	5	4	0	1	1	1	970
6-12	58	28	32	35	41	42	41	28	16	15	7	12	12	5	6	3	4	385
13-19	0	0	2	0	5	8	5	14	15	12	16	20	37	30	24	27	26	241
20-24 ^(b)	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	1	5 ^(b)
Total	714	194	166	199	200	180	137	124	78	45	39	38	53	39	31	33	32	2,302^(b)

^(a) Data are incomplete for 2005 due to reporting lag.

^(b) The oldest was 24 years old at the time of the AIDS diagnosis.

^(c) 213 of 246 cases were diagnosed only on the basis of a CD4 cell count <200 cells/mm³ or <14%.

Figure 7 shows trends in AIDS cases by age at AIDS diagnosis. Among 3,828 perinatally HIV-infected children, 2,302 (60%) developed AIDS through December 2005. One thousand three hundred and forty-three (58%) 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 959 (42%) 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 2005, 246 perinatally infected youth were diagnosed with AIDS at age 13 or older; 213 (87%) were diagnosed solely on the basis of a CD4 cell count <200 cells/mm³ or <14% without any AIDS-defining illnesses.

Table 5: Cumulative Reported AIDS-defining Conditions of 2,302 Perinatally HIV-infected Persons with AIDS^(a), by Year of Diagnosis, 1979–2005^(b), NYC

	1979 -1986	1987 -1994	1995 -1998	1999 -2002	2003 -2005 ^(b)	Total	%
<i>Pneumocystis jiroveci</i> pneumonia ^(c)	112	561	101	31	7	812	20
Lymphoid interstitial pneumonia	65	440	93	10	2	610	15
HIV encephalopathy	8	236	104	32	6	386	10
<i>Mycobacterium avium</i> complex & other species disease	21	203	116	33	12	385	10
Recurrent bacterial infections	31	231	45	6	4	317	8
Wasting syndrome	10	143	62	19	7	241	6
Esophageal candidiasis	26	113	42	27	11	219	5
Cytomegalovirus disease	23	112	25	7	0	167	4
Chronic mucocutaneous herpes simplex	14	70	22	7	5	118	3
Chronic intestinal cryptosporidiosis	10	48	18	3	0	79	2
Pulmonary candidiasis	2	42	7	3	1	55	1
Cytomegalovirus retinitis	0	23	17	5	1	46	1
Extrapulmonary tuberculosis	6	19	7	5	2	39	1
Cryptococcosis	2	16	5	2	1	26	<1
Burkitt's lymphoma	4	13	2	0	2	21	<1
Toxoplasmosis, brain	1	12	5	1	0	19	<1
Immunoblastic lymphoma	0	6	6	2	2	16	<1
Lymphoma, brain	5	5	2	2	0	14	<1
Progressive multifocal leukoencephalopathy	0	4	3	2	0	9	<1
Recurrent pneumonia(d)	0	1	2	4	1	8	<1
Histoplasmosis	0	2	2	0	0	4	<1
Kaposi's sarcoma	0	1	2	0	0	3	<1
Coccidioidomycosis	0	0	0	0	1	1	<1
CD4 cell count <200 cells/mm ³ or <14% ^(d)	0	31	90	196	92	409	10
Total	340	2,332	778	397	157	4,004	100

NA=not applicable

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

^(b) Data are incomplete for 2005 due to reporting lag.

^(c) Previously named *Pneumocystis carinii* pneumonia.

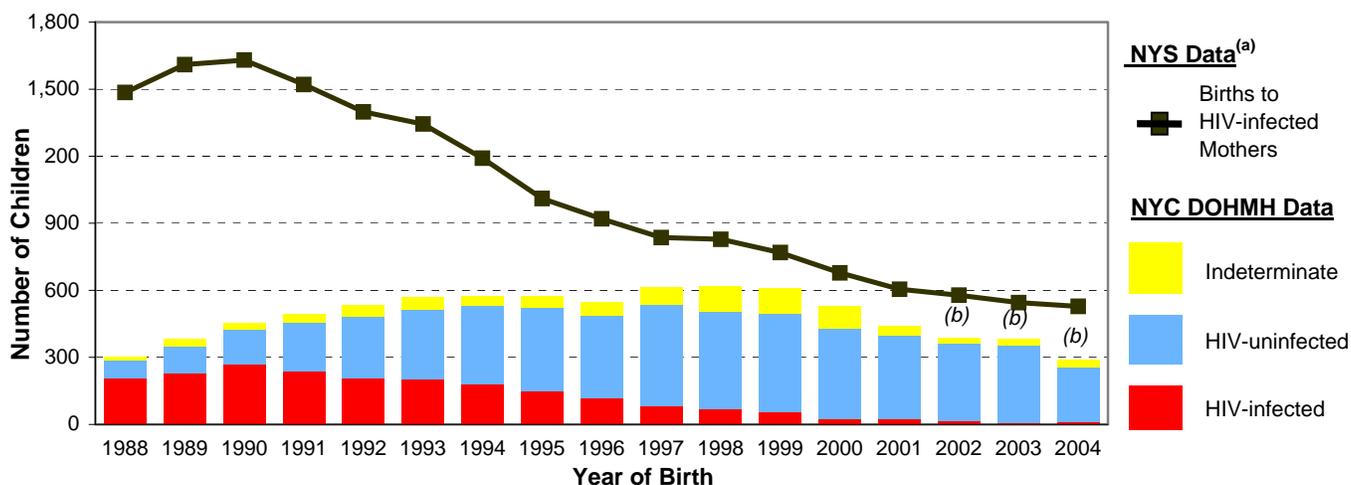
^(d) In 1993, the CDC AIDS case definition was expanded to include CD4 cell counts <200 cells/mm³ or <14%, pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer in adolescents and adults ≥13 years of age.

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 1999-2005, 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 program as described on page 3. Data on trends in prevention of perinatal HIV transmission are 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, 1988–2004



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

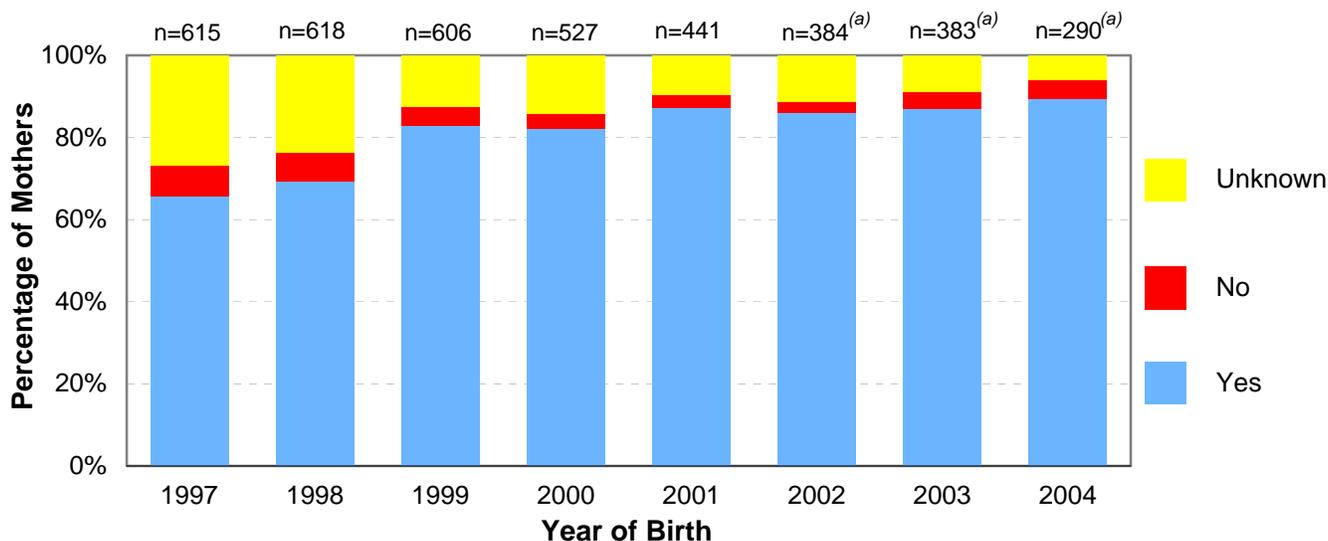
HIV status	Year of Birth																
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 ^(b)	2003 ^(b)	2004 ^(b)
Infected	208	229	270	236	207	201	178	150	115	81	70	55	23	23	17	6	13
Uninfected	79	123	157	218	275	312	355	370	373	456	436	440	404	375	344	350	244
Indeterminate	13	32	28	40	53	57	41	52	59	78	112	111	100	43	23	27	33

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

^(b) Enrollment decreased to 19 sites in 2002-2004.

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 1997-2004, 72% of NYC's HIV-exposed infants were born at and/or were in care at the Expanded Pediatric HIV Surveillance sites.

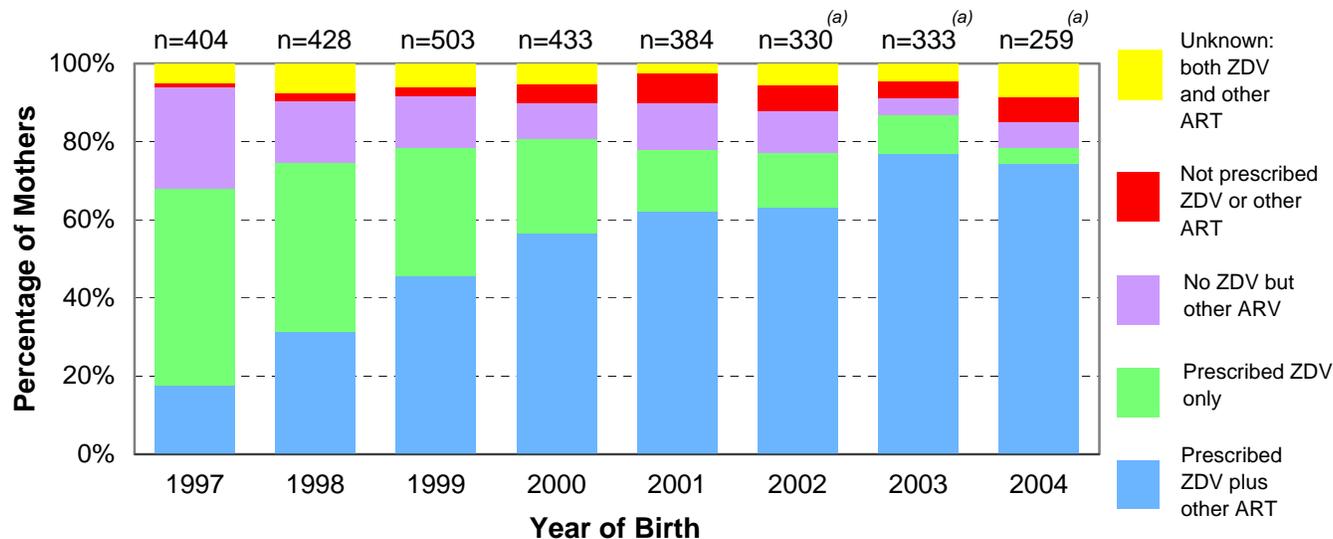
Figure 9: Proportion of HIV-infected Women (N=3,864) who Received Prenatal Care, by Year of Infant Birth, 1997–2004, 22 NYC Sites^(a)



^(a) Enrollment decreased to 19 sites in 2002-2004.

Eighty-five percent of the 3,864 HIV-infected women had prenatal care data documented in the pediatric medical records. Among the women with prenatal care data, 3,074 (94%) had prenatal care.

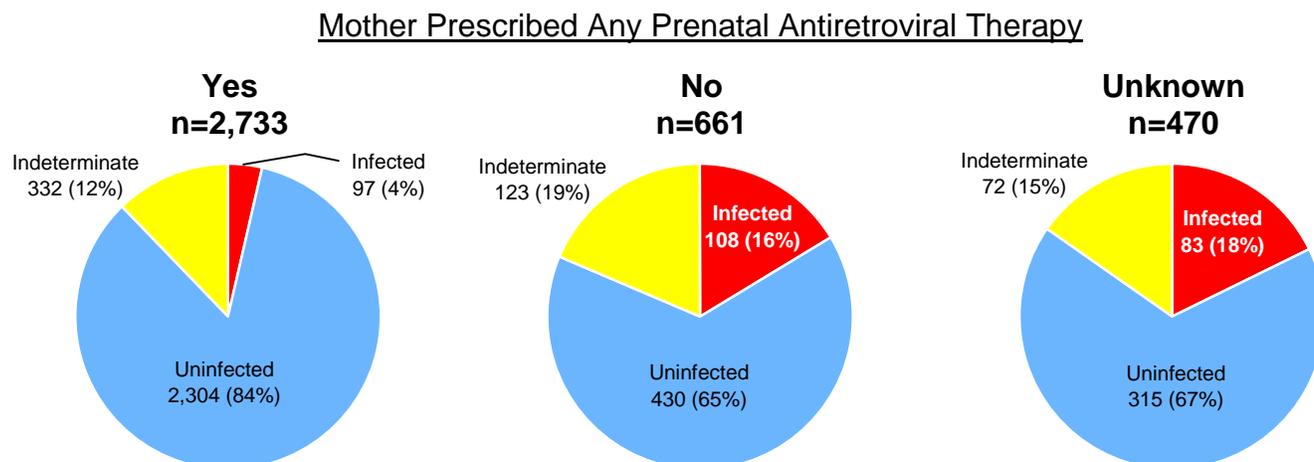
Figure 10: Prenatal Prescription of Antiretroviral Therapies for HIV-infected Women Known to Have Received Prenatal Care (N=3,074), by Year of Infant Birth, 1997–2004, 22 NYC Sites^(a)



^(a) Enrollment decreased to 19 sites in 2002-2004.

In 2004, 85% of women in prenatal care were prescribed antiretroviral therapies (ART): 4% were prescribed prenatal zidovudine (ZDV) alone, 74% were prescribed prenatal ZDV in combination with other antiretroviral therapies (ART), and another 7% were prescribed a prenatal ART regimen that did not contain ZDV. For 7%, no ART was prescribed and for 8% it was unknown. Data on adherence are not collected. Data are obtained from the review of the newborn medical records.

Figure 11: Infant HIV Infection Status by Prenatal Antiretroviral Therapy for 3,864 Infants Born to HIV-infected Women, 1997–2004, 22 NYC Sites^(a)



^(a) Enrollment decreased to 19 sites in 2002-2004. Any prenatal antiretroviral therapy includes zidovudine alone or with other antiretrovirals, or other antiretrovirals without zidovudine, regardless of intrapartum and neonatal antiretroviral therapy.

Among 3,864 infants born to HIV-infected women 1997-2004, 288 (7%) were infected, 3,049 (79%) uninfected, and 527 (14%) 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 2,554 of the 3,864 Infants Born 1997–2004, 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	1,429	2	89	9	0.06 (0.04-0.10)
Prenatal, intrapartum and neonatal ZDV	769	5	80	15	0.16 (0.10-0.25)
Neonatal ZDV only (started within 24 hours of birth)	98	10	67	23	0.41 (0.18-0.89)
None (no ART) ^(d)	258	22	61	17	Referent

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

^(a) Enrollment decreased to 19 sites in 2002-2004.

^(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 2,554 infants are among 3,864 infants born 1997-2004 for whom we have complete information on maternal and neonatal antiretroviral use and for whom the ART included ZDV. Transmission rates were lowest among deliveries with prenatal ZDV with other ART in addition to intrapartum and neonatal ZDV.

NEW YORK CITY HIV-INFECTED YOUTH DIAGNOSED AT 13-24 YEARS OF AGE

Cumulatively, through December 31, 2005, HIV infection was reported in 2,493 adolescents diagnosed at 13-19 years of age, of whom 58% were males, and in 9,643 young adults diagnosed at 20-24 years of age, of whom 64% were males. Before June 2000, only persons with AIDS were reported. The most common CDC-defined risk factor for males in both age groups is sex with other men (MSM) (57%), and for females, heterosexual sex (39%). AIDS was diagnosed among 70% of males and 67% of females. Overall, 27% of persons have died.

Data are presented in Table 7 on 2,646 HIV-infected youth, diagnosed during 2001-2005.

Table 7: Demographics of Youth Diagnosed with HIV Infection Between 13 and 24 Years of Age (N=2,646), during 2001-2005, by Current Clinical Status, as of December 31, 2005, NYC

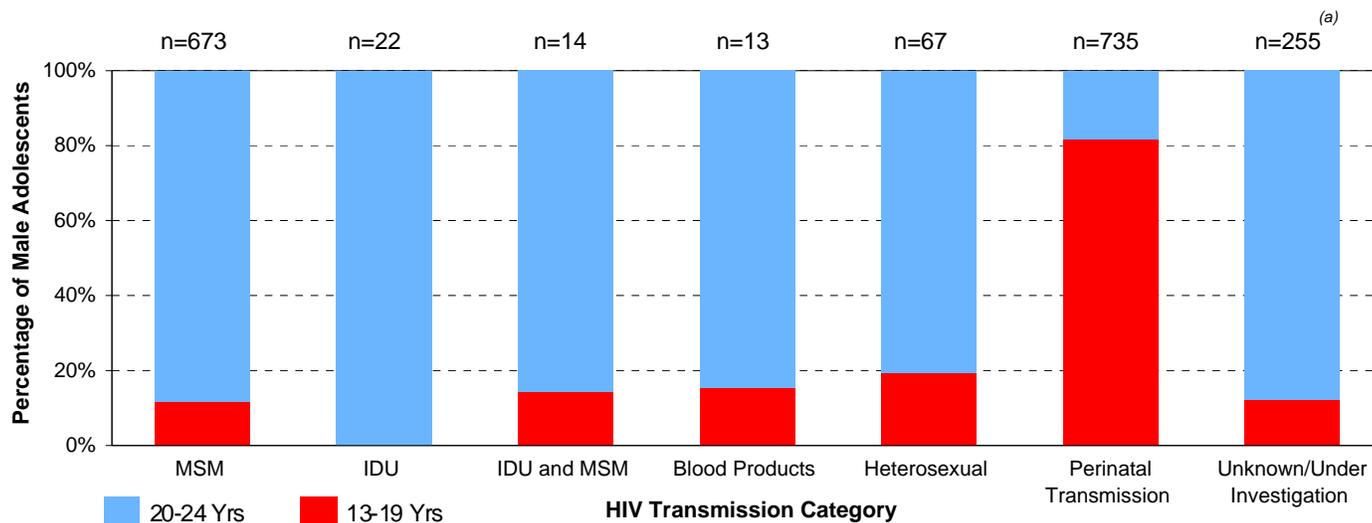
		Males (Age at diagnosis)				Females (Age at diagnosis)			
		13-19 years (N=406)		20-24 years (N=1,259)		13-19 years (N=272)		20-24 years (N=709)	
		N	%	N	%	N	%	N	%
CDC-defined HIV Transmission Risk Categories	Men Who Have Sex With Men (MSM)	274	68	815	65	–	–	–	–
	Injection drug use (IDU)	6	1	37	3	8	3	38	5
	MSM and IDU	5	1	24	2	–	–	–	–
	Heterosexual	28	7	77	6	94	35	238	34
	Sexually Abused	0	0	0	0	14	5	9	1
	Unknown/Under Investigation	93	23	306	24	156	57	424	60
Race/Ethnicity	Black	242	60	607	48	184	68	471	66
	Hispanic	135	33	459	37	70	26	187	26
	White	23	6	158	13	11	4	39	6
	Other ^(a)	4	1	29	2	7	2	10	2
	Unknown	2	<1	6	<1	0	0	2	0
Borough of Residence at Diagnosis	Bronx	112	28	295	23	86	32	230	32
	Brooklyn	120	30	342	27	96	35	244	34
	Manhattan	84	21	339	27	38	14	122	17
	Queens	55	13	198	16	35	13	86	12
	Staten Island	11	3	20	2	4	1	10	2
	Outside NYC	14	3	41	3	5	2	12	2
	Unknown	10	2	24	2	8	3	5	1
Clinical Status	AIDS	124	31	410	33	70	26	187	26
	HIV	282	69	849	67	202	74	522	74
Survival Status	Dead	5	1	27	2	6	2	14	2
	Alive	401	99	1,232	98	266	98	695	98

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

During 2001-2005, young adults, 20-24 years of age, accounted for 74% of the new HIV diagnoses among youth, 13-24 years of age. For males, the predominant known HIV transmission risk was MSM (65%), and for females, it was heterosexual contact (34%). Overall, 15% of males and 12% of females had a concurrent HIV/AIDS diagnosis, indicating an HIV diagnosis late in the course of infection. Subsequently, another 17% of males and 14% of females developed AIDS, resulting in a total 32% of males and 26% of females who developed AIDS.

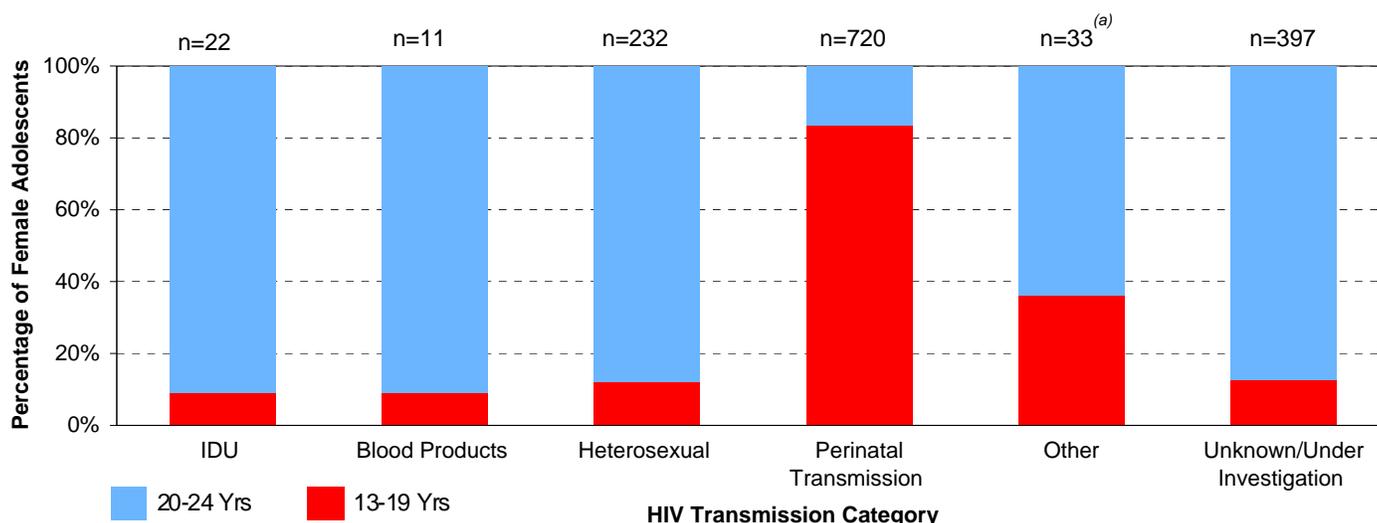
NEW YORK CITY YOUTH LIVING WITH HIV/AIDS

Figure 12: Males Between 13 and 24 Years of Age Living with HIV/AIDS (N=1,779), by HIV Transmission Risk Category and Current Age, as of December 31, 2005, NYC



^(a) Sexual abuse is suspected for one person.

Figure 13: Females Between 13 and 24 Years of Age Living with HIV/AIDS (N=1,415), by HIV Transmission Risk Category and Current Age, as of December 31, 2005, NYC



^(a) The only reported risk is sexual abuse for all 33 females.

Figures 12 and 13 show data on 3,194 HIV-infected youth 13-24 years of age living with HIV/AIDS. They include 1,478 youth diagnosed before 13 years of age (1,453 with perinatal risk, 22 for whom the HIV risk is receipt of contaminated blood products, and 3 whose only reported risk was sexual abuse) and 1,716 diagnosed at 13-24 years of age (among males the predominant known risk is men who have sex with men, and among females it is heterosexual sex). Overall, 1,303 of the youth (41%) have been diagnosed with AIDS, (53% of those with perinatal HIV transmission risk, 58% of those infected through receipt of contaminated blood products, and 30% of the remaining youth). 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 and young adults.