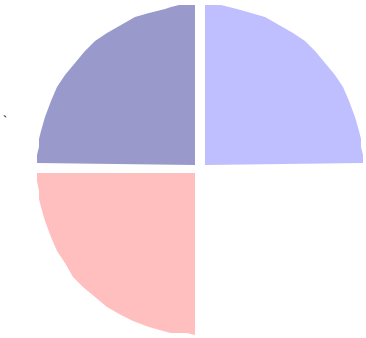

Indiana State
EPIDEMIOLOGICAL REPORT

Prepared for

INDIANA STATE DEPARTMENT OF HEALTH

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Abbreviations

API	Asian Pacific Islander
CDC	Centers for Disease Control and Prevention
EMA	Eligible Metropolitan Area
FY	Fiscal Year
IDU	Injection Drug User
MSM	Men-who-have-sex-with-men
MSM/IDU	Men-who-have-sex-with-men / Injecting Drug User
OI	Opportunistic infection
PCH	Partnership for Community Health
PLWA	Person(s) living with AIDS
PLWH	Person(s) living with HIV
STD	Sexually transmitted diseases

ACKNOWLEDGMENTS

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A special thank you also to Mr. Michael Butler and Ms. Mary Ellis for providing their guidance and support throughout the course of the project.

I. INTRODUCTION

Snapshot of the Epidemic

The epidemiology of HIV and AIDS in the State of Indiana is changing dramatically due to the success of prevention and medical treatment efforts. The basic statistics through 2000 for Indiana and the 12 regions are shown in Table I-1.[1]

Table I-1 Reported HIV/AIDS Statistics for Indiana *

Living with HIV/AIDS in Indiana in 2000	**5,917**
Living with HIV (not AIDS) in Indiana through 2000	3,229
Living with AIDS in Indiana in 2000	2,688
Cumulative AIDS cases in Indiana through 2000	6,091
**Cases only include those reported. According to the CDC, on a national level, about 30% of Americans who are HIV positive are unaware of their infection.*	

Since 1988, the reporting of HIV/AIDS cases has been required by Indiana law. Patients that are diagnosed in another state and are in Indiana must also be reported in Indiana. All infants born to an HIV positive mother are to be reported, even though their final HIV status is not known until later, and this may cause an over-estimate of infected with HIV. The HIV registry and the AIDS registry are different databases and when a case meets the surveillance case definition of AIDS, it is moved from the HIV registry to the AIDS registry.

When estimating the actual number of HIV cases, CDC estimates that, on a national basis, up to 30% of those infected have not been tested and do not know their status. This Epidemiological Review is limited to those who have tested and are aware of their status. Consequently figures reported in the review are underestimates of the total number of PLWH in Indiana. This report describes the trends in newly diagnosed HIV and AIDS cases and provides an in-depth profile of those living with HIV and AIDS at the end of 2000.

Format of the Epidemiological Review

This review starts with a detailed Table of Contents. It provides a road map for the document and points the reader to major findings from the Epidemiological Review. The graphics and text in the report present the epidemiological data in a visual format makes the data more accessible to those untrained in epidemiology, but interested in the trends of HIV and AIDS and its impact on different risk groups, racial and ethnic populations.

This report is divided into eight major sections. They are:

1. This introduction which lays out the report and provides a snapshot of the epidemic.
2. Section II provides a detailed profile of persons living with HIV/AIDS at the end of 2000 and is helpful in determining the subpopulations that are most affected by the epidemic. It is helpful in projecting the number of individuals who will be accessing early and on-going treatment.

[1] Data was provided by the Indiana State Department of Health, HIV/AIDS Division. The 12 counties presented in the tables reflect the HIV/AIDS Care Coordination Regions.

3. Section III displays trends of declining HIV cases that were diagnosed each year from 1994 through 2000.[2] It demonstrates the success of the HIV prevention and the HIV/AIDS continuum of care in the Indiana.
4. Section IV indicates that as outreach efforts are successful in identifying new HIV cases and treatments are successful in preventing the progression to AIDS, the number of PLWH is increasing. This trend suggests the increasing number of persons who will be accessing the care system in the near future.
5. Section V shows that the declining mortality rate among PLWA is a major reason for the increasing number of people living with
6. Section VI compared the profiles of those diagnosed with HIV and those diagnosed with AIDS. It demonstrates that there are significant numbers of PLWH who are progressing to AIDS and that there is a continued need for end-stage services.
7. Section VII shows the co-morbidity of HIV with STDs.
8. Section VIII summarizes the epidemiological information.

The focus of the report is on people living with HIV/AIDS as these are the individuals who need or will need HIV/AIDS services. The number of cumulative AIDS cases shows the devastation this epidemic has brought, and continues to bring, on different communities. Cumulative AIDS trends are shown in the Attachments at the end of this report.

For those who wish to have further detail on the trends of the epidemic and profiles of PLWH/A, the Attachments at the end of the report provide the data that support the graphs and tables in the text and provide a wealth of additional data. There are a series of tables in each attachment. The first is the raw number of cases. The following attachments show row and column percentages for different views of the data.

The attachments include:

Trends in New HIV and PLWH Cases

Attachment 1 shows trends for newly diagnosed HIV and PLWH for the State of Indiana from 1994 and 2000 and the trend for the total number of PLWH a the end of each year from 1994 to 20000. For the cumulative number of HIV cases each year, and the PLWH each year, data is presented by geographic area, regions, sex, race/ethnicity, mode of exposure, and age.

People living with HIV in 2000

Attachment 2 shows a detailed profile of the people living with HIV (PLWH) in Indiana in 2000. It is a "cross-tab" of each demographic category by all other demographic categories. The first part of the attachment shows the raw number of cases, followed by row and column percentages. Numbers that are missing in the table reflect gaps in the data reported by ISDH.

[2] Because there is often a year or more lag in reporting all HIV cases, trends are reported through 2000.

Cumulative HIV in 2000

Attachment 2a shows the cumulative number of people living with HIV, in the same format as the people living with HIV.

Trends in New AIDS Cases and PLWA

Attachment 3 displays the trends for newly diagnosed AIDS cases and PLWA from 1994 to 2000 for the State. It is divided by geographic area, sex, ethnicity, mode of exposure, stage of disease, and age. The first set of tables shows the number of cases and the second set of table in Attachment 3 show the percentage of each demographic population by year.

Death Rates

Attachment 4 presents the trend of deaths and death rates due to AIDS. It shows the total number and also shows the trends by geographic area, region, race/ethnicity, mode of exposure, and age. Death rates per 100,000 population are calculated and presented.

Detailed profile of PLWA and Cumulative AIDS in the year 2000

Attachment 5 shows a detailed profile of the people living with AIDS (PLWA) in Indiana in 2000. It is a "cross-tab" of each demographic category by all other demographic categories. The first part of the attachment shows the raw number of cases, followed by row and column percentages. Numbers that are missing in the table reflect gaps in the data reported by ISDH.

Attachment 5a presents a detailed profile of cumulative AIDS cases through December 2000, including the percentage in each subpopulation.

Trends in New HIV/AIDS Cases and PLWH/A

Attachment 6 presents trends in HIV/AIDS cases from 1994 to 2000 for the State and State and the percentage of cases in each year.

Detailed profile of PLWH/A and Cumulative HIV/AIDS in the year 2000

Attachment 7 displays a detailed profile of the number of PLWH/A and the percentage of PLWH/A in each demographic subpopulation.

Attachment 7a displays a detailed profile of the cumulative HIV/AIDS cases reported through December 2000.

STDs

Attachment 8 presents the number of cases of chlamydia, gonorrhea and primary and secondary syphilis, by region.

This Indiana Epidemiological Review is a tool that can be used to provide an overview of HIV and AIDS in the State of Indiana as well as an in-depth reference for those who need information about those living with HIV and/or AIDS. Any information not found in this report can be requested from the Indiana State Health Department.

II. PEOPLE LIVING WITH HIV/AIDS IN 2000[3]

One of the primary objectives of this epidemiological profile is to provide data on the incidence and prevalence of HIV/AIDS. The number of PLWH/A is one factor in estimating the need and unmet need for HIV/AIDS care services that are funded by the Ryan White CARE Act and other sources of State and Federal funding. In presenting the data the focus is on the number of persons, as numbers of persons are related to preparing adequate capacity for services. Percentages are used to describe how HIV/AIDS cases are distributed among different risk groups, racial/ethnic populations, geographic areas, and gender, but the reader should be cautious as large percentage increases or decreases can be based on small number of cases.

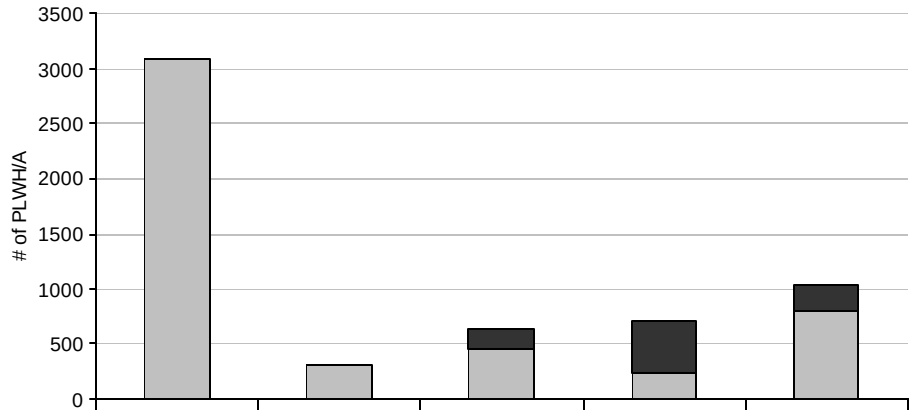
The profile of PLWH/A is detailed below for the year 2000. The total number of people living with HIV/AIDS at the end of the 2000 was 5,917. Figure II-1 – Figure II-4 displays the distribution of PLWH/A by gender, risk group, race/ethnicity, and age.

PLWH/A are mostly male and more than half are MSM

Figure II-1 shows the PLWH/A at the end of year 2000 by risk group and gender. In 2000, about 84% of the cases are male, representing 4,967 cases, and more than half (52%) of the PLWH/A are MSM. The 314 MSM/IDU and 630 IDU account for 16% of all the PLWH/A in 2000. The 707 heterosexuals represent 12% of the PLWH/A.

Women represent about 950 PLWH/A or about 16% of all PLWH/A. Of the 950 females, the largest percent (51%) report heterosexuals exposure, 19% report IDU transmission, and an additional 30% report other exposures. For instance, the "not classified" risk group represents a significant number of the PLWH/A and accounts for over 25% of the females living with HIV/AIDS and about 16% of the males living with HIV/AIDS in 2000.

Figure II-1 PLWH/A through 2000 by Risk Group and Sex



	MSM	MSM/IDU	IDU	Het	Not Classified
Female	0	0	179	483	241
Male	3090	314	451	224	794

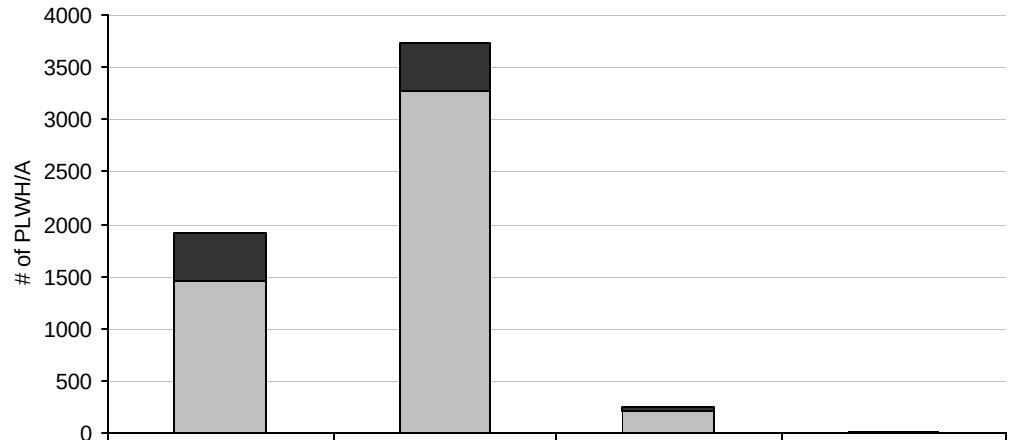
[3] For more detail of PLWH/A at the end of the year 2000, see Attachment 7.

Most PLWH/A are Anglo but African Americans are disproportionately affected

Anglos represent 86% of the general population in Indiana and 63% of all PLWH/A in Indiana. Figure II-2 shows that the 3,727 Anglos living with HIV/AIDS are the largest racial group of PLWH/A. African Americans represent 8% of general population, but 32% of PLWH/A, indicating disproportionate impact of the epidemic on the African American community. There are 1,919 African Americans living with HIV/AIDS which is about half the number of Anglo cases. The 247 Latinos living with HIV/AIDS represent 4% of all PLWH/A in Indiana and that closely reflect the percent of Latinos (3.5%) living in Indiana..

Males represented 84% of PLWH/A compared to 49% in the State. Females living with HIV/AIDS are about evenly divided between African American (48%) and Anglo (49%). Latinas and females of other ethnicities constitute less than four percent of the PLWH/A in Indiana. Figure II-2 shows that females are a larger proportion of African Americans (24%) than Anglos (12%). Latinos living with HIV/AIDS are predominately males.

Figure II-2 PLWH/A through 2000 by Ethnicity and Sex



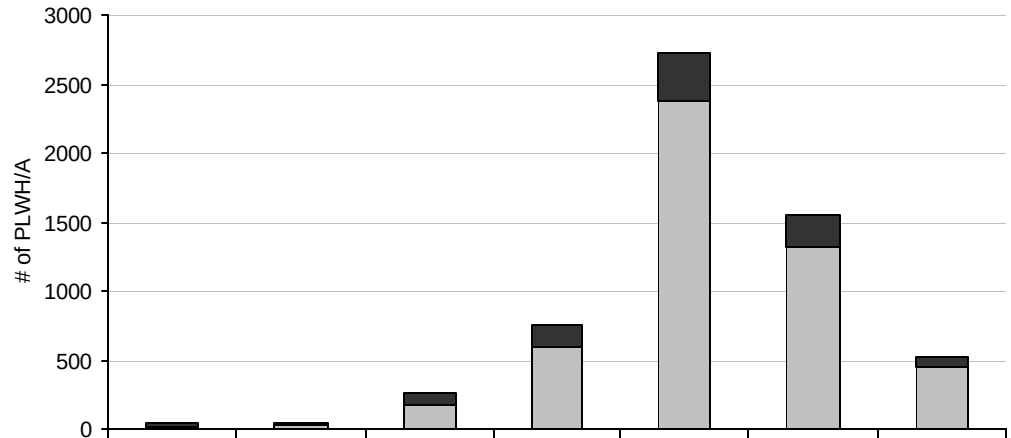
	Af Am	Anglo	Hispanic	Other
Female	456	461	28	5
Male	1463	3266	219	19

A growing number of persons over 50 will be living with HIV/AIDS

Figure II-3 shows that the vast majority (72%) of those living with HIV/AIDS are between 30 and 49 years of age. Nineteen percent (19%) of PLWH/A are under 30 years of age. There are twelve infants reported living with HIV/AIDS, twenty-five children between the ages of 2 and 12, and forty-two adolescents (13-19 years old). The over three hundred cases of PLWH/A between the ages of 13 to 24 highlight the continuing risk of HIV infection for young adults, many infected while teens. Young African American and Latino women account for more than half of the living HIV/AIDS cases among women ages 13 to 24 indicating that young women of color are at heightened risk.

As the mortality rate declines, there will be a growing number of persons over 50 living with HIV/AIDS, and as they near retirement they will have particular needs. At the end of the year 2000, about 9% of the PLWH/A are over 50, and this percentage is expected to increase.

Figure II-3 PLWH/A through 2000 by Age Group and Sex



	<13	13-19	20-24	25-29	30-39	40-49	50+
Female	24	17	86	165	359	228	71
Male	20	25	177	594	2372	1325	454

The ethnic profile among the risk groups differ

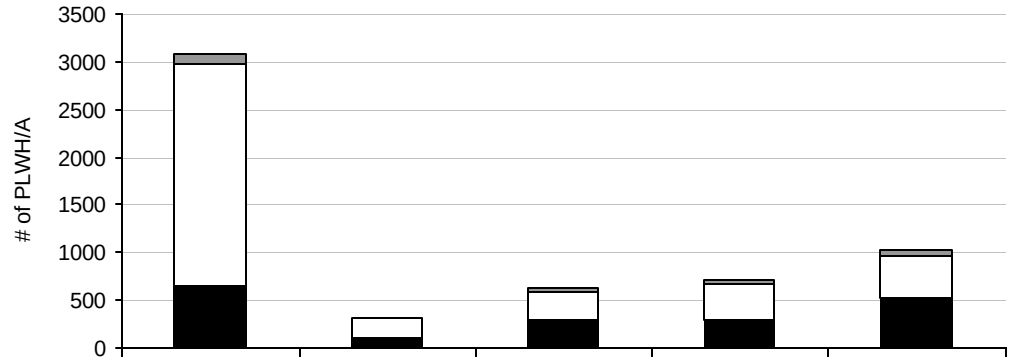
The profiles of the risk groups are different. Figure II-4 indicates that:

- MSM living with HIV/AIDS are more likely to be Anglo (2,324) than non-Anglo (African American (656), Latino (100), Asian Pacific Islander (5), and Native American (5).
- IDU are almost slightly more likely to be African American (303) than Anglo (283). Latinos account for less than seven percent of the IDU PLWH/A.
- MSM/IDU are more than twice as likely to be Anglo (208) than African American (96).
- Over 50% of heterosexual cases are Anglo (387) followed by African American (287) and Latinos (29). As noted above, the over two-thirds (68%)of heterosexuals are female.

More than Half of the PLWH/A are MSM

As shown in Figure II-4, Anglos account for the large proportion of MSM and MSM/IDU. However, African Americans account for nearly half of the IDU and over 40% of the heterosexuals. Eighteen percent (18%) of the PLWH/A had an unknown or "not classified" mode of exposure and more than half of these are African American. The majority of Hispanic PLWH/A report MSM or unknown risk exposure.

Figure II-4 PLWH/A in 2000 by Risk Group and Race



	MSM	MSM/IDU	IDU	Heterosexual	Not Classified
Other	10	0	2	4	5
Hispanic	100	10	42	29	65
Anglo	2324	208	283	387	432
AfAm	656	96	303	287	533

Not shown in the graphs is that over 65% of the PLWH/A come from urban areas. With 2,819 PLWH/A, Indianapolis accounts for nearly half (48%) of all the PLWH/A in Indiana at the end of the year 2000.

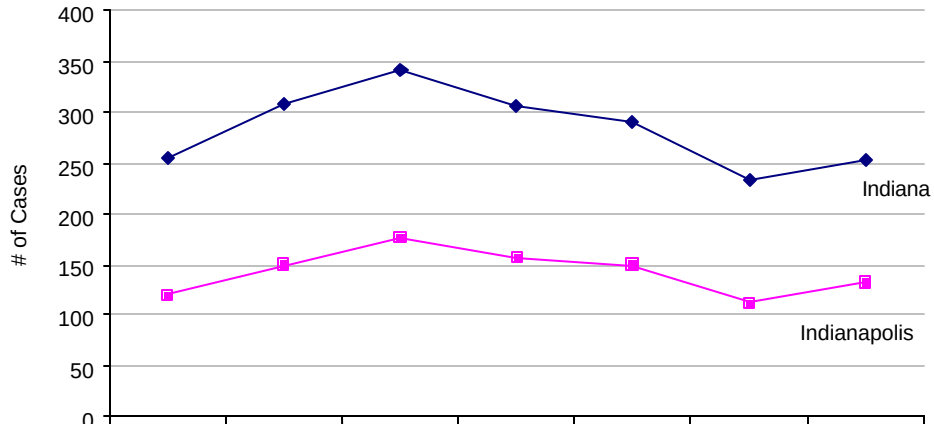
III. TRENDS IN NEWLY DIAGNOSED HIV[4]

Overall Decline in New HIV infections from 1994 to 2000

Figure III-1 presents evidence of the success of HIV prevention effort but raises a caution flag over the most current trends. Over the past seven years, the number of newly diagnosed HIV cases in Indiana has declined. In 1994, 254 persons were diagnosed with HIV in Indiana, reaching a high of 342 in 1996. Between 1994 and 1996, there was a 35% increase in newly diagnosed HIV cases. From 1996 to 1999, a steady decline in newly diagnosed cases was observed.

By the end of year 2000, the number of newly diagnosed cases dropped to 252, representing a decline of about 26% since 1996. However, in 2000, the number of newly diagnosed cases again began to rise, largely driven by the trend in Indianapolis where 112 HIV cases were diagnosed in 1999 and 132 in 2000 -- nearly a 20% increase. While these changes in trends may simply reflect an anomaly in data reporting, the increase in newly diagnosed cases during the past year, would be consistent with other national evidence showing some increase among at risk populations and is likely to suggest a real change in the epidemic.

Figure III-1 HIV Cases by Year of Diagnosis: Indiana and Indianapolis



	1994	1995	1996	1997	1998	1999	2000
Indiana	254	307	342	305	290	234	252
Indianapolis	119	149	177	156	150	112	132

Table III-1 shows the trend in newly diagnosed cases in the 12 regions in Indiana. Since HIV reporting standards were established in the state of Indiana, Indianapolis has accounted for about half of HIV cases in the State, and Indianapolis, Gary, and South Bend account for between 70% and 75% of the cases, depending on the year.

Besides Indianapolis, the next three largest areas are in the North region. Gary shows a pattern of declining HIV infections through 1997, but has leveled off after that. In 1997 Fort Wayne surpassed South Bend in the number of newly diagnosed HIV cases, and both showed an increase in newly diagnosed HIV cases between 1997 and 1998, and then a slow decline in new

[4] The trend data are presented in graphic form in the text. The source data for the graphs are shown in Attachments 1–3, and they include cumulative HIV cases.

cases through 2000. Fort Wayne is the only region with more than twice the number of HIV cases in 2000 compared to the number of HIV cases diagnosed in 1994.

In other areas with fewer cases, in the South, Bloomington and Jeffersonville show an increase in newly diagnosed HIV cases and Evansville shows a decrease. In the Central areas, Lafayette, Peru, and Terre Haute show small increases and Muncie and Richmond show small decreases in newly diagnosed HIV cases.

Table III-1 State Newly Diagnosed HIV Cases

Year	Gary	South Bend	Ft. Wayne	Lafayette	Muncie	Peru	Indpls	Terre Haute	Rich-mond	Bloom-ington	Jeffer-sonville	Evans-ville
1994	54	21	9	4	6	3	119	8	4	10	6	10
1995	58	26	17	6	6	3	149	8	6	9	6	13
1996	49	22	21	5	10	6	177	12	6	9	11	14
1997	39	16	18	10	7	3	156	10	10	9	10	17
1998	37	21	24	8	10	4	150	9	6	6	5	10
1999	35	19	22	1	11	2	112	2	4	6	5	15
2000	35	18	19	5	3	3	132	4	2	10	9	11

New Cases Increase Among Latinos; African Americans Disproportionately Affected

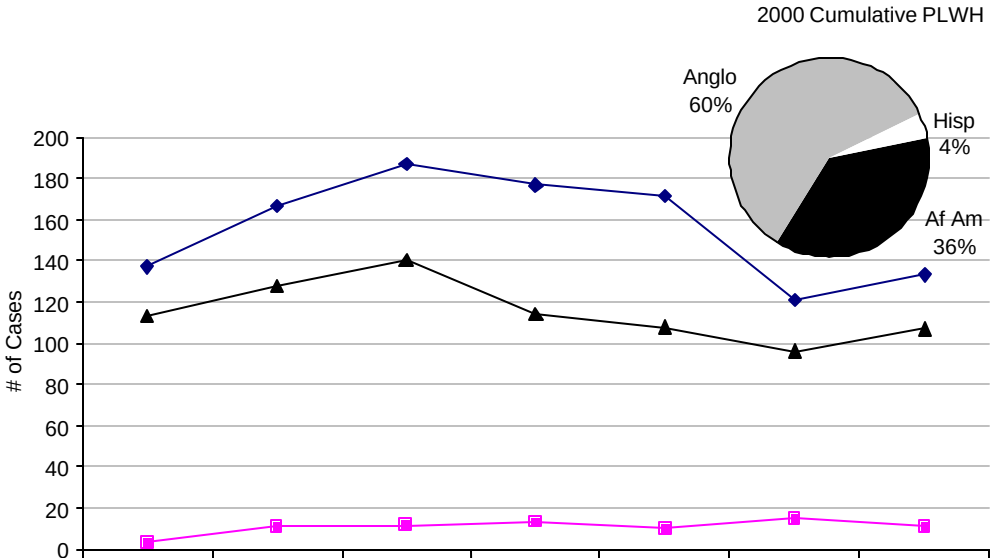
Figure III-2 shows that while overall the rate of newly diagnosed HIV cases has declined among Anglos and African Americans from 1994 to 2000, the rate of decline has increased among Latinos/Hispanics during that same period of time. Figure III-2 also shows that in 2000, while the number of new HIV cases among African Americans and Anglos remains below their respective rates in 1994, from 1999 to 2000 the number of HIV cases increased. On the other hand, the number of new HIV cases among Latinos decreased from 1999 to 2000.

In 1994, Anglos accounted for 54% of the new HIV cases, African Americans were 45%, and Latinos and other ethnicities combined accounted for less than two percent of the newly diagnosed cases. By 2000, the increasing impact of HIV in the Latino community is evident as the proportion of Latinos among the new HIV cases nearly quadrupled from the number of cases in 1994, and the overall distribution was 43% African American, 53% Anglo, and 4% Latino.

HIV has had a disproportionate impact on the African American community. In 2000, while Anglos account for 86% of the total population in Indiana they represent less than 53% of the newly diagnosed HIV cases. On the other hand, African Americans represent less than nine percent of Indiana's population and more than 42% of the new HIV cases.

In terms of cumulative HIV cases, the pie chart in Figure III-2, indicates that Anglos make up the majority of PLWH cases in 2000 (60%, 1916 cases), followed by African Americans (36%, 1167 cases), and Latinos (4%, 131 cases). In 2000, there were no new cases of Asian Pacific Islanders (API) nor Native Americans diagnosed with HIV, and the number of cumulative cases was less than 1% of all PLWH.

Figure III-2 New HIV Cases by Year of Diagnosis and Cumulative PLWH by Race



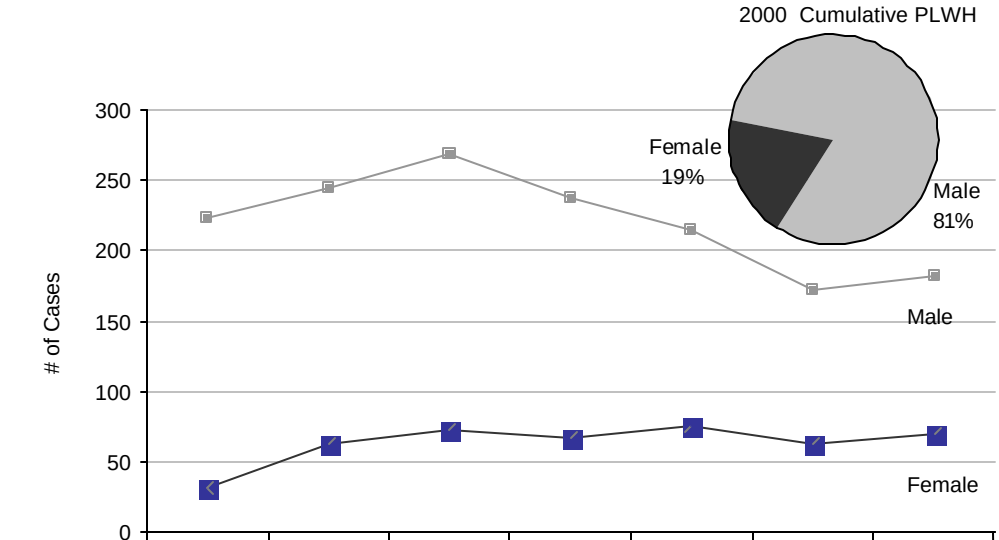
	1994	1995	1996	1997	1998	1999	2000
Af Am	113	128	140	114	108	96	107
Anglo	137	167	187	177	171	121	133
Hispanic	3	11	12	13	10	15	11

The number of women has doubled but men still represent the vast majority of PLWH

Figure III-3 further indicates that the number of newly diagnosed HIV cases among males has declined from 223 newly diagnosed cases in 1994 to 182 reported in 2000, indicating a decline of 18%. Females, on the other hand, have more than doubled, going from 31 cases in 1994 to 70 cases in 2000. While the absolute number of new cases among women remains relatively small in comparison to the cases among men, the increasing proportion of new cases among women over the past seven years highlights the continued and growing risk of HIV infection for women.

As shown in the pie chart in Figure III-3, in the year 2000, males continue to account for the vast majority (81%) of all PLWH.

Figure III-3 HIV Cases by Year of Diagnosis by Gender in Indiana



	1994	1995	1996	1997	1998	1999	2000
Male	223	244	269	238	214	172	182
Female	31	63	73	67	76	62	70

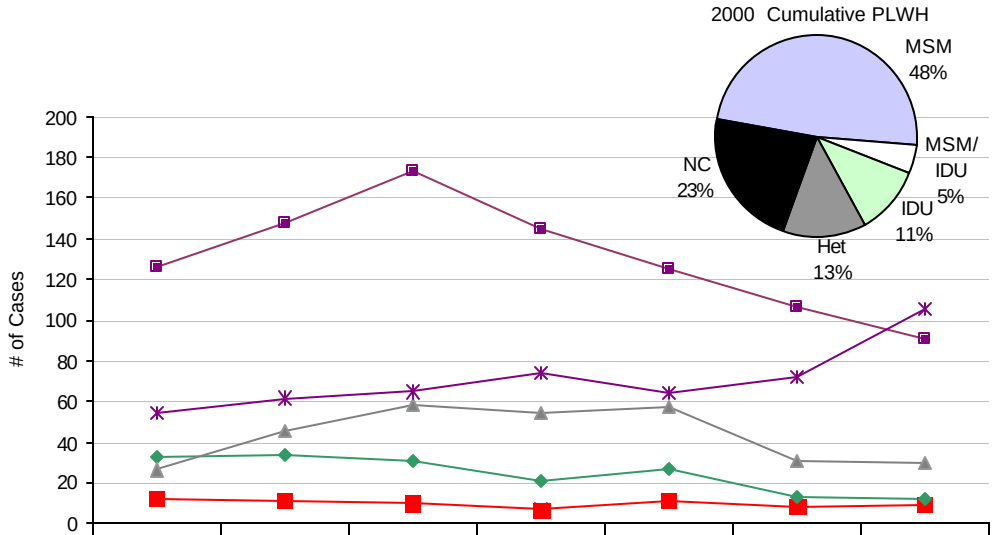
Newly diagnosed HIV cases decline; Heterosexuals represent larger proportion of new cases

Figure III-4 shows an unequal decline in diagnosed HIV cases for exposure groups. Injection drug users (IDU) show the largest percent decline in number of HIV cases diagnosed yearly since 1994, dropping from 33 to 12 cases in 2000. From 1995 to 1996, MSM showed an increase in new HIV cases, however, since 1996, MSM have shown an overall decline, going from 173 cases in 1996 to 91 cases in 2000. Heterosexuals have shown an inconsistent upward and downward trend, and in fact have shown a slight increase since 1994.

While the number of cases without a risk group classification showed a slight decrease from 1997 to 1998, overall the number of new HIV cases has increased. In 2000, the "not classified" risk category accounts for the largest proportion of newly diagnosed HIV cases, with more than 41% of the cases.

With the changing profile of the new HIV infections, by 2000, MSM represent less than 40% of the new HIV cases. The proportion of heterosexuals and "not classified" risk categories have increased from 10% and 21% in 1994, respectively, to 12% and 42% in 2000. Nonetheless, as shown in Figure III-4, MSM and MSM/IDU account for more than half of the cumulative PLWH in 2000.

Figure III-4 HIV Cases by Year of Diagnosis by Risk Group



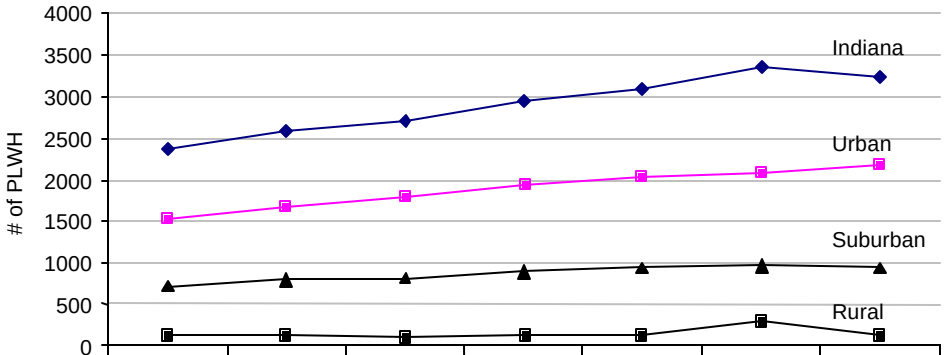
	1994	1995	1996	1997	1998	1999	2000
MSM	126	148	173	144	125	107	91
MSM/IDU	12	11	10	7	11	8	9
IDU	33	34	31	21	27	13	12
Het	26	45	59	54	57	31	30
Not Classified	54	62	65	74	64	72	105

IV. TRENDS AND PROFILE OF PEOPLE LIVING WITH HIV

There has been a 36% increase in the number of PLWH since 1994 in Indiana

As shown in Figure IV-1, since 1994, the number of PLWH has increased 36% in the State and more dramatically (42%) within the urban settings. While the number of PLWH in the State and particularly in the suburban and rural areas has decreased from 1999 to 2000, the number of PLWH in the urban settings increased by 100 cases between 1999 and 2000. This may be due to reporting lag, but the overall trend is a reduction in PLWH.

Figure IV-1 Living with HIV for Indiana, Urban, Suburban and Rural



	1994	1995	1996	1997	1998	1999	2000
Indiana	2376	2577	2712	2947	3092	3347	3229
Urban	1533	1676	1789	1949	2040	2073	2174
Suburban	729	780	815	883	929	950	933
Rural	110	118	106	112	121	283	122

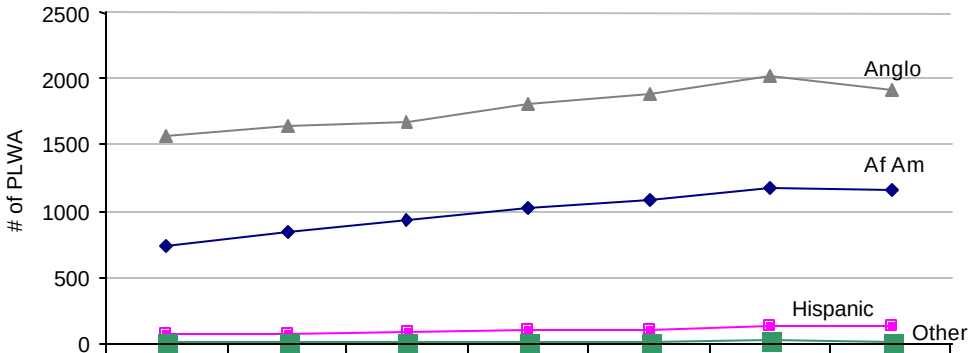
Urban areas account for nearly two-thirds of the PLWH; Number of cases in the rural areas remain stable

Figure IV-1 further indicates that over the past seven years, the urban areas, which include sections of Evansville, Gary, Indianapolis, Fort Wayne, and South Bend, have consistently accounted for more than 60% of the PLWH. Rural areas, which include 45 counties throughout the state with some counties within the regions of Evansville, Fort Wayne and South Bend, account for a total of 122 PLWH, which is less than four percent of the total PLWH in 2000. Notably, in 1999, the number of PLWH increased dramatically to 283 cases in the rural areas. Again, while this may reflect a change in reporting procedures, the dramatic increase may reflect a true change in migration patterns or change in disease.

Latinos are the fastest growing population of PLWH

Figure IV-2 shows that as the number of PLWH is increasing among all ethnic groups, and the rate of increase has been greatest among Latinos, with an increase of 85% since 1994. Their steep increase in cumulative HIV cases -- almost doubling from 71 PLWH in 1994 to 131 in 2000 -- could be caused by one of more of the following: 1) Outreach is discovering more cases among PLWH or that Latinos, 2) The population of Latinos are increasing, and/or 3) Latinos are engaging in higher risk activity. Still, in 2000, Latinos represent less than five percent of PLWH.

Figure IV-2 Living with HIV by Ethnicity in Indiana

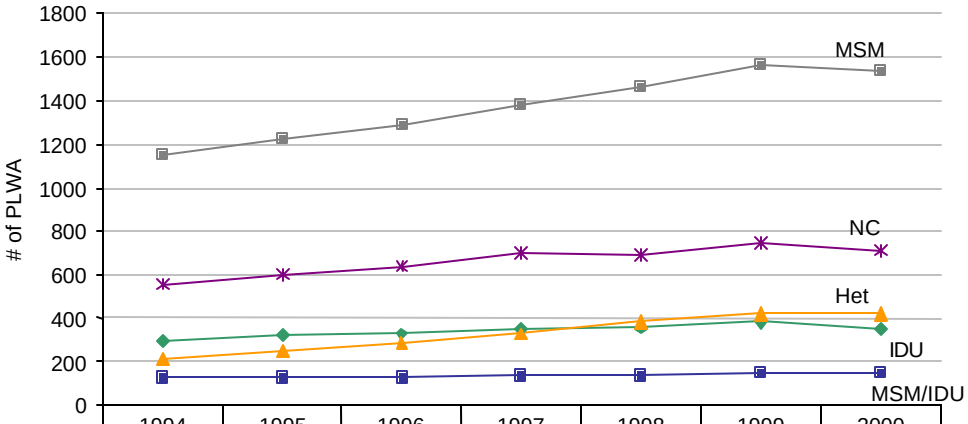


	1994	1995	1996	1997	1998	1999	2000
Af Am	732	840	935	1024	1084	1177	1167
Anglo	1564	1640	1675	1801	1883	2017	1916
Hispanic	71	81	88	110	110	130	131
Other	9	16	14	12	15	23	15

Heterosexuals and pediatric exposure cases increased fastest; MSM remain the vast majority

Figure IV-3 indicates that throughout the epidemic, MSM have accounted for the vast majority of those living with HIV, and given the large number and decreasing mortality rate, MSM will continue to be the vast majority of PLWH for many years to come. However, heterosexuals and children who have acquired HIV through parental exposure have shown the greatest percent increase. Heterosexuals have more than doubled from 208 in 1994 to 420 in 2000, and pediatric exposures (not shown on the graph) have also doubled from 18 cases in 1994 to 37 in 2000.

Figure IV-3 Living with HIV by Risk Group



	1994	1995	1996	1997	1998	1999	2000
MSM	1155	1225	1288	1382	1461	1566	1538
MSM/IDU	125	129	126	138	137	150	145
IDU	289	323	331	346	360	383	343
Het	208	249	287	327	385	423	420
NC	557	604	636	700	691	748	714

Detailed Profile of People Living With HIV in 2000[5]

The continuum of care serves PLWH/A and therefore requires that both PLWH and PLWA be accurately represented. With an emphasis on early treatment, the Ryan White Care Act reauthorization and HRSA have stated that in the future, need will be based more on the incidence and prevalence of HIV than AIDS. While some end-stage services and upper level case management have a requirement of late-state HIV infection, basic eligibility requirements for most Ryan White supported services are HIV infection and low income.

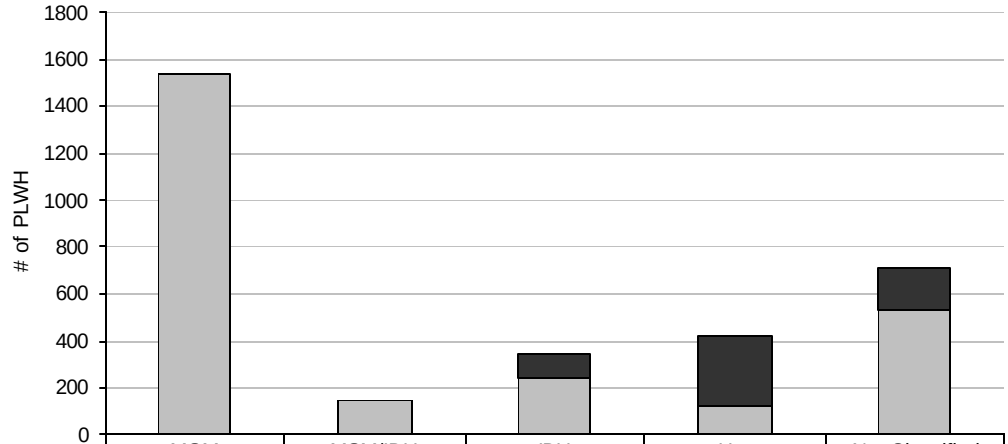
Below is the profile of PLWH in 2000. It is not comprehensive, as many PLWH do not get tested or remain unidentified. Yet at the end of 2000, the total number of PLWH was 3,229.

As new drug treatments delay the decline of T-cell counts and delay the progression to AIDS of those infected with HIV, understanding the profile of PLWH becomes increasingly useful.

Males represent vast majority of PLWH; females represent the vast majority of heterosexuals

The profile of PLWH is shown from Figure IV-4 – Figure IV-8. About 81% of the cases are male, representing 2,617 cases, and 19% are female, representing 612 cases. Reflecting the changing profile of the epidemic, as shown in Figure IV-4, in 2000, MSM represent less than half of the PLWH while the proportion of heterosexuals (13%) is comparable to that of IDU and MSM/IDU combined (15%). The proportion of women among the newly diagnosed HIV cases continues to increase, and in 2000, women account for 30%of the IDU and 72% of the heterosexuals.

Figure IV-4 PLWH through 2000 by Risk Group and Sex



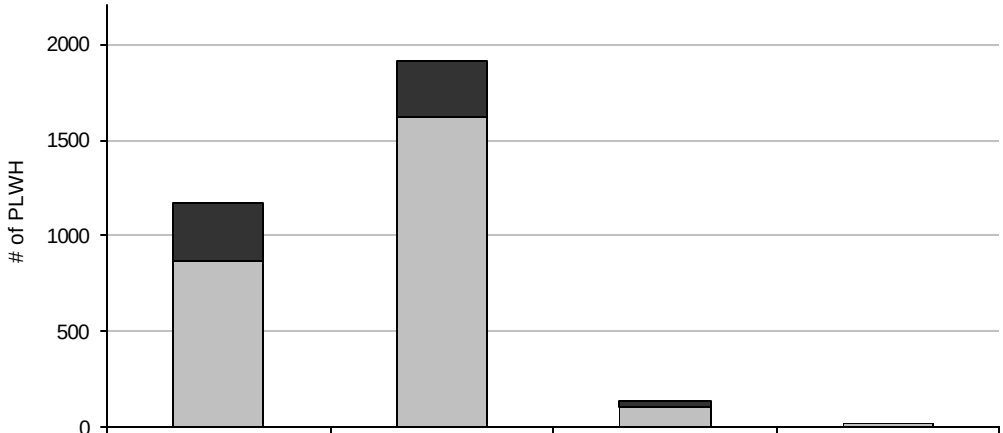
	MSM	MSM/IDU	IDU	Het	Not Classified
Female	0	0	104	302	180
Male	1538	145	239	118	534

[5] A collection of data for all populations collected through December 2000 can be seen in Attachment 2. This attachment also includes a look at the cumulative cases of HIV in the Indiana.

HIV disproportionately affects African Americans

Like all PLWH/A, PLWH are disproportionately African American. African Americans represent about 8% of the general Indiana population and, as shown in Figure IV-5, they represent 36% of PLWH in 2000. Like all PLWH/A, the proportion of Latinos living with HIV (4%) is comparable to their representation of four percent in the general populations. On the other hand, the 1,916 Anglos living with HIV represent about 60% of all PLWH which is considerably lower than their proportion in the general population (86%). The women living with HIV are equally likely to be African American (48%) as they are to be Anglo (48%). Latinas and women of other ethnicities account for less than four percent of the women living with HIV.

Figure IV-5 PLWH through 2000 by Ethnicity and Sex

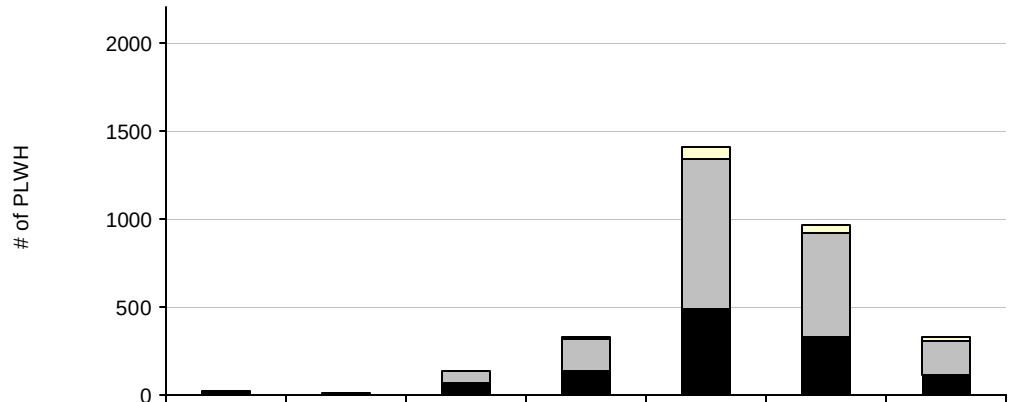


	Af Am	Anglo	Hispanic	Other
Female	295	296	19	2
Male	872	1620	112	13

The Vast Majority of PLWH Are Between 30 and 40 Years Old

Paralleling the profile of PLWH/A, Figure IV-6 shows that the vast majority (74%) of those living with HIV among all ethnic groups are between 30 and 49 years of age. There are two infants living with HIV and 24 children between the ages of 2 and 12 of which 14 are African American. There are 19 adolescents (13-19 years old) known to be living with HIV, with the majority being Anglo. While adolescents are known to engage in risky behavior, as yet, they have not become infected at a high rate. Of greater concern are the increasing number of PLWH who are over 50. In 2000, they represent 10% of those living with HIV among each of the ethnic groups.

Figure IV-6 PLWH through 2000 by Age Group and Ethnicity



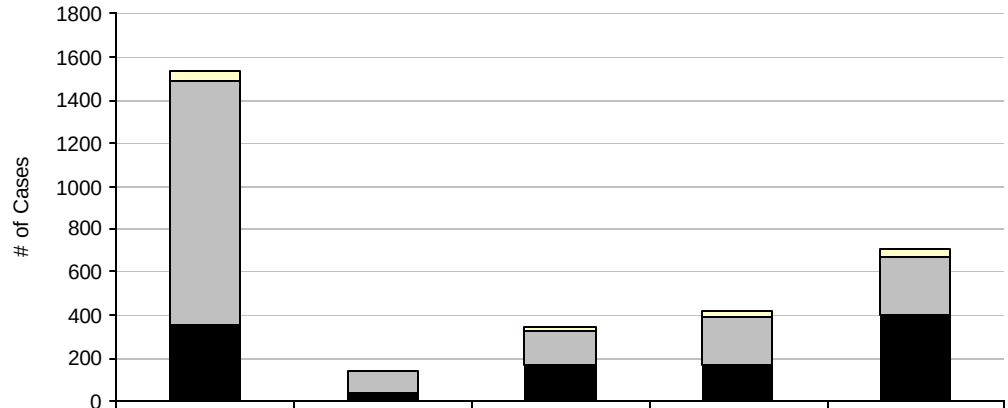
	<13 yrs	13-19	20-24	25-29	30-39	40-49	50+
Hispanic	0	0	5	17	57	39	13
Anglo	11	12	59	188	859	589	198
Af. American	14	6	76	132	490	335	114

MSM are majority Anglo; disproportionately Latinos

The ethnic profiles of the risk groups are different. Figure IV-7 indicates that:

- MSM living with HIV are more likely to be Anglo (1,130) than non-Anglo (African American (358), Latino (43), Other (7)).
- IDU are almost equally likely to be Anglo (157) as African American (170).
- Heterosexuals are more likely to be Anglo (53%) than African American (41%). Latinos represent about 5% of the heterosexuals living with HIV.
- The largest number of Latinos (100) identify as MSM. The second largest number of Latinos (65) will not classify their risk factor.

Figure IV-7 PLWH in 2000 by Risk and Race Groups

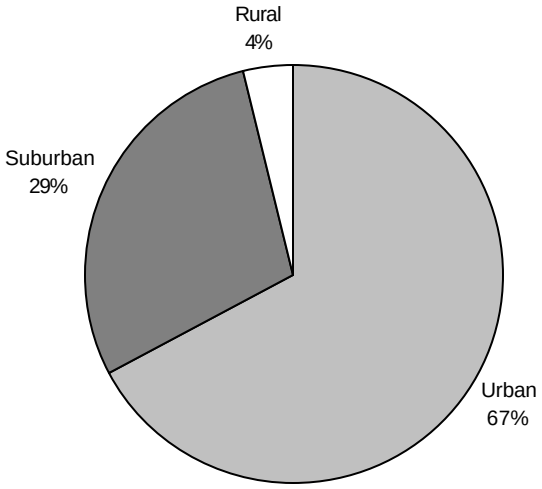


	MSM	MSM/IDU	IDU	Het	Not Classified
Hispanic	43	7	16	23	42
Anglo	1130	94	157	223	270
Af Am	358	44	170	172	398

Indianapolis accounts for 48% of PLWH

As shown in Figure IV-8, two-thirds of the PLWH live in urban settings, with Indianapolis accounting for 70% of the PLWH in the urban settings and 48% of all the PLWH in 2000. There are 122 rural cases which represent four percent of the PLWH in the state and 933 PLWH in the suburban areas.

Figure IV-8 PLWH by Region in 2000

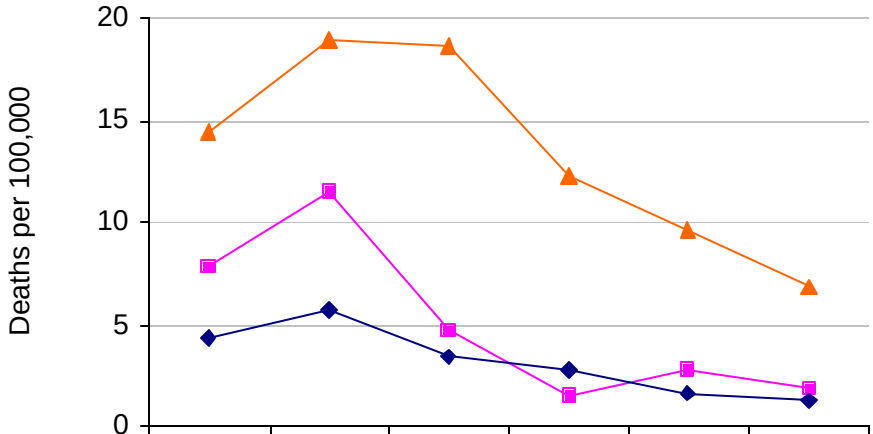


V. DEATH RATES

Death rates for African Americans up to five times higher than other ethnicities

As a decline in diagnosed AIDS cases and increase in those living with AIDS is observed, it is not surprising to see that the overall death rate (defined by the crude death rate per 100,000) has declined.[6] As shown in Figure V-1, the death rate is substantially higher among the African American population, and while it has significantly declined from a rate of 19 per 100,000 in 1995 to seven per 100,000 in 1999, it continues to be between three to five times the rate of the Anglo and Latino death rate, respectively.

Figure V-1 HIV/AIDS Deaths by Ethnicity per 100,000 of Indiana Population



	1994	1995	1996	1997	1998	1999
African American	14.48	18.83	18.65	12.24	9.59	6.81
Latino/Hispanic	7.82	11.46	4.65	1.46	2.75	1.95
Caucasian/White	4.24	5.71	3.42	2.75	1.67	1.20

Sixty-three AIDS deaths among Anglos account for more than 60% of all AIDS Deaths in 1999

In terms of number of deaths reported each year, Anglos represent 64% of the deaths reported from AIDS in 1999 and African Americans accounted for 33%. Latinos and other ethnicities combined accounted for less than one percent of the deaths reported that year.

[6] Fatality and death rates of AIDS cases through December 2000 for the state of Indiana can be seen in Attachment 4.

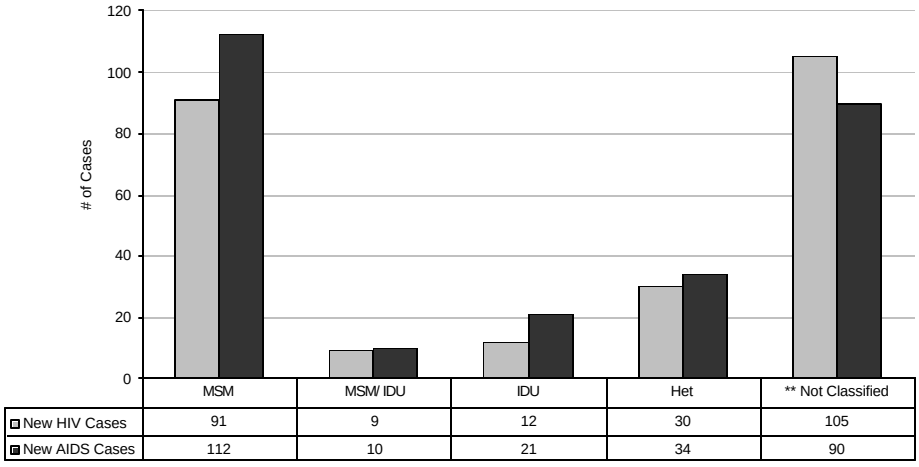
VI. HIV DIAGNOSIS COMPARED TO AIDS DIAGNOSIS

More AIDS Cases diagnosed than HIV cases; IDUs and MSM are more likely to be diagnosed with AIDS than HIV

The comparison of new HIV and AIDS cases in 2000 reveals the current trend in the epidemic. The general finding from Figure VI-1 is that there are more new AIDS cases being diagnosed than new HIV cases. This trend is particularly evident among MSM and IDUs, and the split is relatively even among MSM/IDU and heterosexuals. The exception is the "not classified" where there are more newly diagnosed HIV cases than AIDS cases.

There could be several explanations: 1) MSM and IDUs were the first risk groups to be infected and it is expected that they would progress to AIDS before other populations; 2) medications are not controlling the progression of the HIV infection as much as expected; 3) prevention efforts are effective in reducing new infections; and/or 4) outreach has been unsuccessful in reaching those infected but not in the system of care. To determine which of these explanations have the greatest weight more research would have to be conducted.

Figure VI-1 HIV Diagnosis and AIDS Diagnosis by Risk Group – 2000



	MSM	MSM/ IDU	IDU	Het	** Not Classified
New HIV Cases	91	9	12	30	105
New AIDS Cases	112	10	21	34	90

African Americans and men are more likely to be diagnosed with HIV than AIDS

Supporting the theory that those infected longer are progressing to AIDS, Figure VI-2 shows that Anglos and Hispanics are more likely to be diagnosed with AIDS than HIV and Figure VI-3 shows that men are more likely to be diagnosed with AIDS than HIV.

Figure VI-2 HIV Diagnosis and AIDS Diagnosis by Ethnicity – 2000

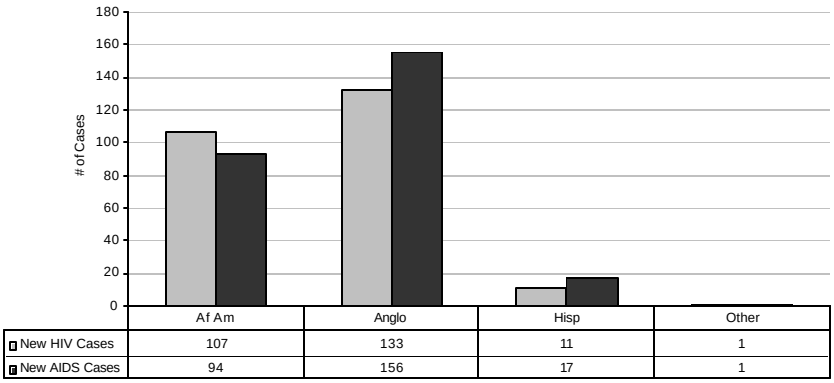
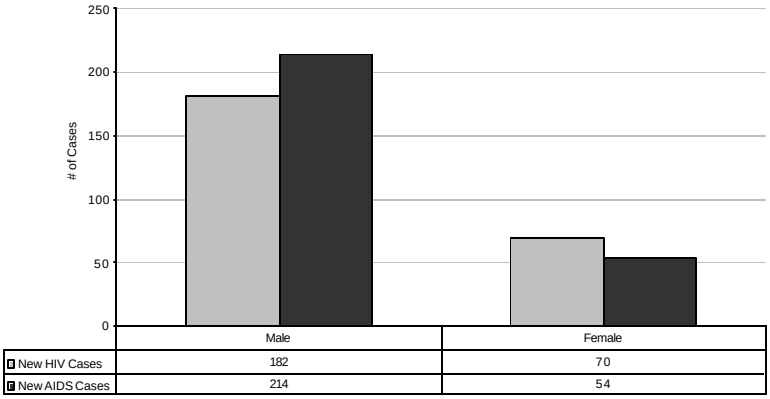


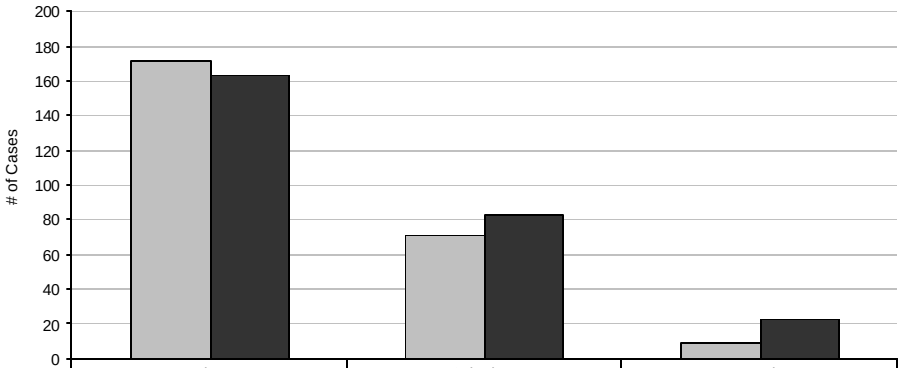
Figure VI-3 HIV Diagnosis and AIDS Diagnosis by Sex – 2000



There are more HIV Cases than AIDS Cases in the Urban Setting

Figure VI-4 shows that the incidence of AIDS is higher than the incidence of HIV in both the suburban and rural settings. However, within the urban settings, the incidence of HIV is greater than that of AIDS. This may reflect the greater ethnic diversity in urban settings.

Figure VI-4 HIV Diagnosis and AIDS Diagnosis by Region – 2000



	Urban	Suburban	Rural
New HIV Cases	172	71	9
New AIDS Cases	163	83	22

VII. COMORBIDITY

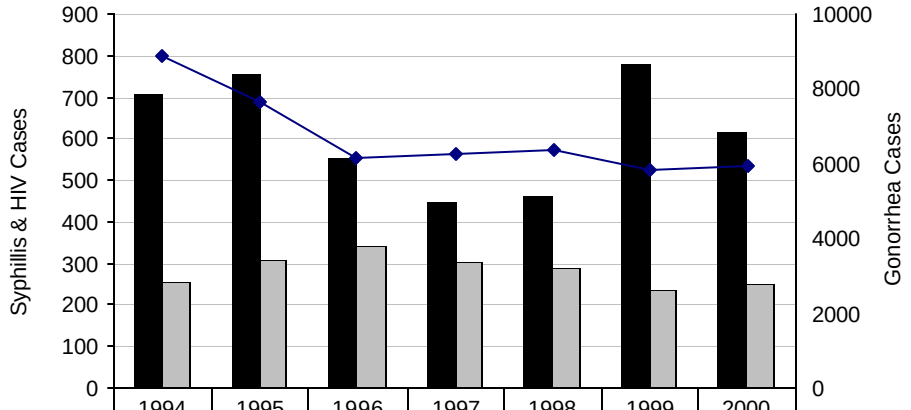
Sexually Transmitted Diseases

Gonorrhea and syphilis rates indicate the level of unprotected sexual contact, and, in theory, should provide an early warning system for increased HIV infection. It is also known that individuals who have a history of STDs are more vulnerable to HIV infection.[7]

The Rates of Syphilis and Gonorrhea are on a Rise

Figure VII-1 plots the incidence of STDs and HIV from 1994 to 2000. It would be expected that the STD trends would follow the HIV trends, however, as seen in Figure VII-1, while the number of cases of syphilis increased from 1997 through 1999, the newly diagnosed HIV cases decreased during that same time period. While the syphilis and HIV rates have fluctuated , the number of gonorrhea cases has decreased dramatically from 1994 to 1996 and has leveled off at about 6,000 annual cases since 1996. There is no clear relationship between gonorrhea and HIV.

Figure VII-1 STDs and HIV



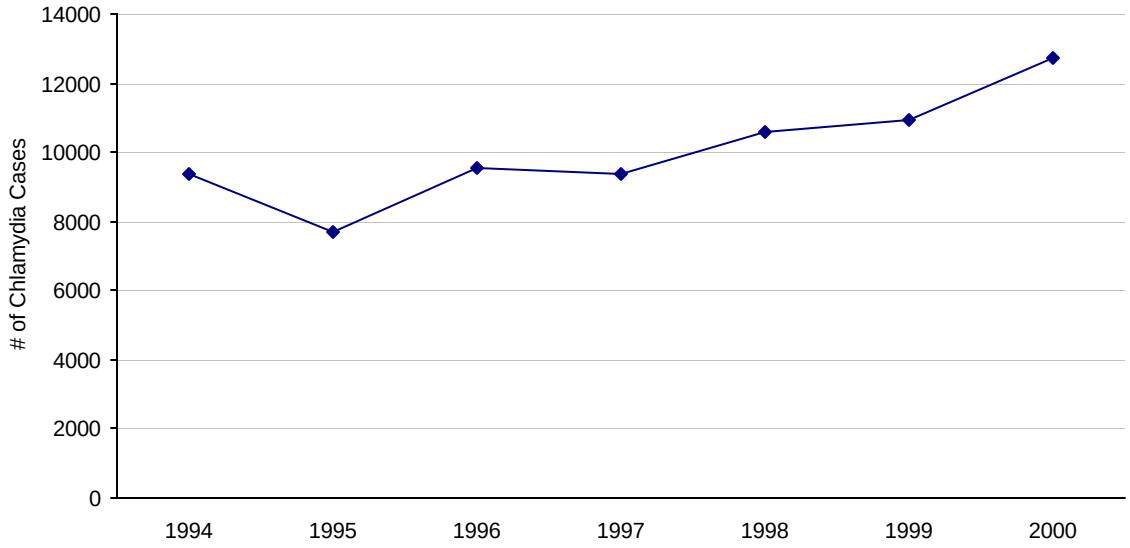
	1994	1995	1996	1997	1998	1999	2000
SYPHILIS	707	757	555	450	461	779	614
HIV	254	307	342	305	290	234	252
GONORRHEA	8864	7665	6172	6266	6349	5819	5929

[7] Data for the Indiana and the state of Indiana from 1994-2000 can be seen in Attachment 8.

Rates of Chlamydia are Rising

Chlamydia, while an indicator of sexual activity, is not necessarily an indicator of unprotected sex. Yet, chlamydia is known as the "silent epidemic" because 75% of women and 50% of men have no symptoms of disease. The increasing rates of chlamydia (Figure VII-1) are of concern as individuals with sexually transmitted diseases (STDs), both male and female, are believed to be at a three- to five-fold increased risk of acquiring HIV if exposed to that virus. [8]

Figure VII-2 Chlamydia in Indiana



[8] As reported during a satellite symposium in November 1997, presented by the Centers for Disease Control and Prevention in cooperation with the American Social Health Association and the National Association of Nurse Practitioners in Reproductive Health.

VIII. CONCLUSION

A diagnosis of HIV infection has changed from an almost certain progression of an infection that leads to AIDS and death, to a diagnosis of a serious chronic disease that can be contained by a difficult drug regimen that has serious side effects. In order to plan needed services, it is critical to know the number of persons infected with HIV and the number of PLWA. These figures, combined with an understanding of the continuum of care and eligibility criteria, will determine the number of persons who are eligible for HIV care services. Table VIII-1 summarizes the people living with HIV, AIDS, HIV/AIDS, and cumulative AIDS in Indiana at the end of 2000.

Table VIII-1 Reported HIV/AIDS Statistics for Indiana*

Living with HIV/AIDS in Indiana in 2000	**5,917**
Living with HIV (not AIDS) in Indiana through 2000	3,229
Living with AIDS in Indiana in 2000	2,688
Cumulative AIDS cases in Indiana through 2000	6.091
**Cases only include those reported. According to the CDC, on a national level, about 30% of Americans who are HIV positive are unaware of their infection.*	

A continuum of HIV/AIDS care has multiple outcomes. For those with HIV infection, the most desirable outcome is preventing the progression to AIDS. For those with an AIDS diagnosis, the outcomes are reducing viral load, limiting future opportunistic infections, maintaining or improving the quality of life, and reducing mortality. For those at end stage HIV infection, the HIV/AIDS care system should provide the medical and social support to allow death with dignity.

The current treatment protocols emphasize early treatment for those diagnosed with HIV. This report describes the number of persons with HIV who may be eligible for early treatment and the combined number of people living with HIV and AIDS who are in need of services.

The over-riding message for this review is that the declining mortality rate and longer life expectancy of those with AIDS demonstrates the effectiveness of the care system, but because of these successes, the care system will be confronted with a growing number of PLWH/A. In addition, HIV infection rates, which have been declining since 1996 have remained at over 230 new cases a year, with a slight increase from 1999 to 2000. Similarly, newly diagnosed AIDS cases have been declining by about 100 cases per year since 1995 yet have remained at above 240 cases a year and rates have increased from 1999 to 2000. In 2000, the number of AIDS cases exceeded the number of HIV cases, suggesting that HIV is progressing to AIDS at an unexpectedly high rate among those with the longest history of infection.

The epidemiology of HIV/AIDS further suggests:

- As mortality decreases and more PLWA survive, there will be a need for services designed for the maintenance of chronic disease including a greater need for medical case management.
- Anglos are more likely to be diagnosed with AIDS while African Americans are more likely to be diagnosed with HIV infections. While the absolute number of HIV infections among

African Americans is slightly less than that among Anglos, the percentage of African Americans infected are disproportionate to their size in the populations.

- African Americans are at greater risk than other populations of dying from AIDS. While death caused by AIDS is decreasing for all populations, in 1999, the death rate for African Americans is over three times that of Anglos and five times that of Latinos. Death rates for Anglos have fallen from 4.2 per 100,000 of the Indiana population to 1.2 per 100,000 between 1994 and 1999. During the same time period, Hispanic death rates have fallen from 7.8 per 100,000 to 1.9 per 100,000. African Americans have had a decline in death rate from 14.5 to 6.8 per 100,000.
- The HIV/AIDS epidemic will continue to be largely a MSM epidemic. The profile of infected MSM will shift slowly from Anglo to African American over the next five years, and if the number of AIDS cases continue to be diagnosed at the current pace, there will be a need for frequent monitoring and care of those PLWH/A.
- In 2000, there is a slight increase noted in new HIV and AIDS cases. There may be several reasons: it may reflect a reporting lag or, more substantively, it may reflect the increased morbidity due to the toxicity of the medications, lack of adherence, and/or the declining efficacy of the medication.
- At the end of 2000, there were 3,229 PLWH in the Indiana. Over two-thirds reside in urban settings, with 48% living in Indianapolis and the majority of PLWH/A living in the Central Region.
- There will be a shift toward early treatment of HIV as the number of PLWH increases.
- Women currently represent about 16% of PLWH/A – up from 12% in 1994. They are the majority of the heterosexual infected with HIV, and there is expected to be a continued increase in heterosexuals among the newly infected.
- Latinos currently represent about 5% of the epidemic, up from 2% in 1994. While they are at lower risk than African Americans, they are the fastest growing population of PLWH.
- The majority of PLWH/A are between 30 and 50 years old. While young persons may engage in greater high risk behavior, with decreased mortality and the aging of PLWH/A, one of the fastest growing populations of PLWH/A are those over 50 (who currently represent over 8% of PLWH/A).
- If the care system is to successfully prevent the progression from HIV to AIDS, in addition to serving the increased number of PLWH/A, the system should increase outreach, particularly among communities of color and increase follow-up of those tested positive who are not in care.
- Rising rates of Syphilis and Gonorrhea suggest that the population of Indiana continue to practice unsafe sex. Undiagnosed Chlamydia could make PLWH/A more susceptible to AIDS.