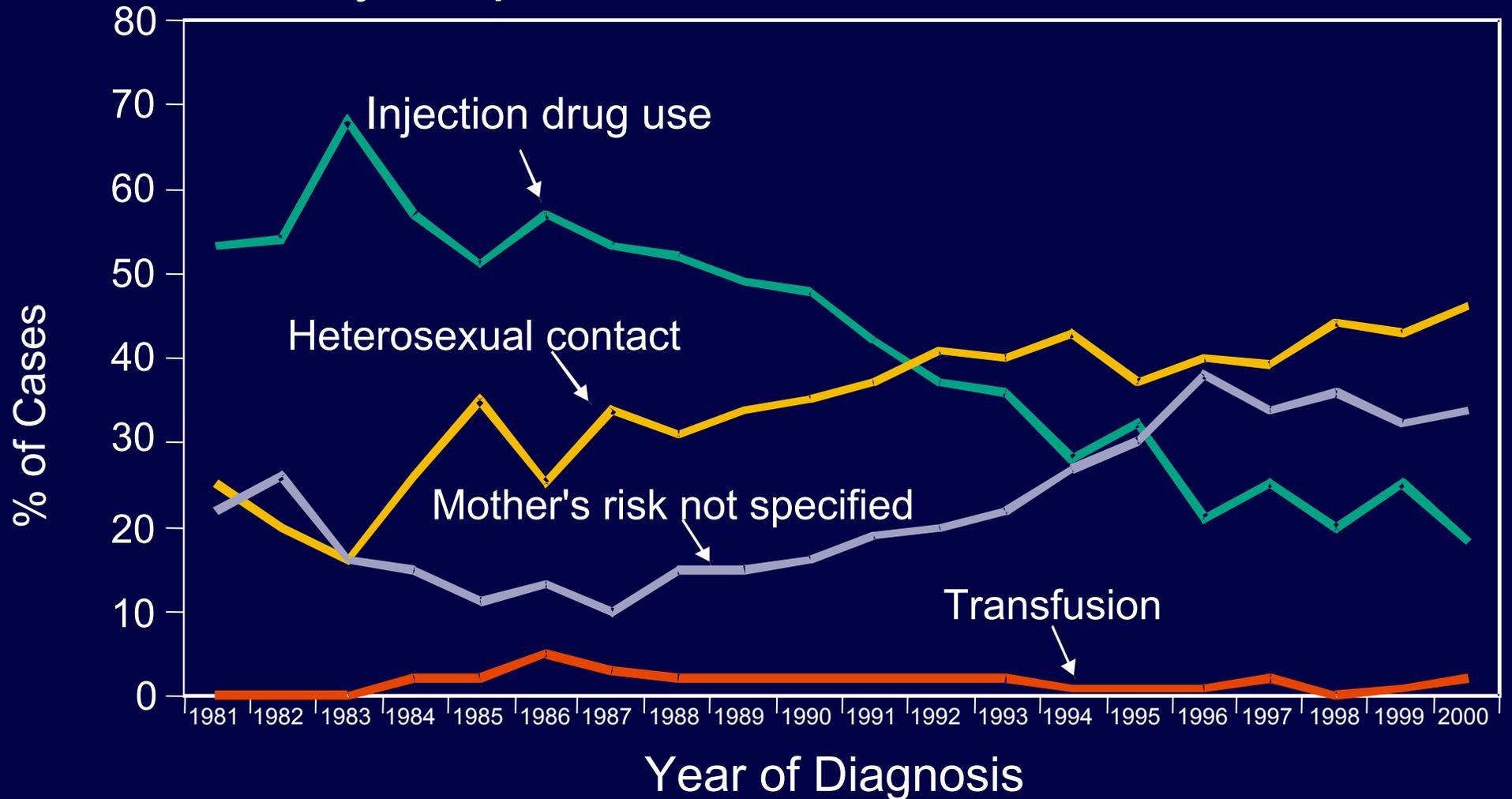


Mother's Exposure Category, by Year of Diagnosis for Perinatally Acquired AIDS, 1981-2000, United States



Note: Data adjusted for reporting delays and for estimated proportional redistribution of cases reported without a risk



Mother's Exposure Category, by Year of Diagnosis for Perinatally Acquired AIDS, 1981- 2000, United States

Changes have occurred in the distribution of exposure categories for the mothers of children who were infected perinatally and in whom AIDS developed.

In the 1980s, most of the women who transmitted HIV vertically were exposed to HIV through injection drug use, and a smaller proportion through heterosexual contact.

In the 1990s, a smaller proportion of women who transmitted HIV vertically were exposed to HIV through injection drug use and a larger proportion through heterosexual contact.



Reported AIDS in Children <13 Years of Age, by Exposure Category, 2001 and Cumulative, United States*

Exposure Category	2001		Cumulative 1982-2001	
	Number	%	Number	%
Perinatally acquired	150	86	8,284	91
Transfusion-associated	2	1	381	4
Hemophilia	0	0	236	3
Other/not reported	23	13	173	2
Total	175	100	9,074	100



*Includes cases reported from Puerto Rico, Guam, US Virgin Islands, and US dependencies, possessions, and associated nations



Reported AIDS in Children <13 Years of Age, by Exposure Category, 2001 and Cumulative, United States

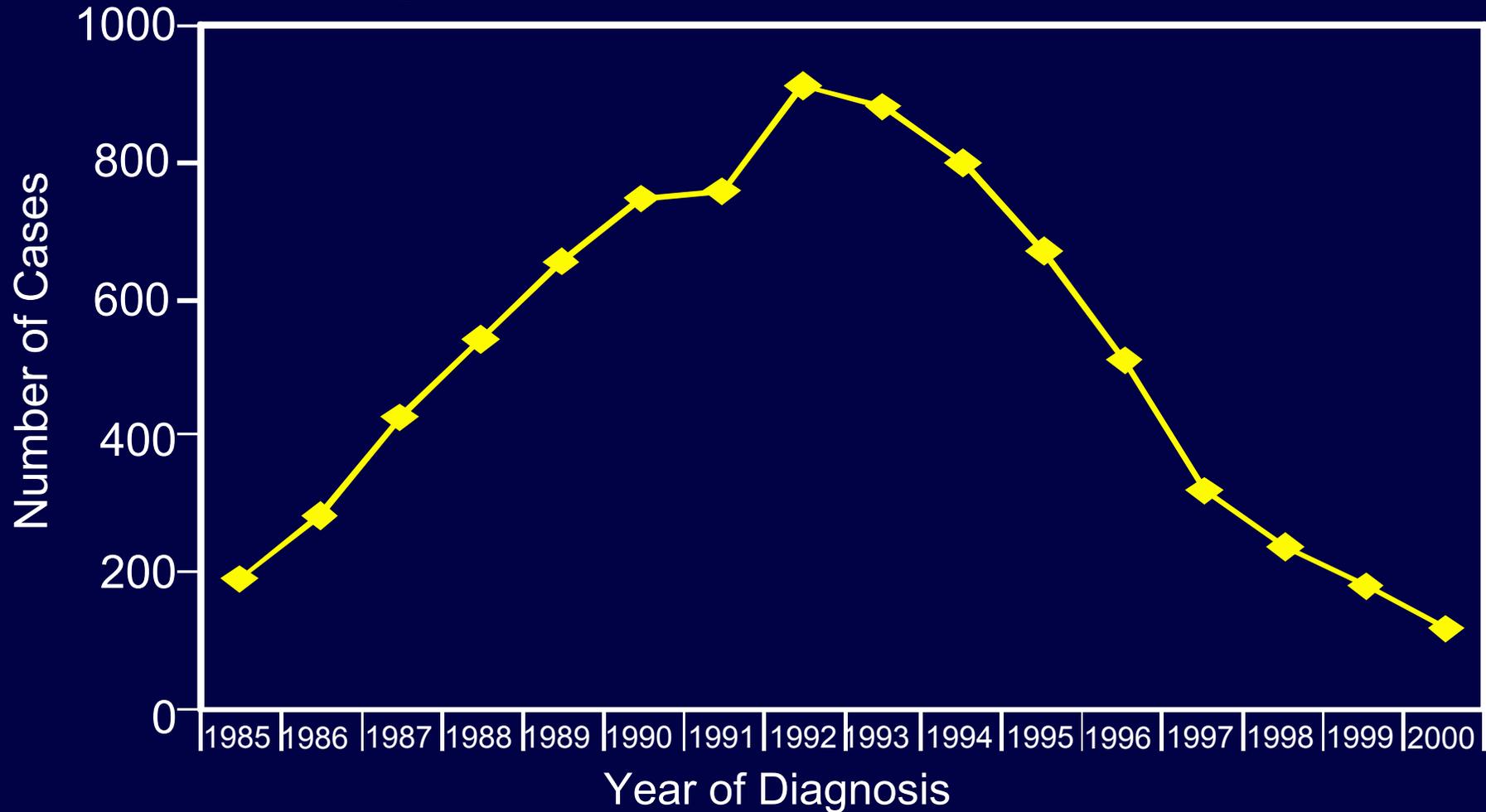
In 2001, 175 children with AIDS were reported to CDC, a marked decrease from 196 in 2000. Most (86%) of these children acquired HIV infection perinatally, that is, from their mother during pregnancy.

Since the beginning of the AIDS epidemic, 9,074 children have been reported with AIDS. Again, most of these children (91%) were infected perinatally.

Another 4% acquired HIV from a transfusion of blood or blood products, and another 3% acquired HIV from transfusion because of hemophilia.



Perinatally Acquired AIDS Cases, by Year of Diagnosis, 1985 – 2000, United States



Note: Data adjusted for reporting delays and for estimated proportional redistribution of cases reported without a risk; data reported through December 2001



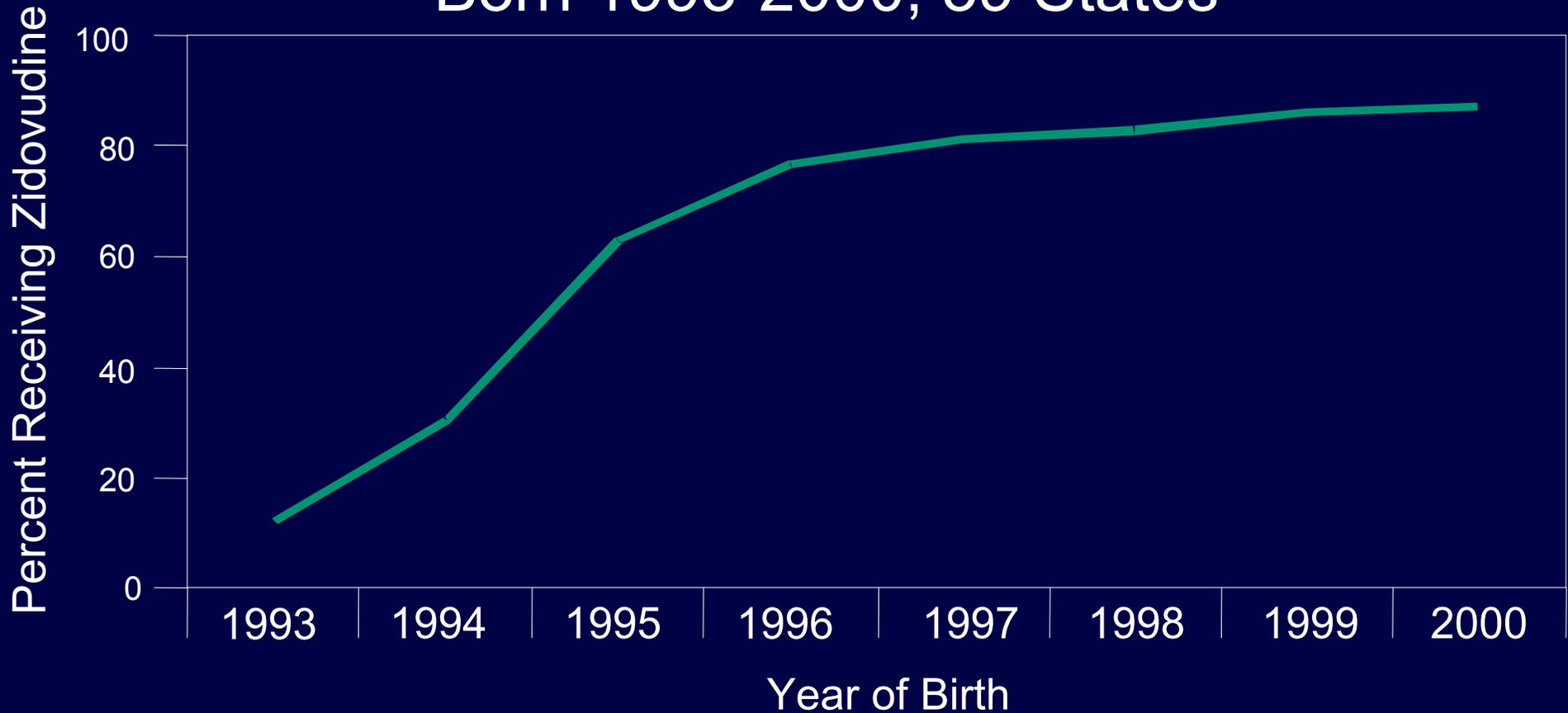
Perinatally Acquired AIDS Cases, by Year of Diagnosis, 1985 - 2000, United States

The estimated number of AIDS cases diagnosed among persons perinatally exposed to HIV peaked in 1992 and has decreased in recent years.

The decline of these cases is likely associated with the implementation of Public Health Service guidelines for the universal counseling and voluntary HIV testing of pregnant women and the use of antiretroviral therapy for pregnant women and newborn infants (*MMWR* 2002;51[No. RR-18]). Other contributing factors are the effective treatment of HIV infections that slow progression to AIDS and the use of prophylaxis to prevent AIDS opportunistic infections among children.



Zidovudine Use for HIV-infected Pregnant Women or for Perinatally Exposed or Infected Children Born 1993-2000, 39 States



Note: Includes prenatal, intrapartum, or neonatal receipt of Zidovudine to reduce perinatal HIV transmission
39 areas conduct name-based HIV Surveillance; data reported through December 2001



Zidovudine Use for HIV-infected Pregnant Women or for Perinatally Exposed or Infected Children Born 1993-2000, 39 States

In April 1994, the Public Health Service released guidelines for the use of zidovudine (ZDV) to reduce perinatal HIV transmission; in 1995, recommendations for HIV counseling and voluntary testing for pregnant women were published, and in 2002 recommendations on the use of antiretroviral drugs in pregnant, HIV-infected women were updated.

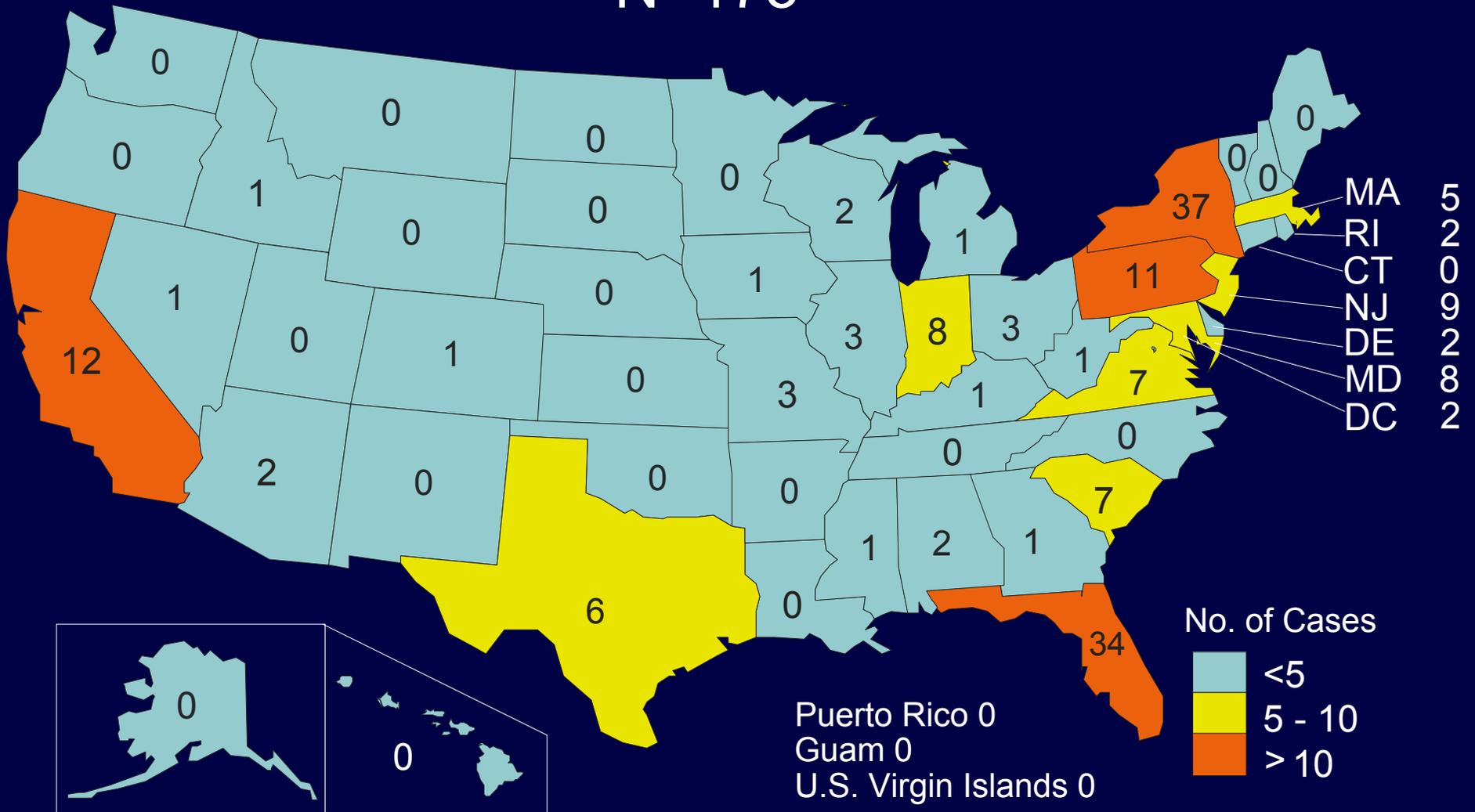
Since then, the proportion of perinatally HIV-exposed or infected children who received ZDV or whose mother had received ZDV has increased markedly. This increase in ZDV use, including receipt by the mother during the prenatal or the intrapartum period and receipt by the neonate, has been accompanied by a decrease in the number of perinatally HIV-infected children and is responsible for the dramatic decline in perinatally acquired AIDS.

The data presented here are from the 39 states with name-based HIV infection surveillance, and may not represent all states in the US.



AIDS Cases in Children Reported in 2001

N=175*



* Includes 1 case in a child whose area of residence is unknown



AIDS Cases in Children Reported in 2001

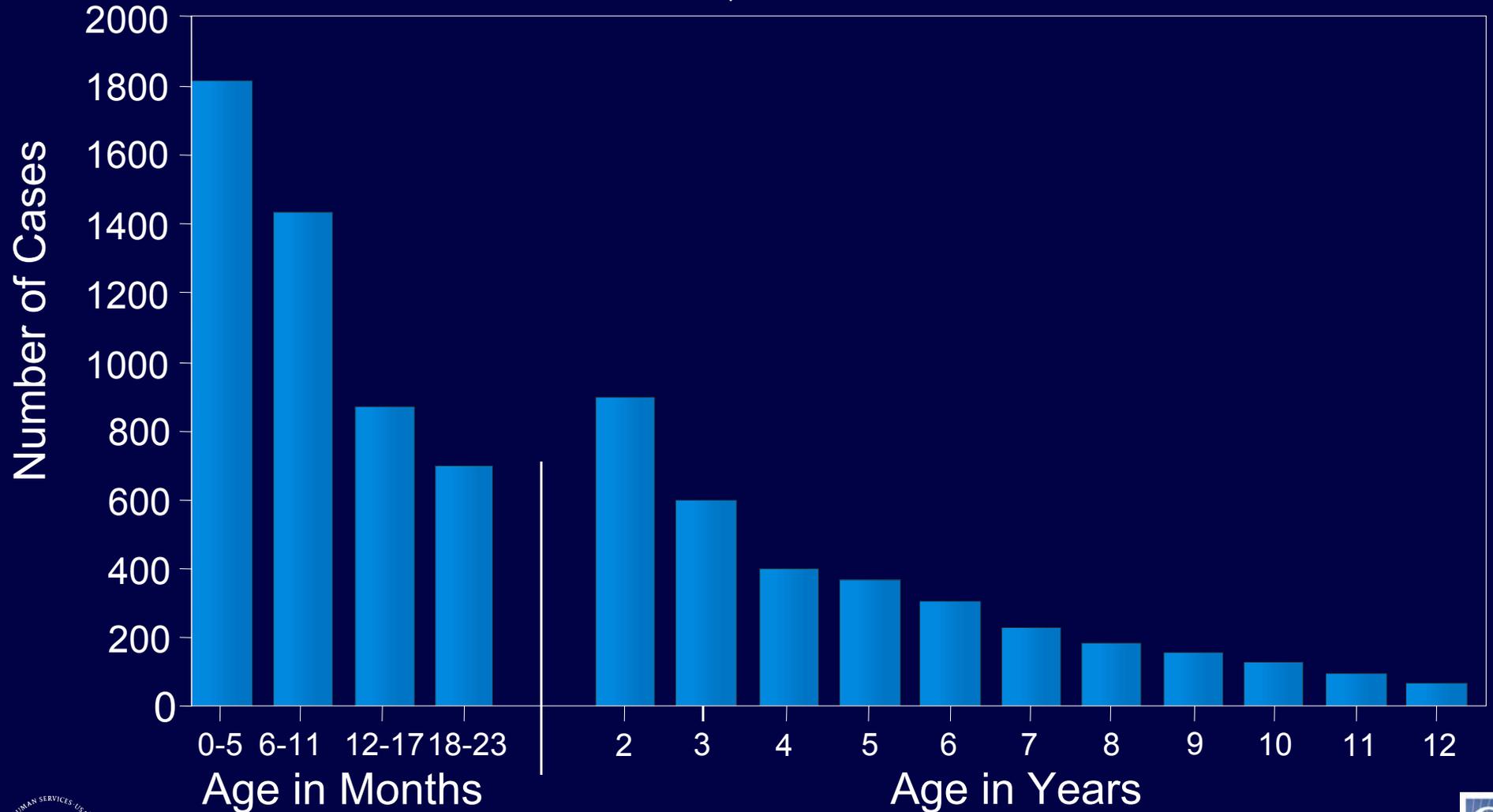
In 2001, a total of 175 cases of AIDS in children younger than 13 years of age were reported, a decrease from 196 in 2000. Most of these cases were perinatally acquired.

New York, Florida, California, and Pennsylvania reported the largest number of cases.

In 2001, 22 states did not report any pediatric AIDS cases.



Perinately Acquired AIDS Cases, by Age at Diagnosis 1982 - 2001, United States



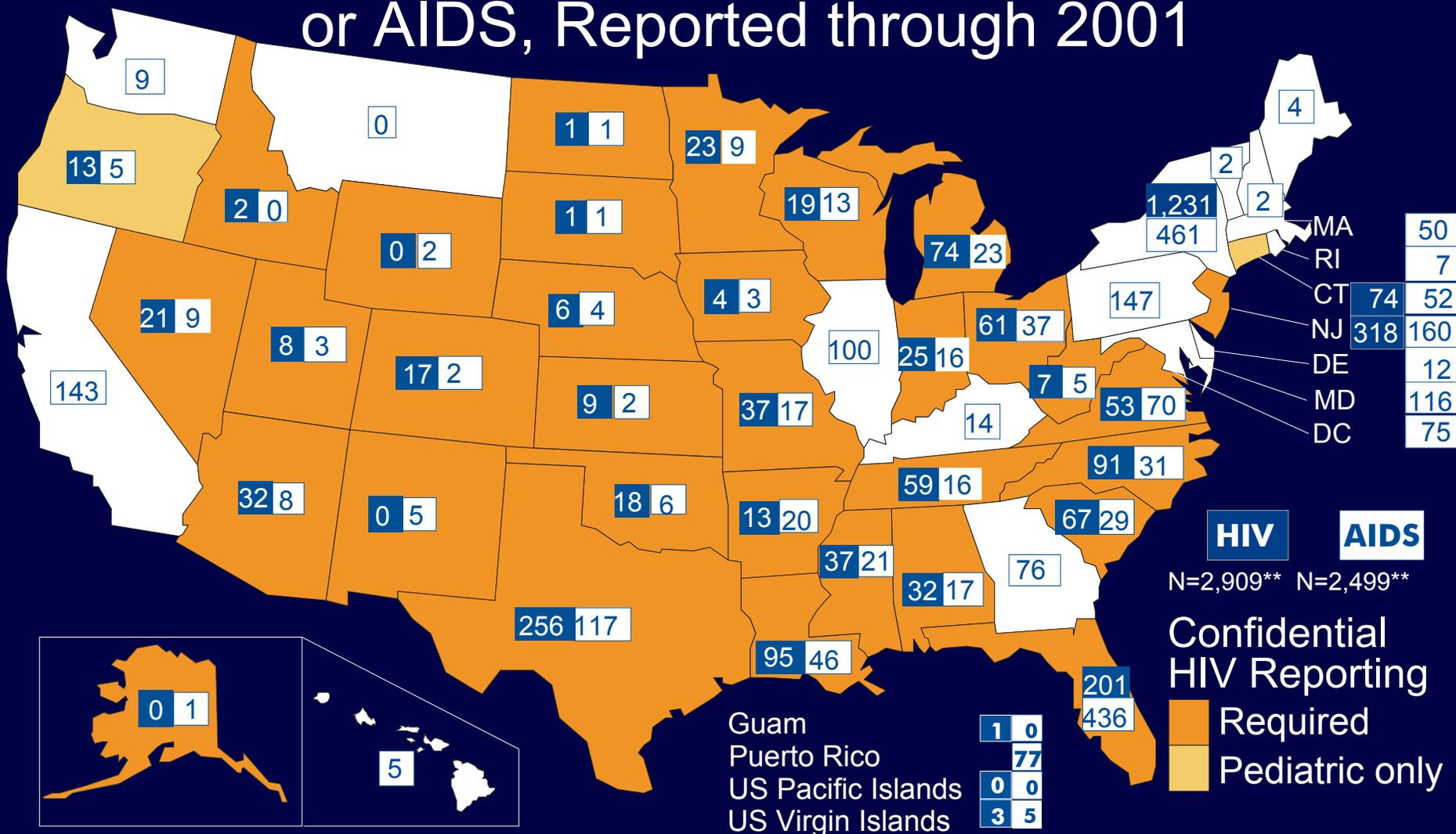
Perinatally Acquired AIDS Cases, by Age at Diagnosis, 1982 - 2001, United States

Perinatally acquired AIDS was diagnosed for nearly 40% of infected children within the first year of life and for 22% within the first 6 months.

This distribution could change if more HIV-infected childbearing women become aware of their HIV status and seek medical care early in their infant's life, when treatment could possibly prevent the progression from HIV infection to AIDS in their children.



Children <13 Years of Age Living with HIV Infection* or AIDS, Reported through 2001



* For areas with confidential HIV infection surveillance reported by patient name. Age based on current age as of December 2001
 ** Totals include cases for which data on state of residence are missing.



Children <13 Years of Age Living with HIV Infection or AIDS, Reported through 2001

As of December 31, 2001, a total of 2,499 children in the United States, Guam, Puerto Rico, the US Pacific Islands, and the US Virgin Islands were reported to be living with AIDS.

An additional 2,909 children were known to be infected with HIV and reported from the areas that conducted confidential name-based HIV infection case surveillance in 2001.

The reported number of infected children is an underestimate of the population of infected children as some states, including several with high AIDS morbidity, do not report HIV infection to CDC.

These data are useful in planning medical and social services to meet the current and future needs of this population.



AIDS-defining Conditions Most Commonly Reported for Children <13 Years of Age, Reported through 2001 United States

<u>Condition</u>	<u>Number</u>	<u>% Cases*</u>
<i>Pneumocystis carinii</i> pneumonia	3018	33
Lymphoid interstitial pneumonitis	2123	23
Recurrent bacterial infections	1871	21
HIV wasting syndrome	1650	18
HIV encephalopathy	1530	17
Candida esophagitis	1454	16
Cytomegalovirus disease	920	10
<i>Mycobacterium avium</i> infection	742	8
Severe herpes simplex infection	455	5
Cryptosporidiosis	441	5
Pulmonary candidiasis	337	4

*>1 diagnosis reported for some children; 9,074 children have been reported with AIDS through 2001



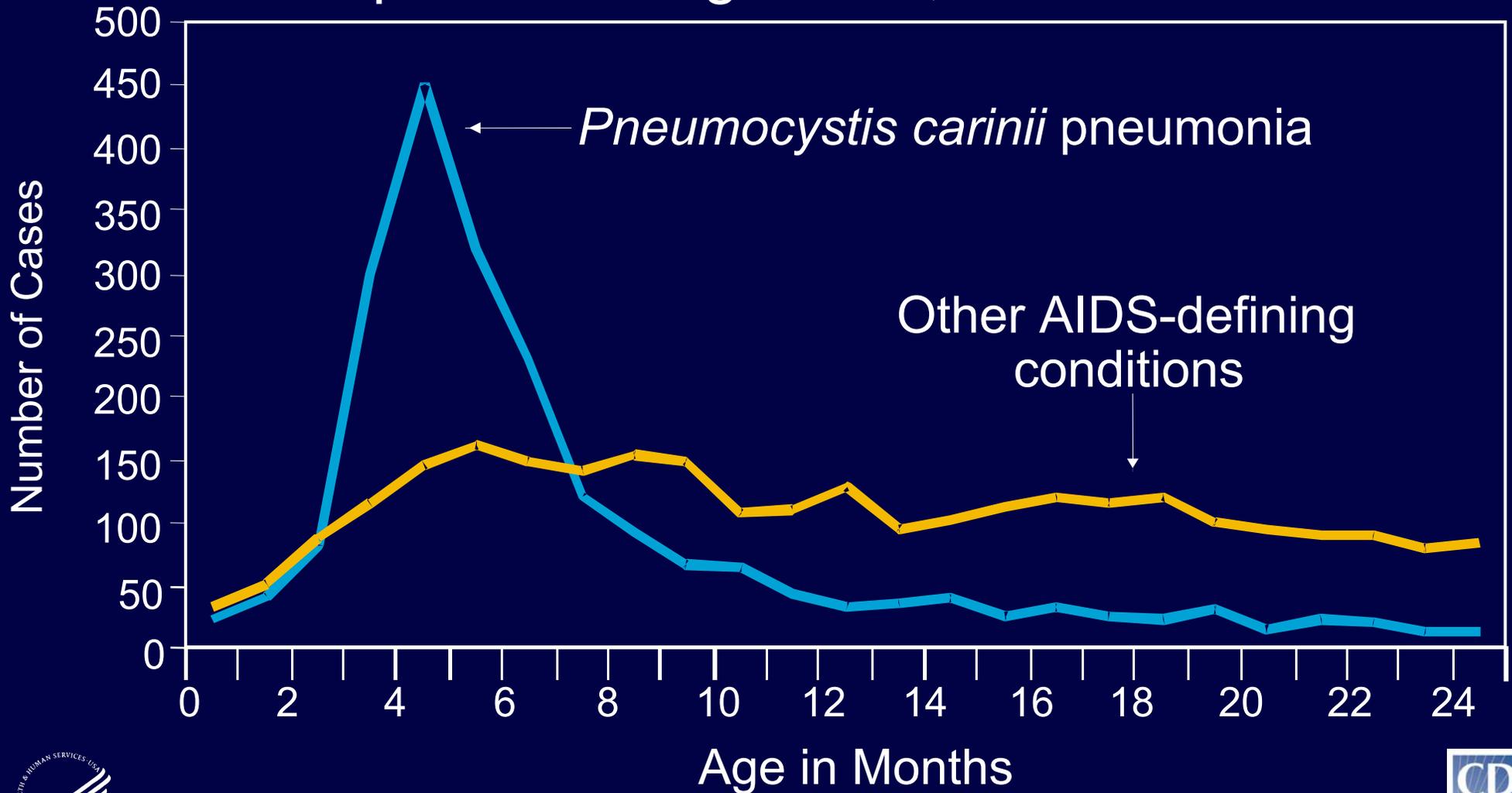
AIDS-defining Conditions Most Commonly Reported for Children <13 Years of Age, Reported through 2001, United States

Certain clinical conditions are used to define AIDS among persons infected with HIV. The most commonly reported conditions for children are listed on this slide.

From the beginning of the epidemic through 2001, 33% of children with AIDS had a diagnosis of *Pneumocystis carinii* pneumonia, another 23% a diagnosis of lymphoid interstitial pneumonitis, and 21% had recurrent bacterial infections.



AIDS-defining Conditions, by Age at Diagnosis for Perinatally Acquired AIDS Cases Reported through 2001, United States



AIDS-defining Conditions, by Age at Diagnosis for Perinatally Acquired AIDS Cases, Reported through 2001, United States

The incidence of *Pneumocystis carinii* pneumonia (PCP) in children with perinatally acquired AIDS peaks at 3 to 6 months of age. The age at diagnosis for the other AIDS-defining conditions is much more evenly distributed during the first 2 years of life.

Because PCP occurs early, prophylaxis is recommended for all perinatally HIV-exposed children, beginning at 6 weeks of age. The occurrence of PCP in children may indicate missed opportunities for testing pregnant women, the use of zidovudine or other antiretroviral therapies to prevent transmission, or therapy (including PCP prophylaxis) for HIV-exposed children.

CDC has a high-priority initiative to reduce HIV transmission from mothers to children by promoting voluntary maternal testing prenatally (intrapartum if women do not receive prenatal care) and zidovudine therapy.



Mother's Exposure Category for Perinatally Acquired AIDS, by Year of Diagnosis, United States

<u>Exposure Category</u>	1981-1995		1996-2001	
	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>
Injection drug use	2,986	42	310	21
Heterosexual contact	2,580	36	599	41
Transfusion	139	2	18	1
Mother's risk not specified	1,368	19	532	36

Note: Data adjusted for reporting delays and for estimated proportional redistribution of cases reported without a risk



Mother's Exposure Category for Perinatally Acquired AIDS, by Year of Diagnosis, United States

Since the beginning of the epidemic, the proportional distribution of exposure categories for HIV infection among mothers of children with perinatally acquired AIDS has changed.

From 1996-2001, 21% of the mothers were exposed to HIV through injection drug use, and 36% did not specify an exposure category.

From 1981 through 1995, a larger proportion (42%) of women were infected through injection drug use, and fewer (19%) were reported as having an unspecified exposure.

It is likely that some proportion of the women without a specified risk were exposed through heterosexual contact.



AIDS Cases in Children <13 Years of Age, Reported in 2001 versus 2001 Population Estimates, by Race/Ethnicity United States

<u>Race/Ethnicity</u>	<u>AIDS N=175 %</u>	<u>US Children N=54,240,000 %</u>
White, not Hispanic	19	61
Black, not Hispanic	65	14
Hispanic	15	19
Asian/Pacific Islander	2	4
American Indian/ Alaska Native	0	1



AIDS in Children <13 Years of Age, Reported in 2001 versus 2001 Population Estimates, by Race/Ethnicity, United States

AIDS has disproportionately affected black children in the United States. Although only 14% of children in the United States are black, 65% of children reported with AIDS in 2001 are black.

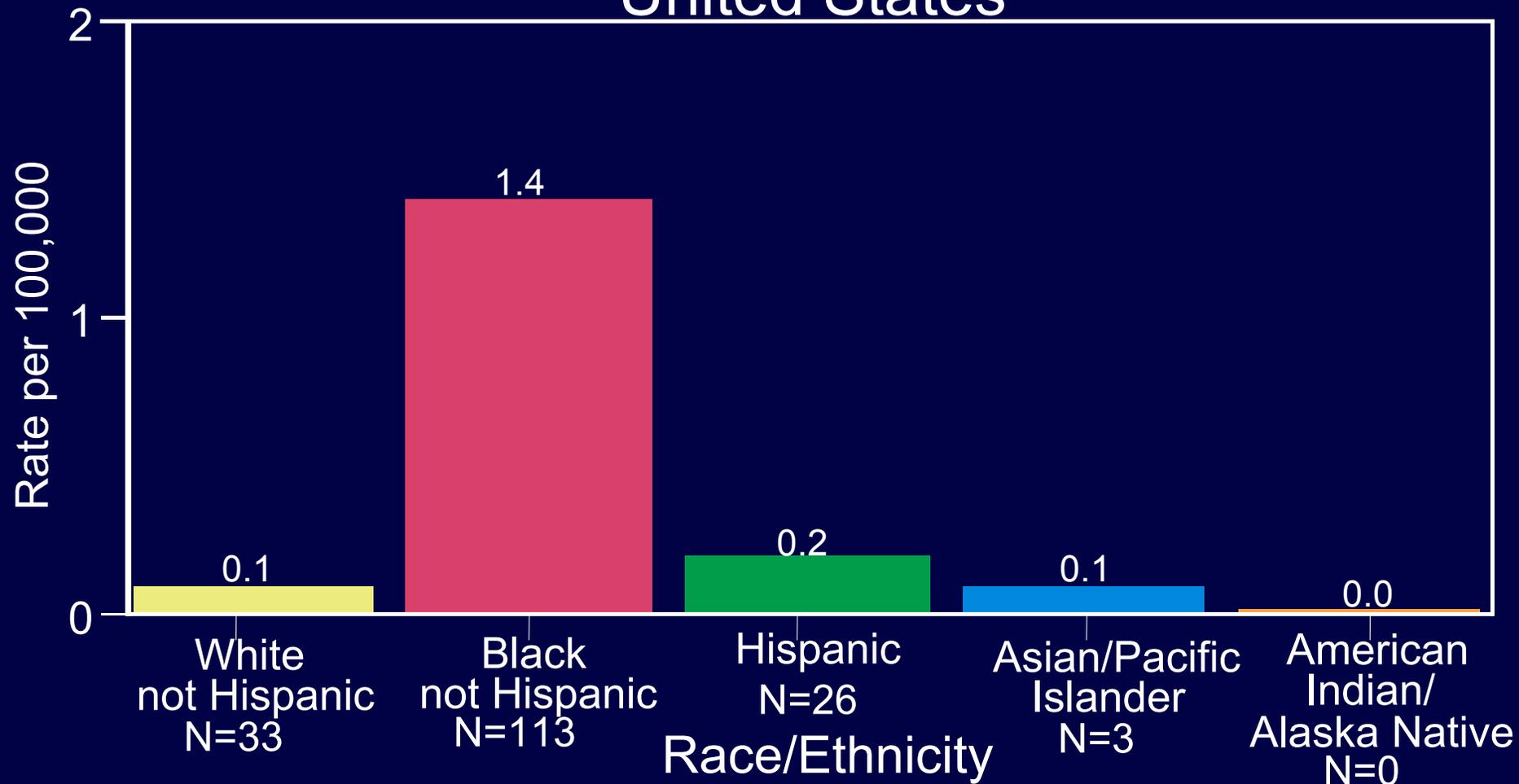
The proportion of children reported with AIDS who are Hispanic (15%) is slightly less than the proportion of US children who are Hispanic (19%).

The proportion of cases among white and Asian/Pacific Islander children is lower than the proportion of children of these races/ethnicities in the total population.

No American Indian/Alaska Native children were reported with AIDS in 2001.



AIDS Rates (cases per 100,000) for Children <13 Years of Age by Race/Ethnicity, Reported in 2001 United States



*US Rate=0.3/100,000 N=175



AIDS Rates (cases per 100,000) for Children <13 Years of Age, by Race/Ethnicity, Reported in 2001, United States

The rate of AIDS among black children in 2001 was 1.4 (per 100,000)—a rate 14 times higher than among white children (0.1) and 7 times higher than among Hispanic children (0.2).

Because most pediatric cases of AIDS are attributed to perinatal HIV transmission, these rates also reflect the disproportionate racial/ethnic distribution of HIV and AIDS among black women in the United States.

