Division of **S**urveillance and **D**isease **C**ontrol

West Virginia HIV/AIDS/STD Program

Epidemiologic Profile of HIV/AIDS in West Virginia

2001 Annual Report

Epidemiologic Profile of HIV/AIDS in West Virginia

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NOTICE TO HEALTH CARE PROVIDERS, LABORATORIES, AND OTHERS RESPONSIBLE FOR DISEASE REPORTING:

West Virginia Code §16-3C-8, §16-3-1et seq., requires that all positive HIV test results and all cases of AIDS as defined by the CDC must be reported to the West Virginia Bureau for Public Health. For information on the CDC AIDS case definition, to obtain case report forms, or to report a case, contact:

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Notes:

Introduction

HIV and AIDS surveillance is in a new era, because of treatment with protease inhibitors and new combination drug therapies. These treatments make it possible for HIV infection to remain asymptomatic. Therefore, the number of AIDS cases and AIDS related deaths have declined since 1996. As a result, the number of new AIDS diagnosis data alone are no longer an accurate tool for developing the HIV prevention plan's educational strategies.

People who are HIV positive, without any treatment, will consequently progress to AIDS. For some people, this progression may take a long time; up to ten years or more. Therefore, the aggregate data for AIDS cases may not be helpful enough for HIV education and prevention planning because, the data characterizes people who were infected up to ten years ago, which sometimes makes it difficult to collect accurate information about the individuals and their partners for surveillance purposes.

An active surveillance system is very important in understanding the epidemiology of a disease, its cause, transmission mode, and distribution of cases over time and geographical location. Active surveillance involves a variety of techniques to obtain cases, including but not limited to death certificate review, TB registry matches, and hospital records reviews. HIV and AIDS data are collected through passive surveillance and active surveillance. Passive surveillance refers to AIDS cases and HIV infections that are submitted to the West Virginia AIDS Program as required by West Virginia State Law. Surveillance nurses gather case reports through active surveillance from health care providers, hospitals, and laboratories. Additionally, active follow-up is conducted on each case reported passively to ensure accuracy and completeness.

Please forward any comments or questions regarding this report to:

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Technical Notes

While reviewing this report, please keep in mind the following:

- Data available are limited to HIV infection and AIDS case reports that have been received by the West Virginia Division of Surveillance and Disease Control. It does not reflect HIV infections or AIDS cases that have gone undetected or that are not identifiable through active surveillance. Data are only as good as the completeness of reporting by providers.

- The HIV reported data are not as representative of the HIV population as are the AIDS reported data compared with the AIDS population. The Centers for Disease Control estimates that at least one-third of Americans infected with HIV are unaware of their infection because they have not been tested and are thus unreported.

- West Virginia data most often reflect the year a case was reported. Often when a case is reported to the Division of Surveillance and Disease Control, a surveillance staff nurse goes to the hospital or clinic to review the chart and may identify an AIDS-defining event which occurred at an earlier time, possibly even years earlier. The date of diagnosis is usually earlier than the date of the report.

- Individuals are included in either the HIV or AIDS data set, but not both. HIV infection cases later reported with AIDS are deleted from HIV infection tables and added to the AIDS tables.

- Percent columns in tables and charts may not add up to 100% due to rounding.

- HIV infection and AIDS cases are counted in the state of residence at the time of diagnosis. Therefore, West Virginia figures do not reflect cases diagnosed out of state before moving to West Virginia.

- In order to ensure confidentiality, persons of Hispanic, Asian, Pacific Islander, American Indian, or Alaskan Native ethnicities are collapsed into the "Other" category where race data are reviewed.

Explanation of No Identified Risk (NIR) Cases

Although 6 AIDS cases reported in this document have No Identified Risk (NIR), it must be explained that this does not support a concern for an unknown risk behavior. There have been 159 NIR's collected in West Virginia at initial reporting from 1984 to 2000. Of these 159, 105 were reclassified after surveillance follow-up and investigations. Of the remaining 54, 6 are still open and being investigated, and 46 were closed because no risk could be identified after interviews were declined or failed to uncover a mode of exposure, or cases were closed due to being lost to follow-up, or death. The lack of an identified risk may be explained by the CDC 1993 surveillance case definition change. For example, individuals who are HIV positive and found to have an initial CD4+ cell count test result <200 may be included as an AIDS case sooner in the course of disease than individuals diagnosed with opportunistic infections (OI). AIDS cases with OI's may have been receiving health care longer, thus allowing more time to counsel the patient and identify risk.

HIV NIR's for both males and females are higher than desired. A high percentage of NIR (16%, 95 cases) indicates that people with HIV infection are initially reluctant to reveal their risk behavior or do not know the HIV status of their high risk behavior partners. There were 140 HIV NIR's collected in West Virginia at initial reporting from 1989 to 2000. Of these 140, 84 were closed after follow-up and investigations, 51 were reclassified, and 5 are still open and being investigated.

The following categories are used regarding the status of NIR:

- OPEN, ACTIVE FOLLOW-UP: investigation is in progress.
- RECLASSIFIED: investigation is completed.
- MOVED OUT OF STATE: investigation unable to be completed because person with HIV/AIDS moved out of state.
- CLOSED, DEAD: investigation completed; no interview conducted due to death of the person with HIV/AIDS and no appropriate proxy to interview.
- CLOSED, DECLINED INTERVIEW: investigation completed; no interview conducted because person with HIV/AIDS or his/her physician declined interview.
- CLOSED, LOST TO FOLLOW-UP: investigation unable to be completed because person with HIV/AIDS was lost to follow-up.
- CLOSED, CDC RISK ASCERTAINMENT QUESTIONNAIRE COMPLETED and mailed to CDC.

Executive Conclusions

Detailed comments are included throughout this document specific to each table, figure, and map. The following statements are notable findings which should be considered by HIV community planning groups, community-based organizations, and other groups attempting to address issues surrounding HIV and AIDS in West Virginia.

- There was a decline (10%) in 2000 reported AIDS cases compared to the previous year. A possible reason for this decrease is that AIDS case surveillance is in a new era because of new treatment with anti-retrovirals, protease inhibitors, combination therapies, and increased prophylaxis for opportunistic infections.

- A notable change in the AIDS epidemic is that the number of AIDS cases in West Virginia is declining among all socio-demographic groups. We must be cautioned, however, to note that this may not be due to the decline in the epidemic but rather to the success of the new drug therapies.

- Comparing the time frames of 1984-90, with 1991-95 and 1996-00, the proportion of AIDS cases among females increased for IDU and heterosexual contact risk factors (28% to 35% to 37% for IDU and 33% to 44% to 46% for heterosexual, respectively).

- Cumulatively, females accounted for 13% of the reported AIDS, 27% of HIV infections, and 18% all reported HIV/AIDS cases, while accounts for 22% of PLWHA reported cases.

- The 20-29 age group comprised 18% of AIDS cases, 39% of the HIV infection cases, while 28% of PLWHA

- The 30-39 age group comprised 45% of AIDS, 37% of the HIV infection and 40% of PLWHA.

- Blacks in West Virginia are disproportionately affected by AIDS and HIV. Blacks account for 3% of the state's population, but comprised 18% of AIDS, 35% of HIV infection, and 28% of PLWHA reported cases.

- During 1989-00, HIV infection among males predominately occurred among MSM, IDU, and MSM/IDU (77%). HIV infection in females commonly occurred among persons with heterosexual contact (44%) and IDU (34%) risk behaviors.

- During 1984-00, IDU was more prevalent among blacks with AIDS (43%) than whites (11%) for AIDS, while IDU is the second lagest percent of AIDS cases among females(37%) compare to 14% among males.

- During 1989-00, of males reporting MSM as risk behavior for HIV infection, 83% were white, 14% were black, while 72% of total HIV infection cases were reported among males

Chapter 1:
West Virginia Demographic Data

West Virginia Financial Characteristics

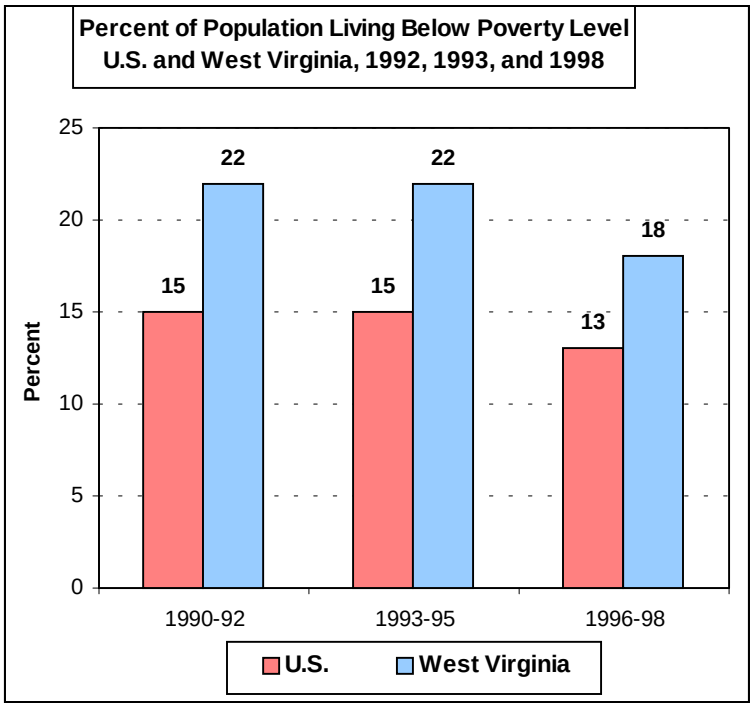


Figure 1.1

West Virginia is one of the poorest states in the nation. Data from the U.S. Bureau of the Census indicate that the burden of poverty was significantly greater in West Virginia than in the U.S. for 1992 and 1993, as shown in Figure 1.1.

Similarly, the median household income in West Virginia was below that for the U.S. in the 1970, 1980, 1990, and 1998 censuses, as shown in Figure 1.2.

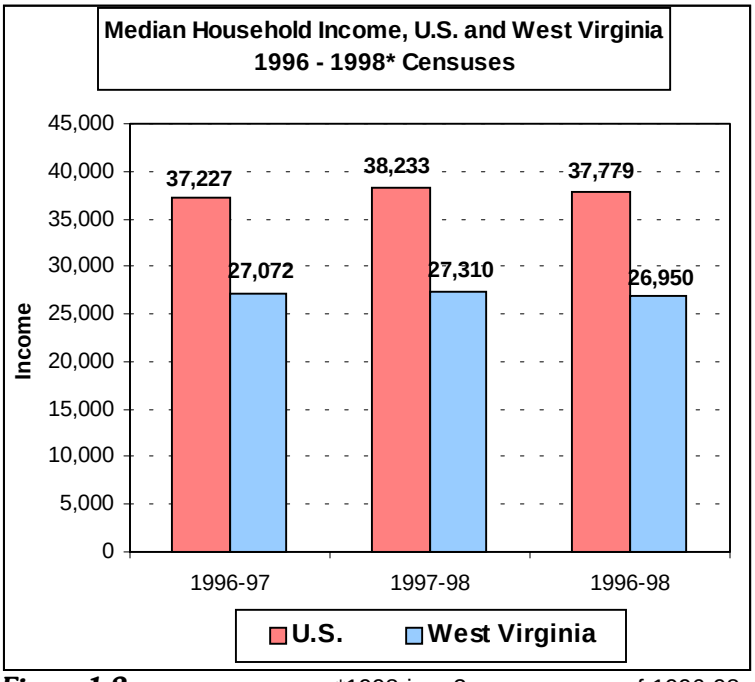
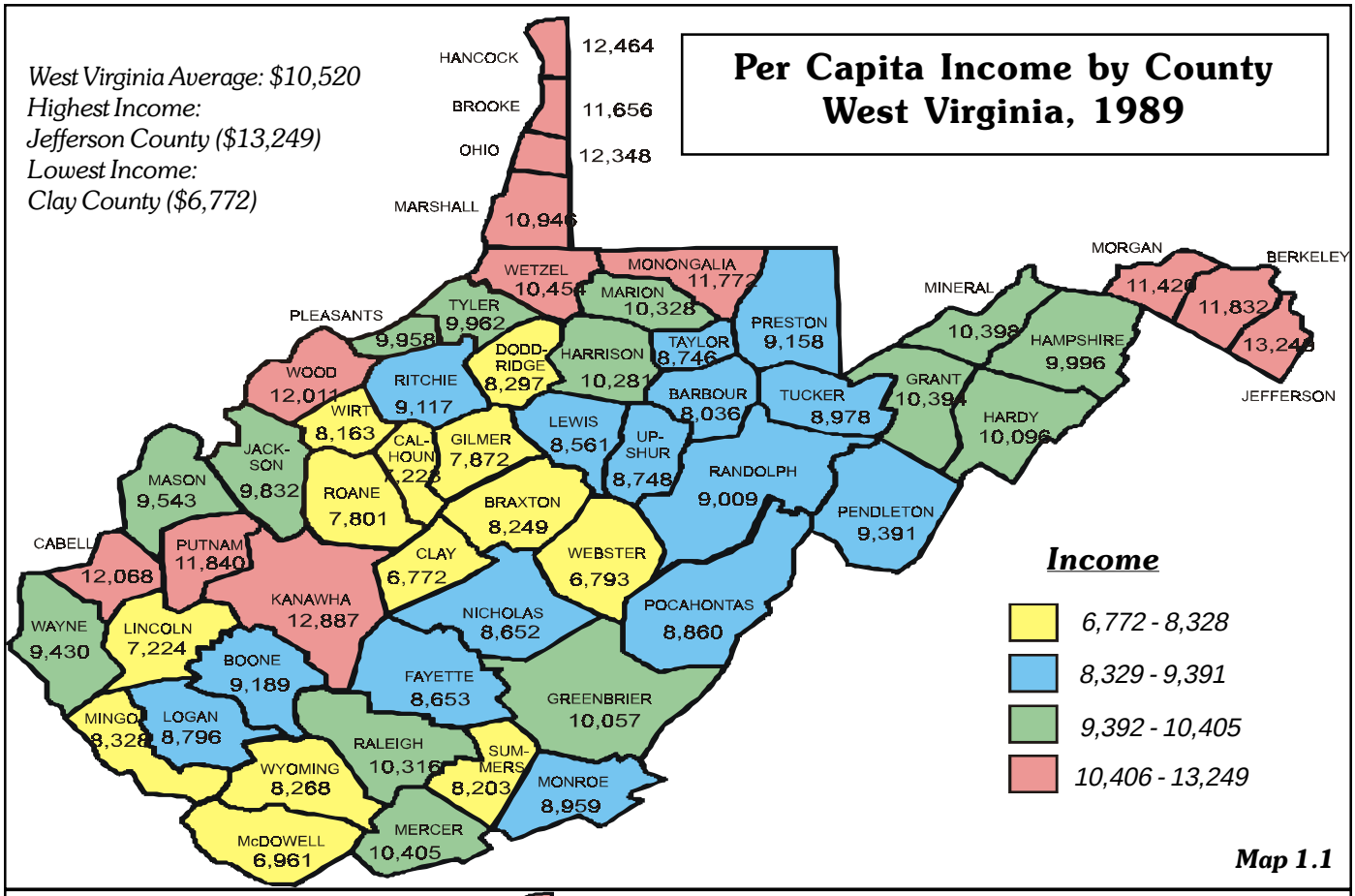
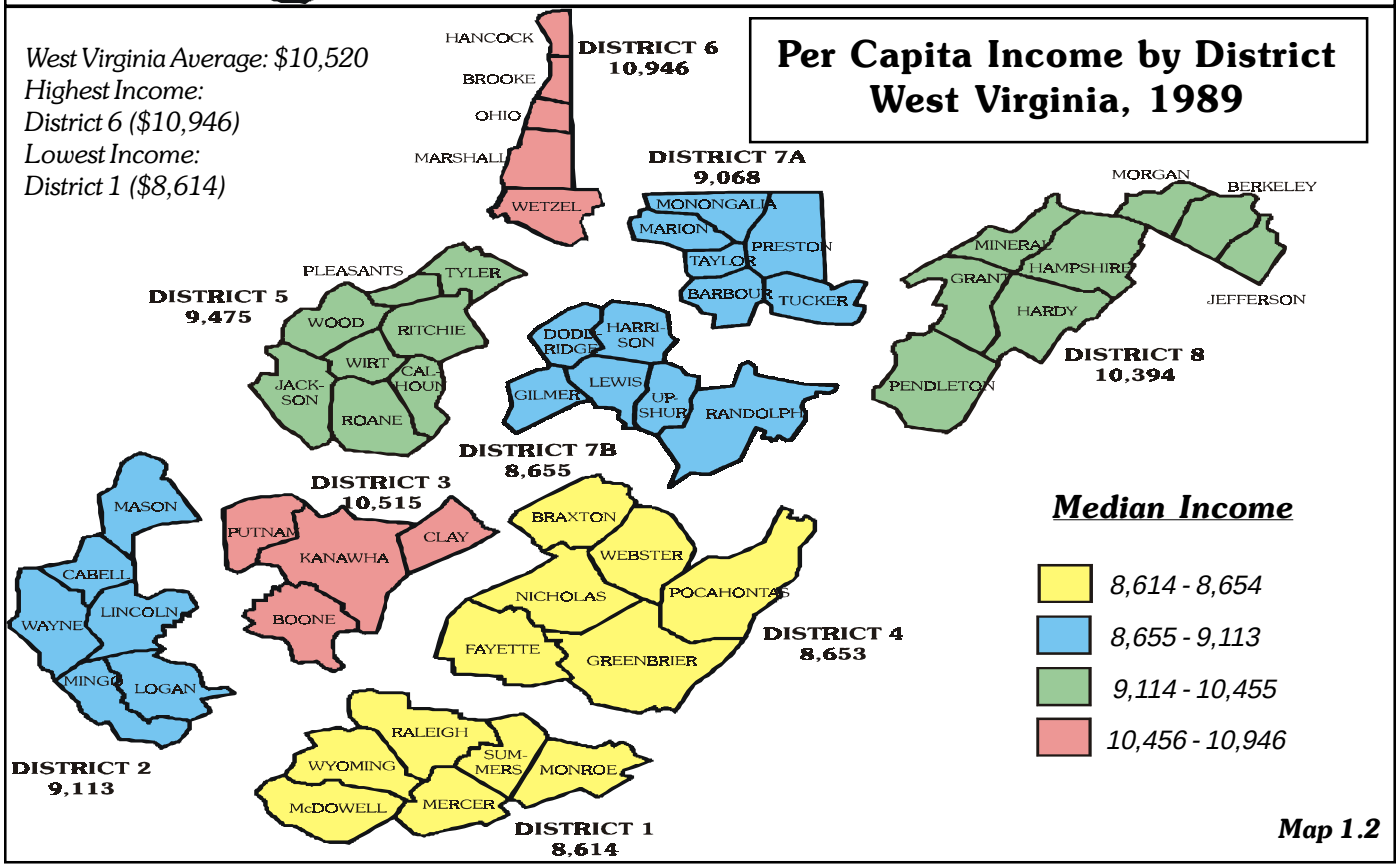


Figure 1.2

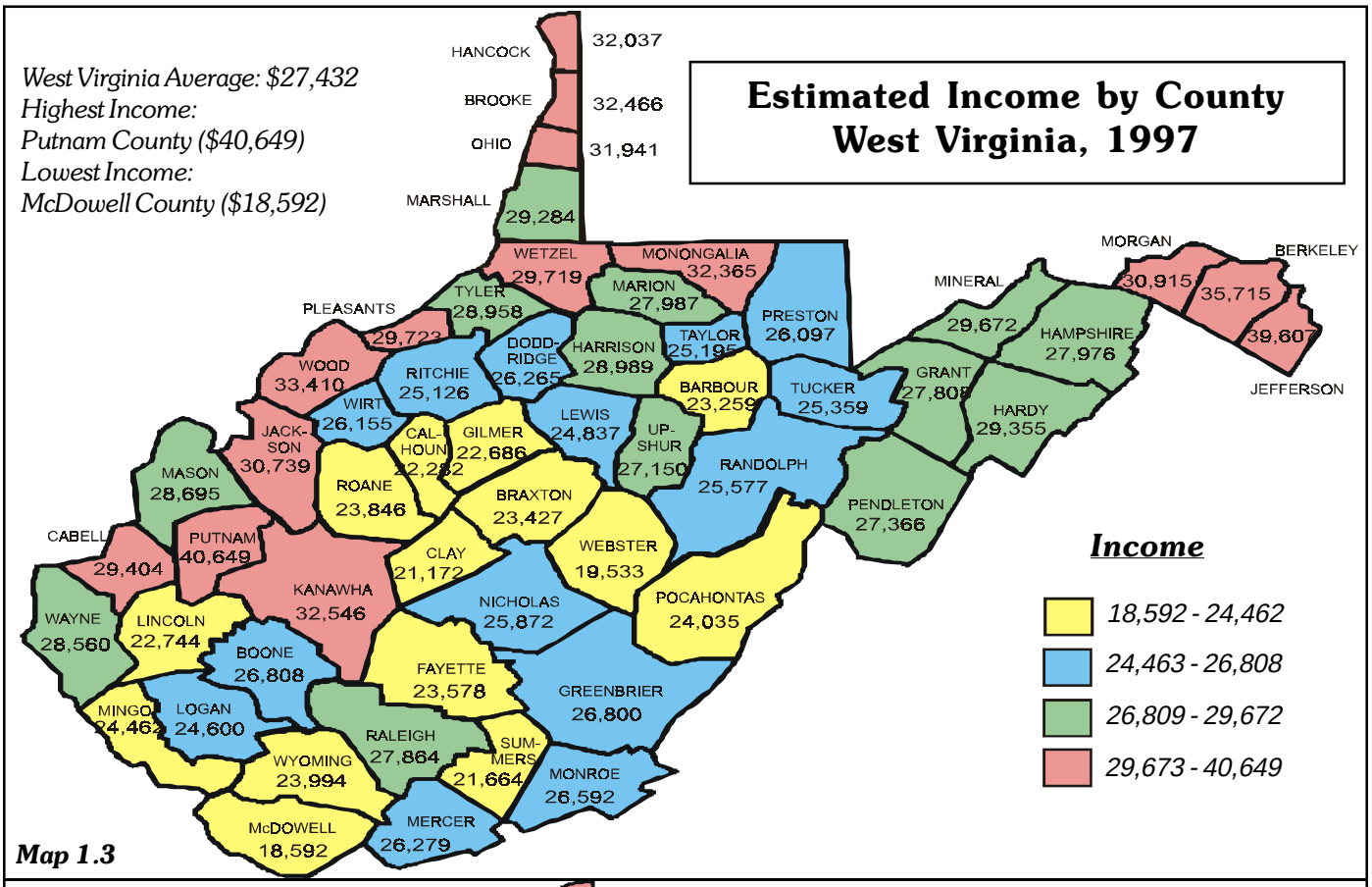
*1998 is a 3-year average of 1996-98


West Virginia Average: $10,520
Highest Income:
Jefferson County ($13,249)
Lowest Income:
Clay County ($6,772)
Per Capita Income by County
West Virginia, 1989
HANCOCK 12,464
BROOKE 11,656
OHIO 12,348
MARSHALL 10,946
WETZEL 10,454
MONONGALIA 11,772
MARION 10,328
PLEASANTS 9,958
TYLER 9,962
PRESTON 9,158
WOOD 12,011
RITCHIE 9,117
DODD-RIDGE 8,297
HARRISON 10,281
TAYLOR 8,746
BARBOUR 8,036
TUCKER 8,978
MINERAL 10,398
MORGAN 11,420
BERKELEY 11,832
JEFFERSON 13,249
HAMPSHIRE 9,996
GRANT 10,394
HARDY 10,096
WIRT 8,163
JACK-SON 9,832
CAL-HOUN 7,223
GILMER 7,872
LEWIS 8,561
UP-SHUR 8,748
RANDOLPH 9,009
MASON 9,543
ROANE 7,801
BRAXTON 8,249
PENDLETON 9,391
CABELL 12,068
PUTNAM 11,840
CLAY 6,772
WEBSTER 6,793
KANAWHA 12,887
NICHOLAS 8,652
POCAHONTAS 8,860
WAYNE 9,430
LINCOLN 7,224
BOONE 9,189
FAYETTE 8,653
GREENBRIER 10,057
MINGO 8,328
LOGAN 8,796
RALEIGH 10,316
SUM-MERS 8,203
WYOMING 8,268
MONROE 8,959
McDOWELL 6,961
MERCER 10,405
Income
6,772 - 8,328
8,329 - 9,391
9,392 - 10,405
10,406 - 13,249

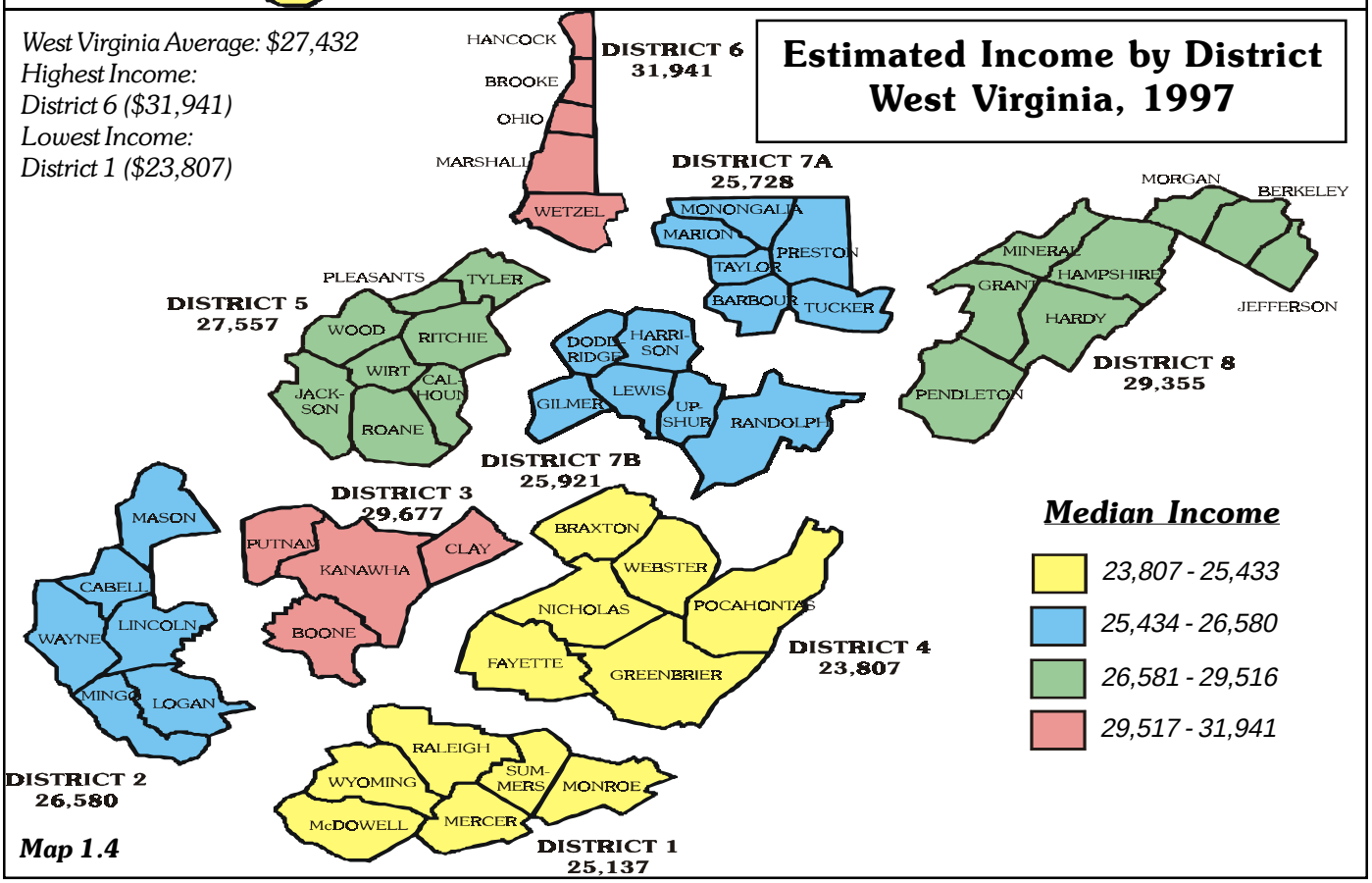
Map 1.1


West Virginia Average: $10,520
Highest Income:
District 6 ($10,946)
Lowest Income:
District 1 ($8,614)
Per Capita Income by District
West Virginia, 1989
HANCOCK
BROOKE
OHIO
MARSHALL
WETZEL
DISTRICT 6
10,946
DISTRICT 7A
9,068
MONONGALIA
MARION
PRESTON
TAYLOR
BARBOUR
TUCKER
PLEASANTS
TYLER
DISTRICT 5
9,475
WOOD
RITCHIE
WIRT
CAL-HOUN
JACK-SON
ROANE
DODD-RIDGE
HARRI-SON
GILMER
LEWIS
UP-SHUR
RANDOLPH
DISTRICT 7B
8,655
MORGAN
BERKELEY
MINERAL
HAMPSHIRE
GRANT
HARDY
JEFFERSON
PENDLETON
DISTRICT 8
10,394
DISTRICT 3
10,515
MASON
PUTNAM
CLAY
KANAWHA
CABELL
WAYNE
LINCOLN
BOONE
MINGO
LOGAN
BRAXTON
WEBSTER
NICHOLAS
POCAHONTAS
FAYETTE
GREENBRIER
DISTRICT 4
8,653
RALEIGH
WYOMING
SUM-MERS
MONROE
McDOWELL
MERCER
DISTRICT 2
9,113
DISTRICT 1
8,614
Median Income
8,614 - 8,654
8,655 - 9,113
9,114 - 10,455
10,456 - 10,946

Map 1.2


West Virginia Average: $27,432
Highest Income:
Putnam County ($40,649)
Lowest Income:
McDowell County ($18,592)
Estimated Income by County
West Virginia, 1997
HANCOCK 32,037
BROOKE 32,466
OHIO 31,941
MARSHALL 29,284
WETZEL 29,719
MONONGALIA 32,365
MARION 27,987
PRESTON 26,097
TYLER 28,958
PLEASANTS 29,723
DODD-RIDGE 26,265
HARRISON 28,989
TAYLOR 25,195
WOOD 33,410
RITCHIE 25,126
WIRT 26,155
BARBOUR 23,259
TUCKER 25,359
LEWIS 24,837
UP-SHUR 27,150
RANDOLPH 25,577
JACK-SON 30,739
CAL-HOUN 22,282
GILMER 22,686
MASON 28,695
ROANE 23,846
BRAXTON 23,427
CABELL 29,404
PUTNAM 40,649
CLAY 21,172
WEBSTER 19,533
KANAWHA 32,546
NICHOLAS 25,872
POCAHONTAS 24,035
WAYNE 28,560
LINCOLN 22,744
BOONE 26,808
FAYETTE 23,578
GREENBRIER 26,800
MINGO 24,462
LOGAN 24,600
RALEIGH 27,864
SUM-MERS 21,664
WYOMING 23,994
MONROE 26,592
McDOWELL 18,592
MERCER 26,279
MINERAL 29,672
MORGAN 30,915
BERKELEY 35,715
HAMPSHIRE 27,976
39,607
GRANT 27,805
JEFFERSON
HARDY 29,355
PENDLETON 27,366
Income
18,592 - 24,462
24,463 - 26,808
26,809 - 29,672
29,673 - 40,649

Map 1.3


West Virginia Average: $27,432
Highest Income:
District 6 ($31,941)
Lowest Income:
District 1 ($23,807)
Estimated Income by District
West Virginia, 1997
HANCOCK
BROOKE
OHIO
MARSHALL
DISTRICT 6
31,941
WETZEL
DISTRICT 7A
25,728
MONONGALIA
MARION
PRESTON
TAYLOR
BARBOUR
TUCKER
PLEASANTS
TYLER
DISTRICT 5
27,557
WOOD
RITCHIE
WIRT
CAL-HOUN
JACK-SON
ROANE
DODD-RIDGE
HARRI-SON
GILMER
LEWIS
UP-SHUR
RANDOLPH
DISTRICT 7B
25,921
MORGAN
BERKELEY
MINERAL
HAMPSHIRE
GRANT
HARDY
JEFFERSON
PENDLETON
DISTRICT 8
29,355
MASON
DISTRICT 3
29,677
PUTNAM
KANAWHA
CLAY
CABELL
WAYNE
LINCOLN
BOONE
MINGO
LOGAN
BRAXTON
WEBSTER
NICHOLAS
POCAHONTAS
FAYETTE
GREENBRIER
DISTRICT 4
23,807
DISTRICT 2
26,580
RALEIGH
WYOMING
SUM-MERS
MONROE
McDOWELL
MERCER
DISTRICT 1
25,137
Median Income
23,807 - 25,433
25,434 - 26,580
26,581 - 29,516
29,517 - 31,941

Map 1.4

1990 West Virginia Population Characteristics By Sex, Age Group, and Race

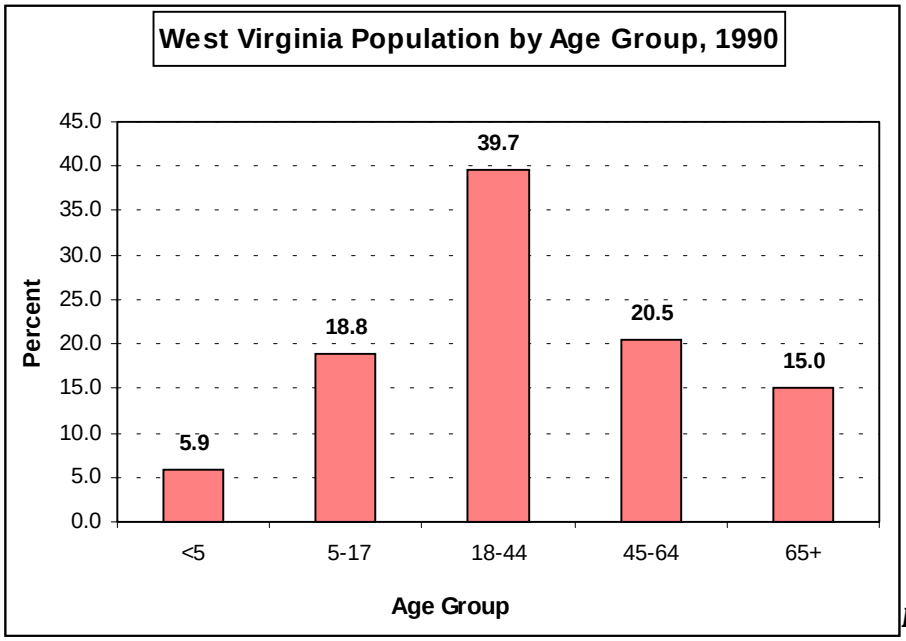


Figure 1.3

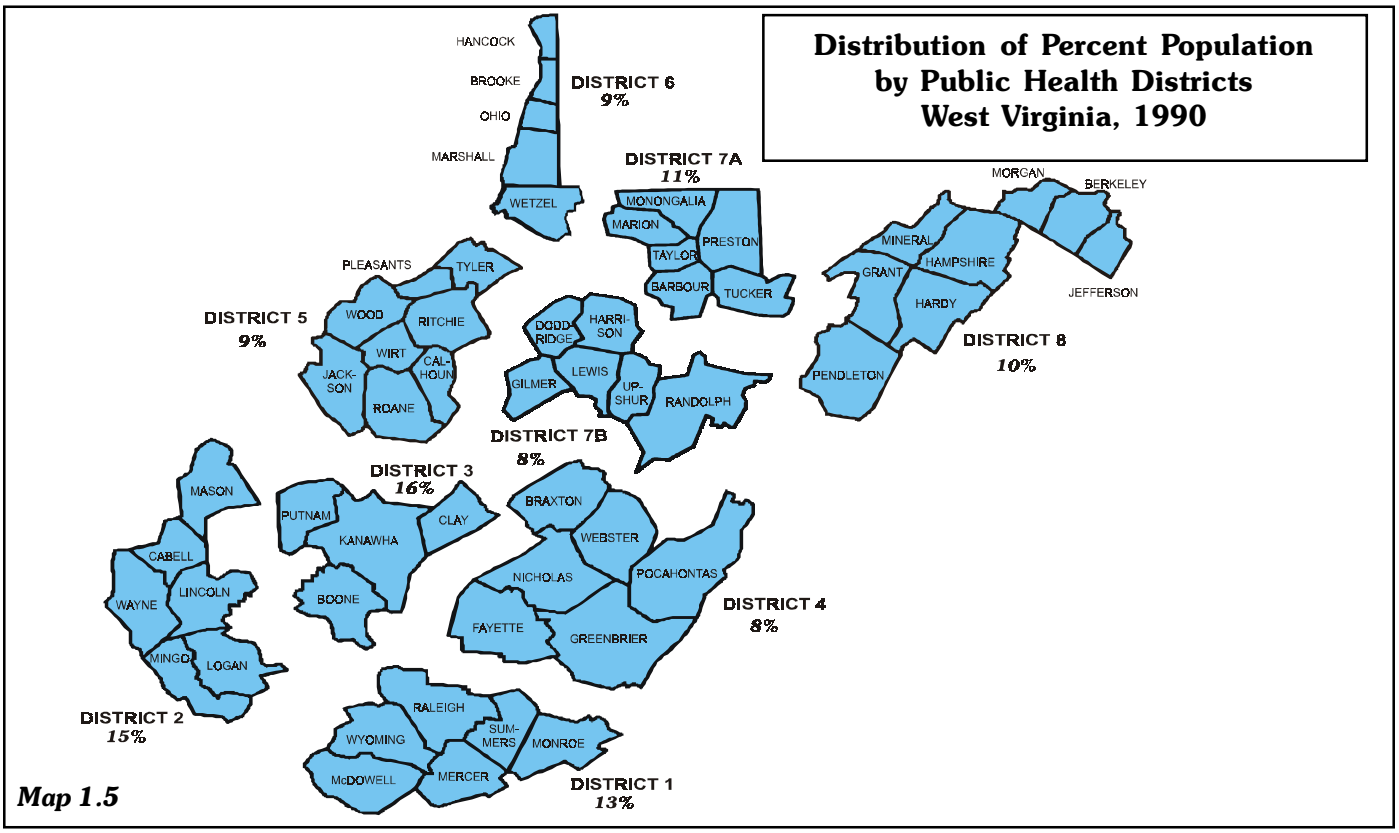
West Virginia Population by Age Group Gender, and Race, 1990		
Characteristic	**# Population**	**% Population**
Age Group		
Under 5	106,659	6
5-17	336,918	19
18-44	712,798	40
45-64	368,205	21
65+	268,897	15
Gender		
Male	861,536	48
Female	931,941	52
Race		
White	1,726,023	96
Black	56,295	3
Other	11,159	1
Total	1,793,477	100

Table 1.1

U.S. Bureau of the Census, 1990 (West Virginia Bureau for Public Health, Health Statistics Center, 1996)

The largest percentage of West Virginia's population is among the 18-44 age group (39.7%) (Figure 1.3). The female population in West Virginia is higher than the male population (52% to 48%) (Table 1.1). Blacks and other minorities combined make up only 4% of the state's population (Table 1.1).

West Virginia Population by Race and Public Health Districts



Map 1.5

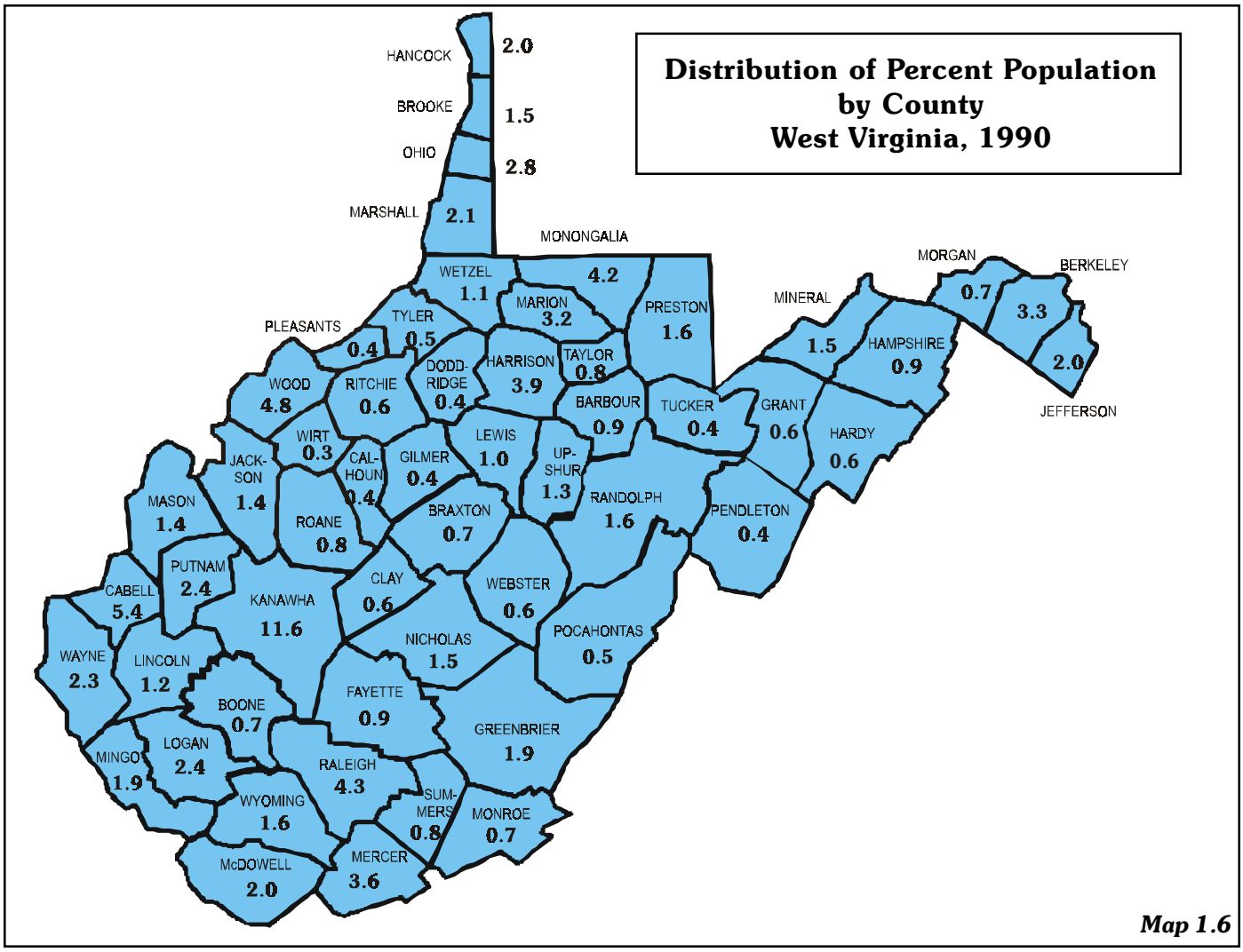
West Virginia Population by Race and Public Health District

District	White Pop.	% White	Non-white Pop.	% Non-white	Total Pop.	% Total Pop.
1	215,812	93	16,820	7	232,632	13
2	254,057	97	7,737	3	261,794	15
3	270,127	94	16,180	6	286,307	16
4	137,016	96	5,139	4	142,155	8
5	166,864	99	1,761	1	168,625	9
6	165,909	98	3,801	2	169,710	9
7A	193,840	97	6,526	3	200,366	11
7B	149,791	99	2,136	1	151,927	8
8	172,607	96	7,354	4	179,961	10
Total	**1,726,023**	**96**	**67,454**	**4**	**1,793,477**	**100**

Table 1.2

U.S. Bureau of the Census, 1990 (West Virginia Bureau for Public Health, Health Statistics Center, 1996)

West Virginia population by race and public health district is listed according to the 1990 U.S. Census in Table 1.2. As seen in Map 1.5, the state currently identifies nine public health districts for HIV prevention community planning. West Virginia's 55 counties are grouped into these nine public health districts. The grouping of counties into districts was used to increase the strength of the data and to protect the anonymity of West Virginia's low HIV/AIDS case counts. West Virginia's population is predominantly white (96%).



Map 1.6

West Virginia Counties With Highest Percentage of Non-White Population

County	White Population		Non-White Popuation		Total Population
	#	%	#	%	
Kanawha	192,151	93	15,468	7	207,619
Raleigh	70,486	92	6,333	8	76,819
McDowell	30,458	86	4,775	14	35,233
Total	293,095	92	26,576	8	319,671
Percent of State Total		**17**		**39**	**18**
State Total	**1,726,023**	**96**	**67,454**	**4**	**1,793,477**

Table 1.3

U.S. Bureau of the Census, 1990 (West Virginia Bureau for Public Health, Health Statistics Center, 1996)

Table 1.3 identifies Kanawha, Raleigh, and McDowell counties as containing 39% of the state's non-white population and 17% of the whites. As will be discussed in greater detail later in this report, non-whites are disproportionately impacted by West Virginia's HIV epidemic, as is seen nationwide. Map 1.6 shows percent of population for West Virginia's 55 counties.

West Virginia Resident Births by Mother's Age Group, 1990

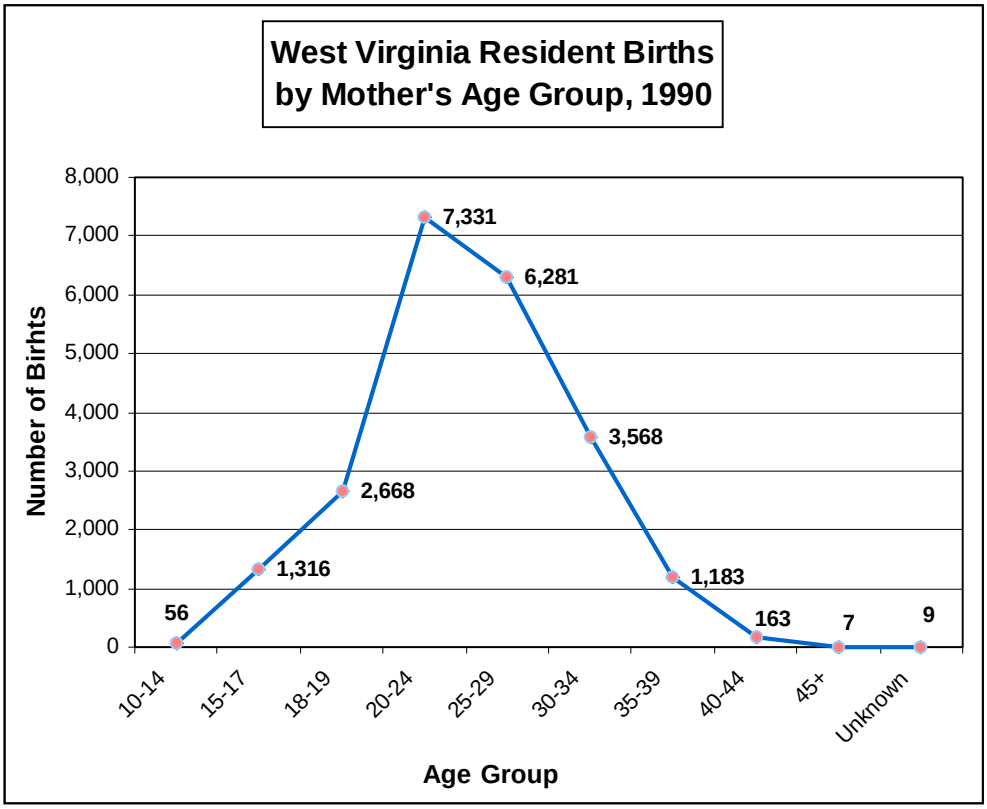


Figure 1.4

Age of Mother (Women's Reproductive Years) West Virginia Resident Birth, 1990		
Age Group	**Birth**	
	#	**%**
10-14	56	<1
15-17	1,316	6
18-19	2,668	12
20-24	7,331	32
25-29	6,281	28
30-34	3,568	16
35-39	1,183	5
40-44	163	1
45+	7	<1
Unknown	9	<1
Total	**22,582**	**100**

Table 1.4

Chapter 2:
AIDS in West Virginia

West Virginia AIDS Cases and Rates by Year of Report and Diagnosis, 1984 - 2000

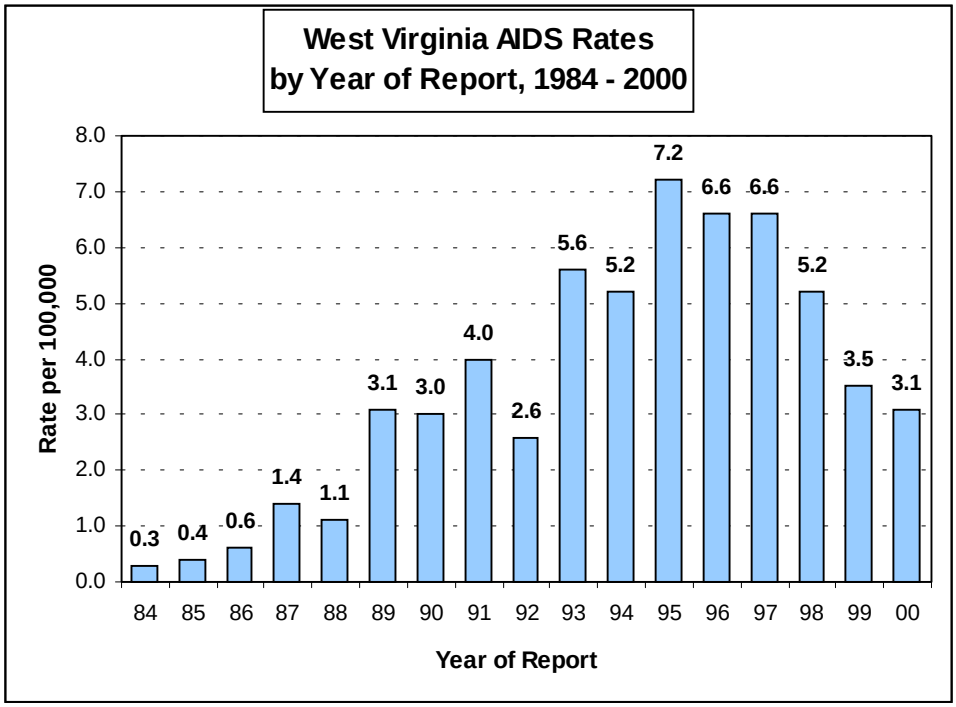


Figure 2.1

West Virginia AIDS Cases By Year of Report and Diagnosis, 1984 - 2000																		
Year	**84**	**85**	**86**	**87**	**88**	**89**	**90**	**91**	**92**	**93**	**94**	**95**	**96**	**97**	**98**	**99**	**00**	**Total**
Reported	6	7	10	25	20	55	54	71	45	100	95	129	121	119	94	62	56	1069
Diagnosed	7	14	16	28	37	73	64	89	97	96	96	114	107	87	61	52	31	1069

Table 2.1

Figure 2.1 displays an epidemic curve of crude annual rates calculated for a 12-month period per 100,000 West Virginia population. This figure describes the occurrence of AIDS in West Virginia from 1984 through 2000. Rate conclusions must be drawn cautiously on this data, especially when rates are based on very small case numbers. Rates are based on the 1990 population of West Virginia. Census population for the state was 1,793,477 in 1990.

Table 2.1 displays West Virginia AIDS cases by year of report from 1984 through 2000. During this 17-year period, 1069 AIDS cases were reported. AIDS case surveillance is in a new era because of treatment with protease inhibitors and new combination drug therapies. As a possible result, there was a significant decrease (34% and 10%) in reported 1999 and 2000 AIDS cases compared to the previous year. This decline has also been reported nationally. Table 2.1 displays AIDS in West Virginia from 1984 through 2000 by comparing the year of diagnosis to the year of report. There is a period of time (often referred to as "lag time") between the diagnosis of AIDS and the date the case is reported to the state health department.

West Virginia Percent of AIDS Cases Comparison by Year of Report, 1984 to 2000

The following items are noted from a review of Table 2.2:

- The highest percentage of the total AIDS cases were reported among the 30-39 age group (45%), followed by the 40-49 age group (26%).
- Blacks were 18% of total AIDS cases, 3% of population, whites 81% of AIDS cases, and 96% of population.
- Females were 13% of the reported AIDS cases from 1984-2000, while comprising 52% of the state's population. Males were 87% of the reported AIDS cases for the same time period, while comprising 48% of the state's population.
- The risk behaviors of MSM and MSM/IDU declined in 2000, 53% to 50% for MSM, and 10% to 7% for MSM/IDU. IDU increased slightly in 2000, from 11% to 13%. The highest percentage of reported AIDS cases was among the MSM risk behavior (50%).

Caution should be exercised when interpreting this table. Percentages based on small numbers can fluctuate widely with minimal changes in occurrence. To keep things in perspective, refer to the total number of reported cases sited in the bottom row of the table.

West Virginia Percent of AIDS Cases Comparison by Year of Report, 1984 - 2000

Characteristic	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	Total	
Age Group	**Percent**																	#	%
Under 5	17	0	10	0	0	0	0	3	0	0	1	1	0	0	0	2	0	**7**	**1**
5-12	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	**2**	**0**
13-19	0	0	0	4	0	0	0	0	2	0	2	2	0	0	0	0	2	**8**	**1**
20-29	0	43	10	24	35	22	13	21	20	18	17	23	16	13	20	8	14	**190**	**18**
30-39	33	43	70	44	20	64	56	41	44	43	43	42	52	41	45	37	48	**483**	**45**
40-49	0	14	0	16	15	11	22	27	24	29	29	25	24	34	27	37	29	**278**	**26**
50+	50	0	10	12	30	4	9	8	9	9	7	6	8	13	9	16	7	**101**	**9**
Gender	**Percent**																		
Male	67	100	90	92	90	93	87	89	91	89	81	88	84	87	88	87	79	**863**	**87**
Female	33	0	10	8	10	7	13	11	9	11	19	12	16	13	12	13	21	**194**	**13**
Race	**Percent**																		
White	83	100	70	84	80	85	85	86	89	83	72	78	83	79	78	76	82	**863**	**81**
Black	17	0	30	12	20	13	15	14	11	17	25	21	16	20	20	23	16	**194**	**18**
Other/Unk.	0	0	0	4	0	2	0	0	0	0	3	1	1	1	2	2	2	**12**	**1**
Risk Behavior	**Percent**																		
MSM	0	57	50	56	50	75	54	52	56	64	49	53	58	58	57	53	50	**598**	**56**
IDU	0	0	10	12	5	5	15	17	22	13	19	20	21	19	18	11	13	**174**	**16**
MSM/IDU	0	14	0	12	0	4	4	11	7	5	4	7	4	7	4	10	7	**64**	**6**
Adult Hemoph.	17	14	0	8	0	0	6	1	7	5	4	4	2	3	2	2	4	**37**	**3**
Heterosexual	0	0	0	4	10	9	9	4	7	5	14	8	11	8	11	13	11	**94**	**9**
Transfusion	50	14	20	8	35	4	6	4	2	4	1	1	1	0	1	0	4	**34**	**3**
NIR*/Other	17	0	10	0	0	4	7	7	0	3	7	6	3	4	6	10	13	**59**	**6**
Pediatric	17	0	10	0	0	0	0	3	0	1	1	2	0	0	0	2	0	**9**	**1**
TOTAL CASES	**6**	**7**	**10**	**25**	**20**	**55**	**54**	**71**	**45**	**100**	**95**	**129**	**121**	**119**	**94**	**62**	**56**	**1069**	**100**

*NIR=No Identified Risk

Table 2.2

West Virginia AIDS and HIV Infection Cases and Deaths Comparison by Year of Report, through December 2000*

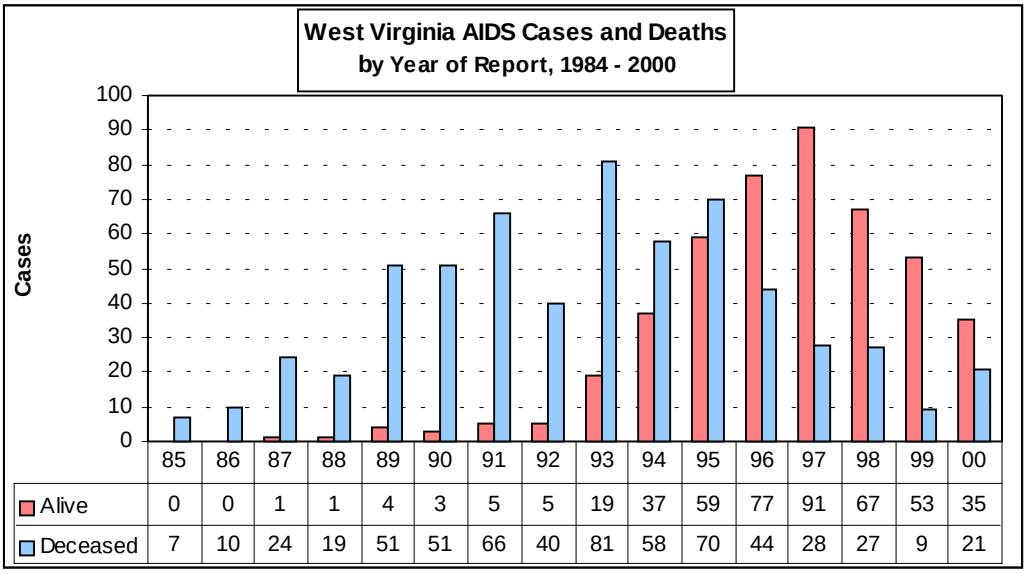


Figure 2.2

Figure 2.2 presents the year that the case was reported, along with the proportion of people known to have died. The impact of new anti-retrovirals, protease inhibitors, combination therapies, and earlier access to care have resulted in a decline in AIDS deaths.

Table 2.3 displays that there have been 1655 AIDS and HIV cases reported cumulatively from 1984 through 2000 in West Virginia. From 1984 through 2000, the percentage of deceased AIDS cases as expected continues to decline from 97% to 15% in 1999, but increase to 38% in 2000 due to discovery of more than ten cases from death registry. Among the HIV infection cases reported 95% are living due to combination drug treatment, while the percentage of people living with AIDS is 43%. Overall, the percentage of people living with HIV/AIDS in West Virginia is 61%.

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS by Year of Report AIDS 1984-2000, HIV 1989-2000

Year Reported	AIDS					HIV (Not AIDS)					Total	PLWHA	
	Total	Alive		Deceased		Total	Alive		Deceased			Alive	
		#	%	#	%		#	%	#	%		#	%
1984-88	**68**	2	3	66	97	**0**	0	0	0	0	**68**	2	3
1989	**55**	4	7	51	93	**22**	20	91	2	9	**77**	24	31
1990	**54**	3	6	51	94	**32**	29	91	3	9	**86**	32	37
1991	**71**	5	7	66	93	**35**	30	86	5	14	**106**	35	33
1992	**45**	5	11	40	89	**52**	50	96	2	4	**97**	55	57
1993	**100**	19	19	81	81	**44**	43	98	1	2	**144**	62	43
1994	**95**	37	39	58	61	**47**	43	91	4	9	**142**	80	56
1995	**129**	59	46	70	54	**58**	56	97	2	3	**187**	115	61
1996	**121**	77	64	44	36	**53**	51	96	2	4	**174**	128	74
1997	**119**	91	76	28	24	**61**	57	93	4	7	**180**	148	82
1998	**94**	67	71	27	29	**65**	61	94	4	6	**159**	128	81
1999	**62**	53	85	9	15	**43**	43	100	0	0	**105**	96	91
2000	**56**	35	63	21	38	**74**	73	99	1	1	**130**	108	83
Total	**1,069**	**457**	**43**	**612**	**57**	**586**	**556**	**95**	**30**	**5**	**1,655**	**1,013**	**61**

Table 2.3

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.

West Virginia AIDS Cases Among MSM* by Age Group and Race, 1984-1990, 1991-1995, 1996-2000

West Virginia AIDS Cases Among MSM* by Age Group, 1984 - 2000								
Age Group	1984-90^		1991-95		1996-00		Total	
	#	%	#	%	#	%	#	%
20-29	26	25	49	20	38	15	113	19
30-39	56	54	111	46	118	46	285	48
40-49	17	17	66	27	66	26	149	25
50+	4	4	15	6	32	13	51	9
Total Cases	**103**	**100**	**241**	**100**	**254**	**100**	**598**	**100**
% Cases	**17**		**40**		**42**		**100**	

Table 2.4

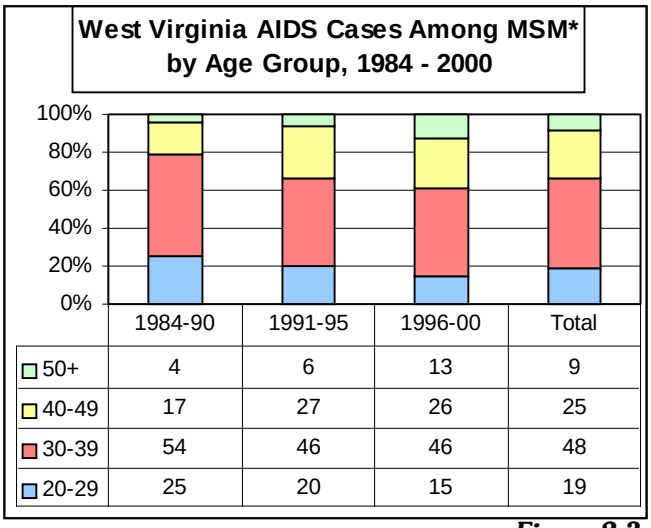


Figure 2.3

West Virginia AIDS Cases Among MSM* by Race, 1984 - 2000								
Race	1984-90^		1991-95		1996-00		Total	
	#	%	#	%	#	%	#	%
White	88	85	225	93	230	91	543	91
Black	13	13	15	6	23	9	51	9
Other	2	2	1	0	1	0	4	1
Total Cases	**103**	**100**	**241**	**100**	**254**	**100**	**598**	**100**
% Cases	**17**		**40**		**42**		**100**	

Table 2.5

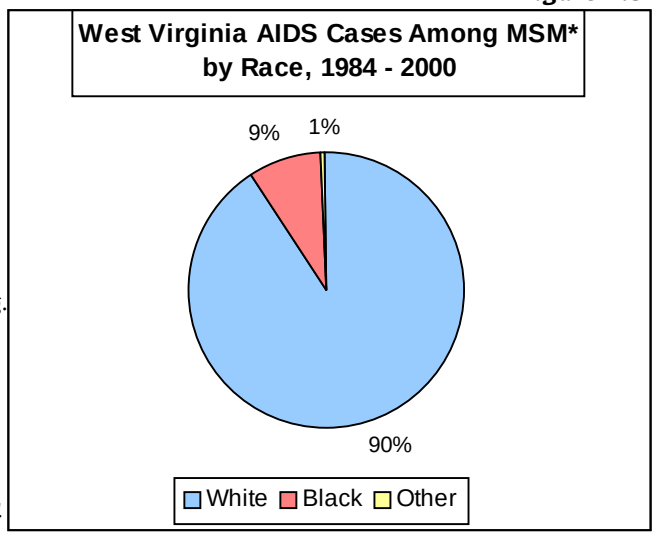


Figure 2.4

***MSM**=**M**en who have **S**ex with **M**en.

Note: Percent in pie charts may not add up to 100% due to rounding.

^ Due to number of AIDS cases being very small from 1984 though 1986, first period grouping consist of seven years of datas(1984-90)

Tables 2.4 and 2.5 display West Virginia AIDS cases reported with a risk behavior of Men who have Sex with Men (MSM) by age group and race respectively, for three 5-year aggregates of data, 1984-90, 1991-95 and 1996-00. MSM risk behavior is the most prevalant risk behavior reported by AIDS cases among 30-39 age group.

MSM AIDS cases are compared in three 5-years groupings by race in Table 2.5. The number of MSM AIDS cases is greater among whites (91%), than blacks (9%). AIDS cases among whites have increased in number of cases reported (88, 225, and230 cases) in these three 5-year groupings. MSM AIDS cases have continued to increase with a slowing of growth in the second to third grouping(225 to 230). Even though the percentages have not increased, the number of 30-39 year old MSM has continued to climb, 56, 111, 118 persons per 5-year aggregates for total of 285 cases, 48%.

West Virginia AIDS Cases Among IDU* by Age Group, Gender, and Race, 1984-1990, 1991-1995, 1996-2000

West Virginia AIDS Cases Among IDU* by Age Group, 1984 - 2000								
Age Group	1984-90^		1991-95		1996-00		Total	
	#	%	#	%	#	%	#	%
20-29	1	6	8	10	7	9	16	9
30-39	12	75	34	43	38	48	84	48
40-49	2	13	29	37	30	38	61	35
50+	1	6	8	10	4	5	13	7
Total Cases	**16**	**100**	**79**	**100**	**79**	**100**	**174**	**100**
% Cases	**9**		**45**		**45**		**100**	

Table 2.6

West Virginia AIDS Cases Among IDU* by Gender, 1984 - 2000								
Gender	1984-90^		1991-95		1996-00		Total	
	#	%	#	%	#	%	#	%
Male	11	69	59	75	55	70	125	72
Female	5	31	20	25	24	30	49	28
Total Cases	**16**	**100**	**79**	**100**	**79**	**100**	**174**	**100**
% Cases	**9**		**45**		**45**		**100**	

Table 2.7

West Virginia AIDS Cases Among IDU* by Race, 1984 - 2000								
Race	1984-90^		1991-95		1996-00		Total	
	#	%	#	%	#	%	#	%
White	9	56	40	51	41	52	90	52
Black	7	44	38	48	36	46	81	47
Other	0	0	1	1	2	3	3	2
Total Cases	**16**	**100**	**79**	**100**	**79**	**100**	**174**	**100**
% Cases	**9**		**45**		**45**		**100**	

Table 2.8

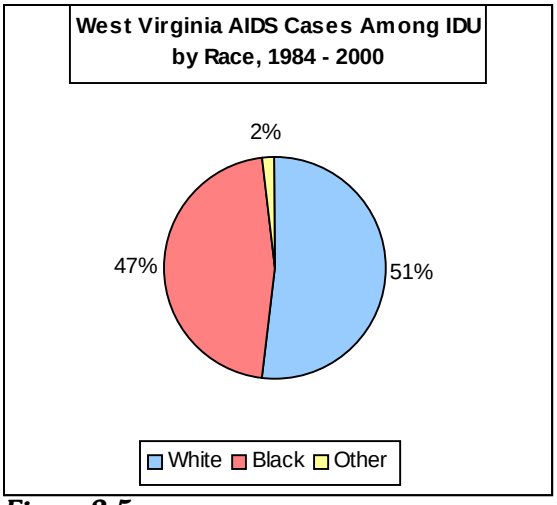


Figure 2.5

^ Due to number of AIDS cases being very small from 1984 though 1986, first period grouping consist of seven years of datas(1984-90).

***IDU**=**I**njecting **D**rug **U**ser.

West Virginia's reported AIDS cases with the risk behaviors IDU by age group for three 5-year aggregates of data are shown in Table 2.6. Most IDU appear to have predominantly occurred in the 30-39 and 40-49 age groups, combining for 83% of the cases. The 30-39 age group experienced an increase from (34 cases, 43%) in 1991-95 to (38 cases, 48%) in 1996-00. The 40-49 age group experienced slight increase in reported cases in the last two 5-year aggregates of data, (29 cases, 37%) and (30 cases, 38%), respectively (Table 2.6).

Table 2.7 displays the gender of West Virginia's reported IDU AIDS cases for three 5-year aggregates of data, 1984-90, 1991-95 and 1996-00. AIDS cases among females with IDU risk behavior experienced an increase from (20 cases, 25%) in 1991-95 to (24 cases, 30%) in 1996-00.

Most AIDS cases with an IDU risk behavior occurred among whites. Blacks have been disproportionately affected with IDU risk behavior 81 cases(47%), while the proportion of black vs white IDU cases has declined slightly(48% to 46%) in last period compared to previous one(Table 2.8).

West Virginia AIDS Cases Among Persons With Heterosexual Contact, by Age Group, Gender, and Race 1984-1990, 1991-1995, 1996-2000

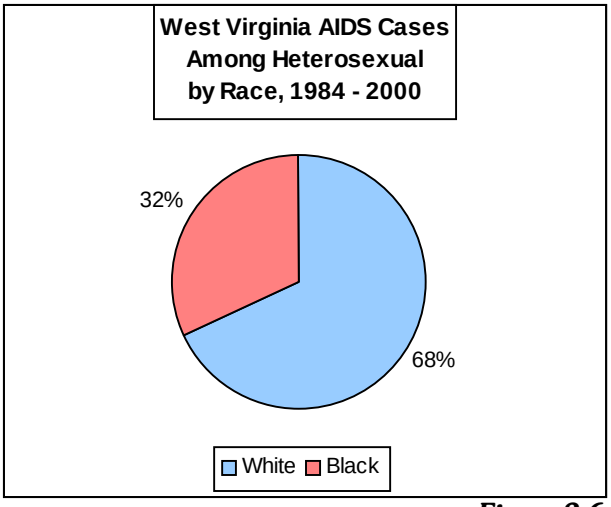


Figure 2.6

West Virginia AIDS Cases Among Heterosexual by Age Group, 1984 - 2000								
Age Group	1984-90^		1991-95		1996-00		Total	
	#	%	#	%	#	%	#	%
20-29	4	31	13	38	6	13	23	24
30-39	5	38	14	41	23	49	42	45
40-49	2	15	6	18	14	30	22	23
50+	2	15	1	3	4	9	7	7
Total Cases	**13**	**100**	**34**	**100**	**47**	**100**	**94**	**100**
% Cases	**14**		**36**		**50**		**100**	

Table 2.9

West Virginia AIDS Cases Among Heterosexuals by Gender, 1984 - 2000								
Gender	1984-90^		1991-95		1996-00		Total	
	#	%	#	%	#	%	#	%
Male	7	54	9	26	17	36	33	35
Female	6	46	25	74	30	64	61	65
Total Cases	**13**	**100**	**34**	**100**	**47**	**100**	**94**	**100**
% Cases	**14**		**36**		**50**		**100**	

Table 2.10

^ Due to number of AIDS cases being very small from 1984 though 1986, first period grouping consist of seven years of datas(1984-90).

West Virginia AIDS Cases Among Heterosexuals by Race, 1984 - 2000								
Race	1984-90^		1991-95		1996-00		Total	
	#	%	#	%	#	%	#	%
White	10	77	21	62	33	70	64	68
Black	3	23	13	38	14	30	30	32
Total Cases	**13**	**100**	**34**	**100**	**47**	**100**	**94**	**100**
% Cases	**14**		**36**		**50**		**100**	

Table 2.11

Tables 2.9, 2.10, 2.11, and Figure 2.6 display West Virginia AIDS cases reported with a risk behavior of heterosexual contact by age group, gender, and race respectively, for three 5-year aggregates data, 1984-90, 1991-95 and 1996-00.

Heterosexual contact AIDS cases mostly occurred among the 30-39 age group (45%) and secondly among the 20-29 age group (24%). In 1984-90, 69% of the cases occurred in these two age groups and inceased to 79% in 1990-94. The 30-39 is the predominant age groups among the Heterosexual contact (42 cases, 45%) (Table 2.9).

Although only 94 cases since 1984 were due to high risk heterosexual contact and a decline was seen among females (74% to 64%), the number of females reported continued to increase(6 to 25 to 30) for 65% of the total cases reported(Table 2.10).

The number of cases with heterosexual contact as a risk behavior continued to increase for whites and the number reported, though small numbers, for blacks (3 to 13 to 14)(Table 2.11). Heterosexaul contact accounts for 32% of AIDS cases among blacks.

West Virginia AIDS Cases by Age Group and Gender, through 2000

West Virginia AIDS Cases by Age Group and Gender, 1984-2000						
Age Group	Male		Female		Total	
	#	%	#	%	#	%
0-12	4	0	5	4	9	1
13-19	8	1	0	0	8	1
20-29	161	17	29	21	190	18
30-39	414	45	69	49	483	45
40-49	252	27	26	19	278	26
50+	90	10	11	8	101	9
Total Cases	**929**	**100**	**140**	**100**	**1069**	**100**
% Cases	**87**		**13**		**100**	

Table 3.12

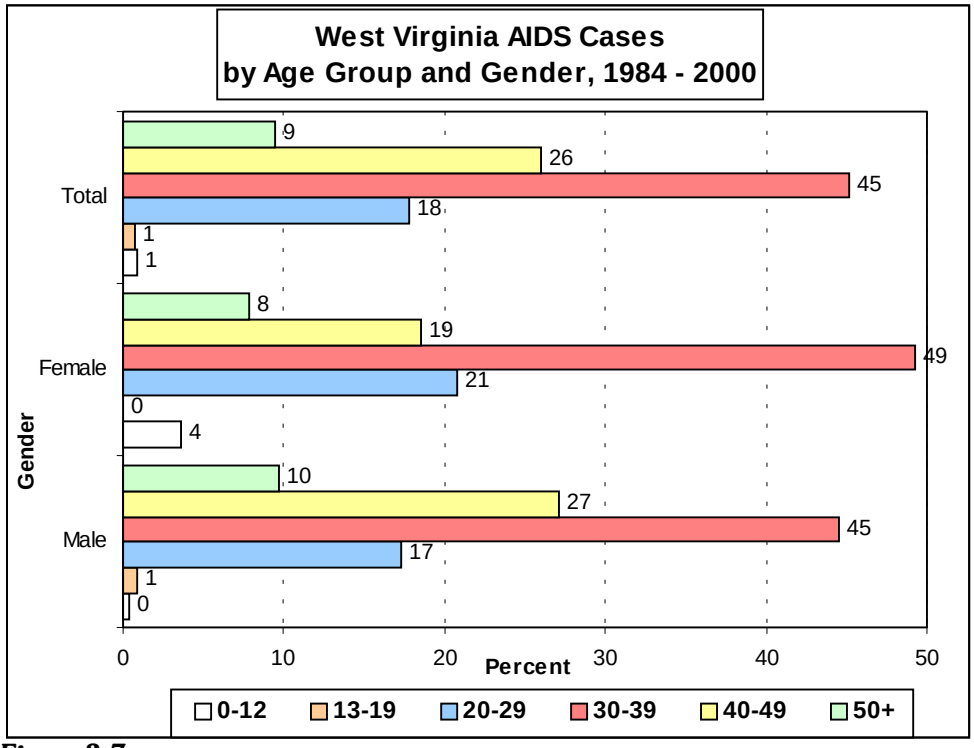


Figure 3.7

Data from 1984 through 2000 indicate that females accounted for 13% of the total reports of AIDS cases, while 27% of HIV infection cases(Table 4.1, page 46). Table 3.12 displays that percent of AIDS cases among females is higher in the 0-29 age group than among males in the same age group (25% to 18%) respectively. AIDS cases among males are more affected in 20-29 age groups(414 cases, 45%) followed by 30-39 age group (252 cases, 27%). The 30-39 age group reported 45% of total AIDS cases, followed by the 40-49 age group with 26% of cases (Table 3.12 and Figure 3.7).

West Virginia AIDS Cases by Age Group and Race, 1984 - 2000

West Virginia AIDS Cases by Age Group and Race, 1984 - 2000								
Age Group	White		Black		Other		Total	
	#	%	#	%	#	%	#	%
0-12	4	0	4	2	1	8	9	1
13-19	8	1	0	0	0	0	8	1
20-29	164	19	25	13	1	8	190	18
30-39	394	46	83	43	6	50	483	45
40-49	215	25	60	31	3	25	278	26
50+	78	9	22	11	1	8	101	9
Total Cases	**863**	**100**	**194**	**100**	**12**	**100**	**1069**	**100**
% Cases	**81**		**18**		**1**		**100**	

Table 3.13

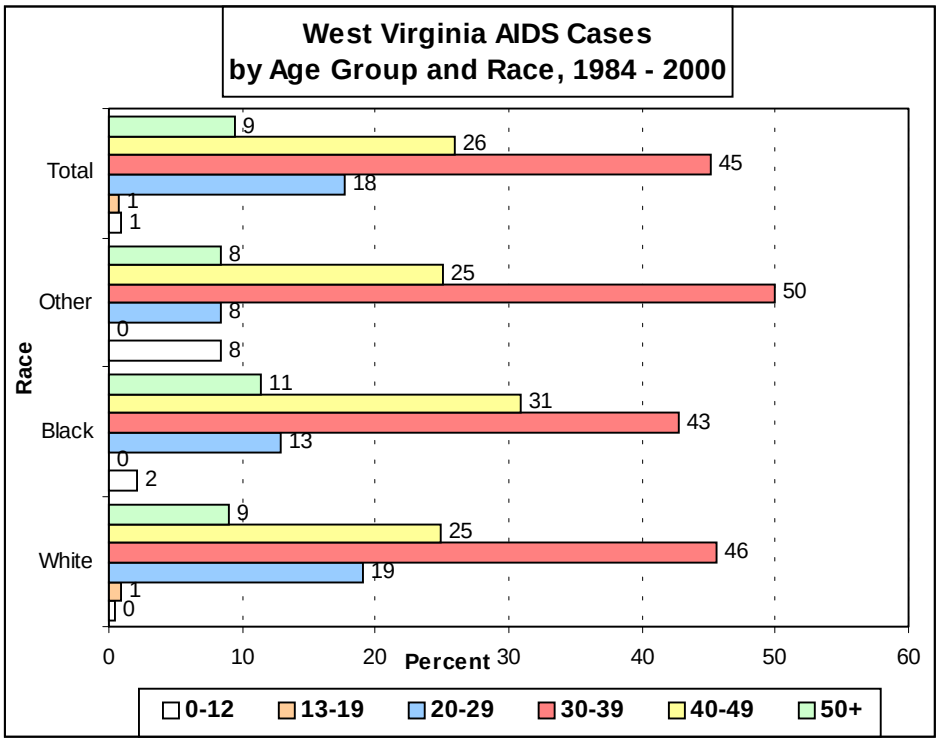


Figure 3.8

Table 3.12 and Figure 3.7 show AIDS cases by age group and race from 1984 through 2000. Total reported AIDS cases by race indicate that, blacks with AIDS in West Virginia were disproportionately affected, as they comprise 3% of the state's population and 18% of the AIDS cases reported. When looking at AIDS cases by age group and race, whites and blacks were more heavily affected in the 20-29 and 30-39 age groups (394 cases, 46% and 215 cases, 25%) for whites and (83 cases, 43% and 60 cases, 31%) for blacks.

West Virginia AIDS Cases by Risk Behavior and Gender 1984-1990*, 1991-1995, 1996-2000

West Virginia AIDS Cases Risk Behaviors and Gender Five-Year Aggregates, 1984-1990*, 1991-1995 and 1996-2000																		
Risk Behavior	1984 - 1990						1991 - 1995						1996 - 2000					
	Male		Female		Total		Male		Female		Total		Male		Female		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
MSM	103	65	0	0	103	58	241	63	0	0	241	55	254	66	0	0	254	56
IDU	11	7	5	28	16	9	59	15	20	35	79	18	55	14	24	37	79	17
MSM/IDU	8	5	0	0	8	5	29	8	0	0	29	7	27	7	0	0	27	6
Coagualtion Disorder	7	4	0	0	7	4	17	4	1	2	18	4	12	3	0	0	12	3
Heterosexual Contact	7	4	6	33	13	7	9	2	25	44	34	8	17	4	30	46	47	10
Transfusion/Transplant	15	9	5	28	20	11	5	1	5	9	10	2	2	1	2	3	4	1
Risk Not Specified	8	5	0	0	8	5	20	5	3	5	23	5	19	5	9	14	28	6
Mother with HIV Risk	0	0	2	11	2	1	3	1	3	5	6	1	1	0	0	0	1	0
TOTAL	**159**	**100**	**18**	**100**	**177**	**100**	**383**	**100**	**57**	**100**	**440**	**100**	**387**	**100**	**65**	**100**	**452**	**100**

Table 2.14

*Due to number of AIDS cases being very small from 1984 though 1986, first period grouping consist of seven years of datas(1984-90).

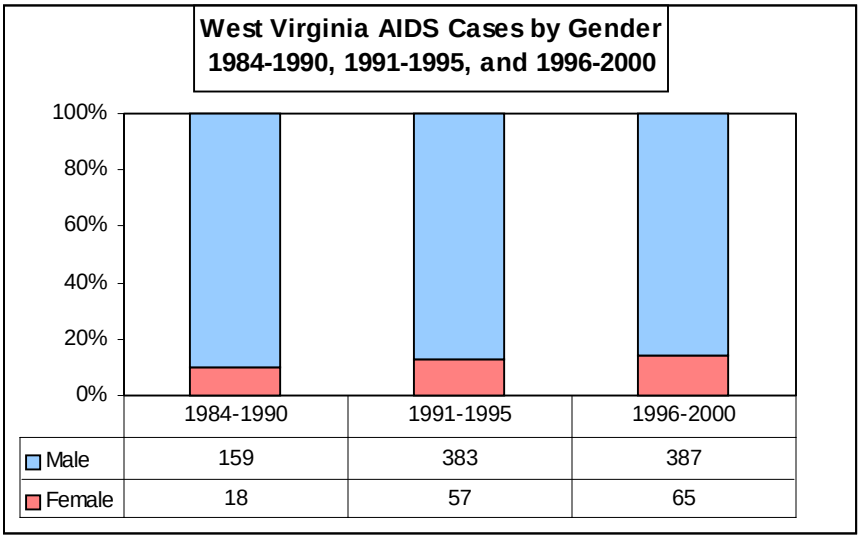


Figure 2.9

Table 2.14 lists AIDS cases by risk behavior and gender in three 5-year periods, 1984-90, 1991-95 and 1996-00. The trends for male AIDS cases when looking at risk behavior shows that MSM has basically remained the same (65% to 63% to 66%), throughout the three 5-year periods. IDU among male AIDS cases has increased with time from 7% in 1984-90 to 15% in 1991-95, but declined to 14% in 1996-00. Generally, however, across all risk behaviors from 1991-95 to 1996-00 little change has occurred.

The trends for females should be reviewed carefully due to the small numbers of cases reported (18, 57 and 65) during these three respective 5-year time periods. Heterosexual contact with an at-risk partner appears to have been the predominate and possibly increasing risk behavior among women. Heterosexual contact in females has gradually increased in these three time periods (6 cases, 33%), (25 cases, 44%), to (30 cases, 46%). The second highest risk behavior for women over these aggregated 5-year time periods was IDU (5 cases, 28%), (20 cases, 35%) and (24 cases, 37%), respectively.

West Virginia AIDS Cases by Risk Behavior and Gender, 1996-2000

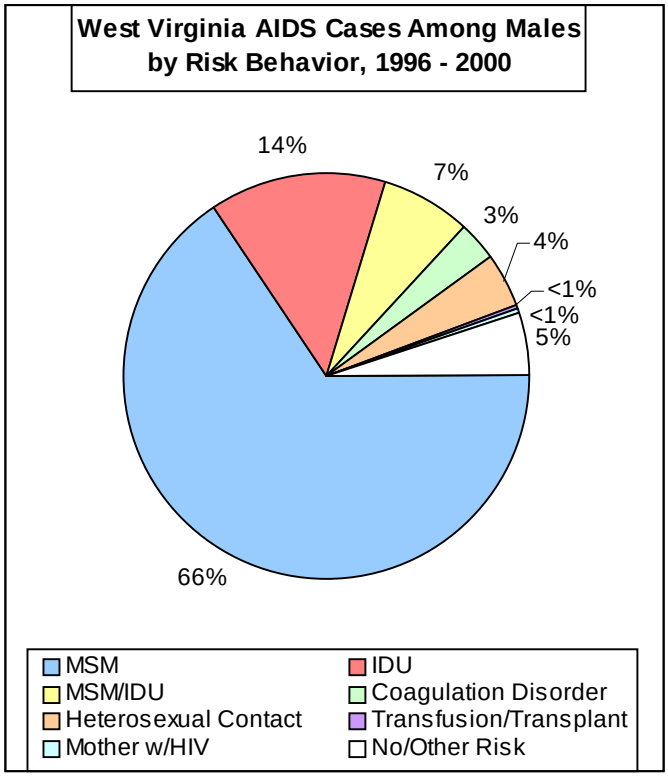


Figure 2.10

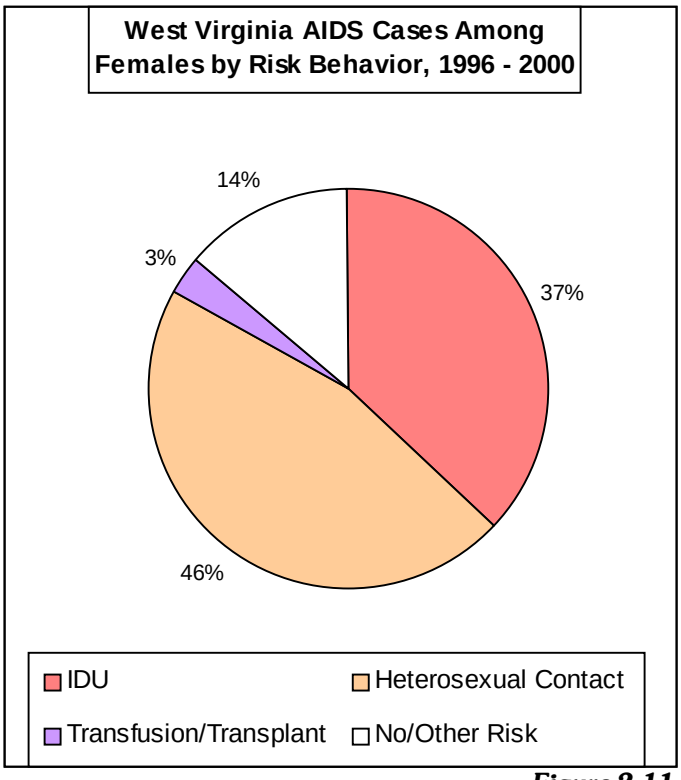


Figure 2.11

From 1996 through 2000, 66% of West Virginia's male AIDS cases reported MSM as their risk behavior followed by IDU (14%), MSM/IDU (7%), and heterosexual contact (4%). Eighty-seven percent of AIDS cases for males reported MSM and/or IDU as their risk behavior(Figure 2.10).

Figure 2.11 displays that during this 1996-2000 time period, 47% of females AIDS cases were predominately infected through heterosexual contact with an at-risk male. Thirty-seven percent of the female cases were reported with a risk of injecting drug use, compared to 14% among males.

West Virginia AIDS Cases by Risk Behavior and Race, 1996-2000

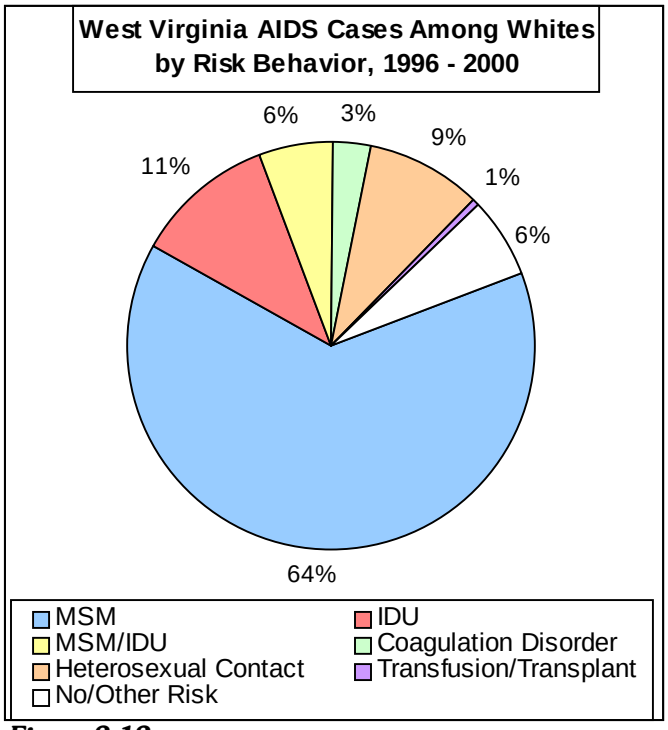


Figure 2.12

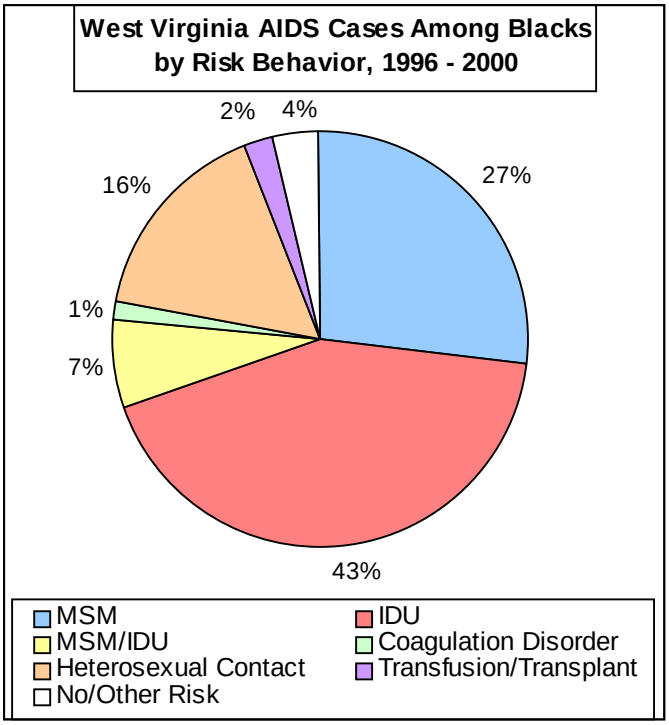


Figure 2.13

From 1996 through 2000, 64% of West Virginia's white AIDS cases reported MSM as their risk behavior (Figure 2.12), followed by IDU (11%), MSM/IDU (6%), and coagulation disorder (3%). Eighty-one percent of white AIDS cases reported MSM and/or IDU as their risk behavior, while only 77% of blacks were MSM and/or IDU.

Figure 2.13 displays that during this 1996-2000 time period, 43% of blacks reported with AIDS were predominately reported IDU as their risk behavior. Twenty-seven percent of the blacks were reported with MSM risk behavior, compared to 64% among whites. AIDS due to heterosexual contact accounted for 16% of the black cases, compared to 9% among white.

West Virginia AIDS Cases Among Males by Risk Behavior and Race, 1996 - 2000

West Virginia AIDS Cases Among Males by Risk Behavior and Race, 1996 - 2000								
Risk Behavior	White		Black		Other		Total	
	#	%	#	%	#	%	#	%
MSM	230	73	23	35	1	17	254	66
IDU	28	9	25	38	2	33	55	14
MSM/IDU	21	7	6	9	0	0	27	7
Coagulation Disorder	11	3	1	2	0	0	12	3
Heterosexual	8	3	9	14	0	0	17	4
Transfus/Transpl	1	0	1	2	0	0	2	1
Mother w/HIV	0	0	0	0	1	17	1	0
Risk Not Specified	16	5	1	2	2	33	19	5
Total Cases	**315**	**100**	**66**	**100**	**6**	**100**	**387**	**100**
% Cases	**81**		**17**		**2**		**100**	

Table 2.15

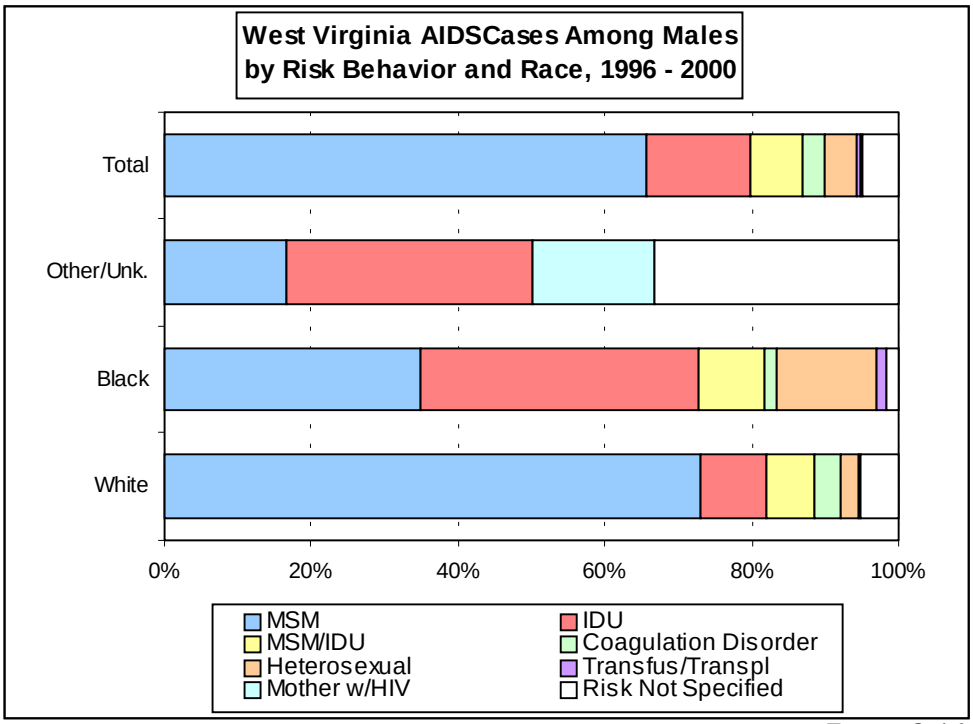


Figure 2.14

Table 2.15 and Figure 2.14 show five years of aggregated data for male AIDS cases by risk behavior and race for 1996-00. West Virginia's black males are disproportionately affected by the AIDS epidemic, as they accounted for 17% of the reported AIDS cases. The most predominant risk behavior for West Virginia's black male AIDS cases is IDU, accounting for 38% of the reported cases from 1996-00. The predominate risk behavior for white males is MSM, accounting for 73% of the reported cases. Primary HIV prevention education activities must address different risk behavior for black and white males.

West Virginia AIDS Cases Among Females by Risk Behavior and Race, 1996 - 2000

West Virginia AIDS Cases Among Females by Risk Behavior and Race, 1996 - 2000						
Risk Behavior	White		Black		Total	
	#	%	#	%	#	%
IDU	12	27	10	56	22	35
Heterosexual	24	55	5	28	29	47
Transfus/Transpl	0	0	1	6	1	2
Mother w/HIV	1	2	0	0	1	2
Risk Not Specified	7	16	2	11	9	15
Total Cases	**44**	**100**	**18**	**100**	**62**	**100**
% Cases	**71**		**29**		**100**	

Table 2.16

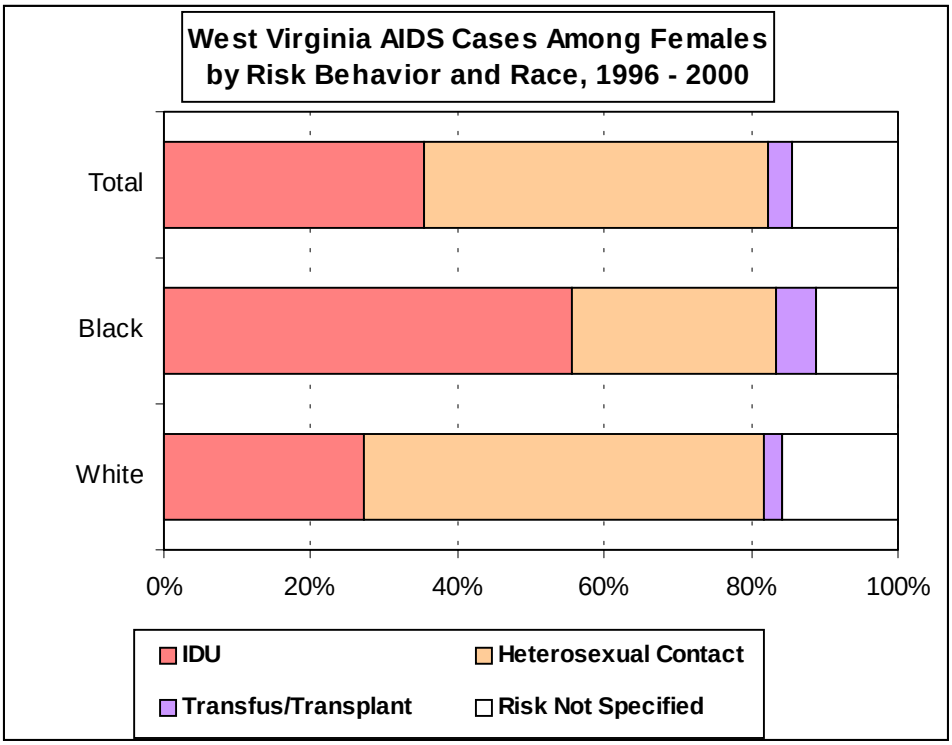
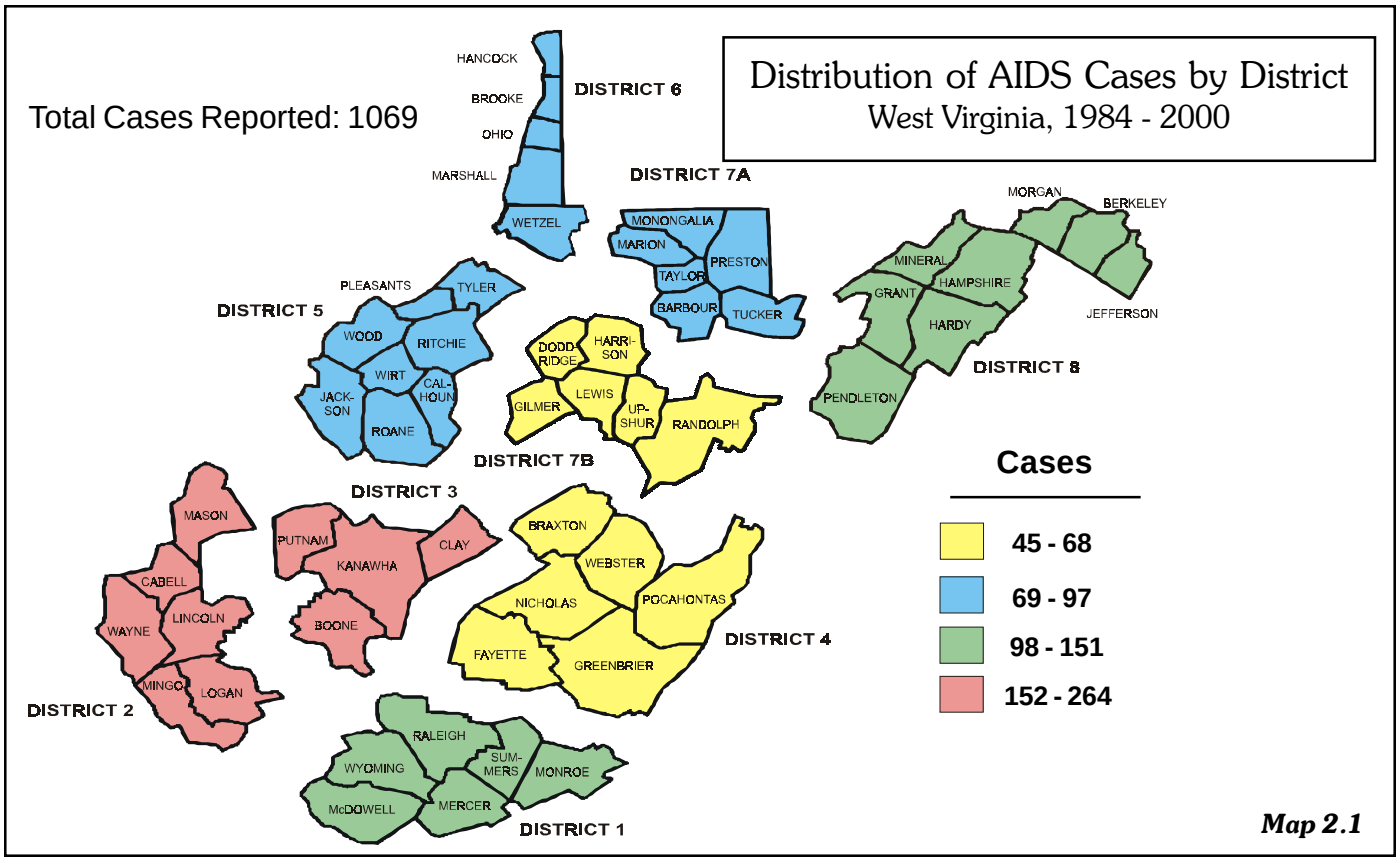
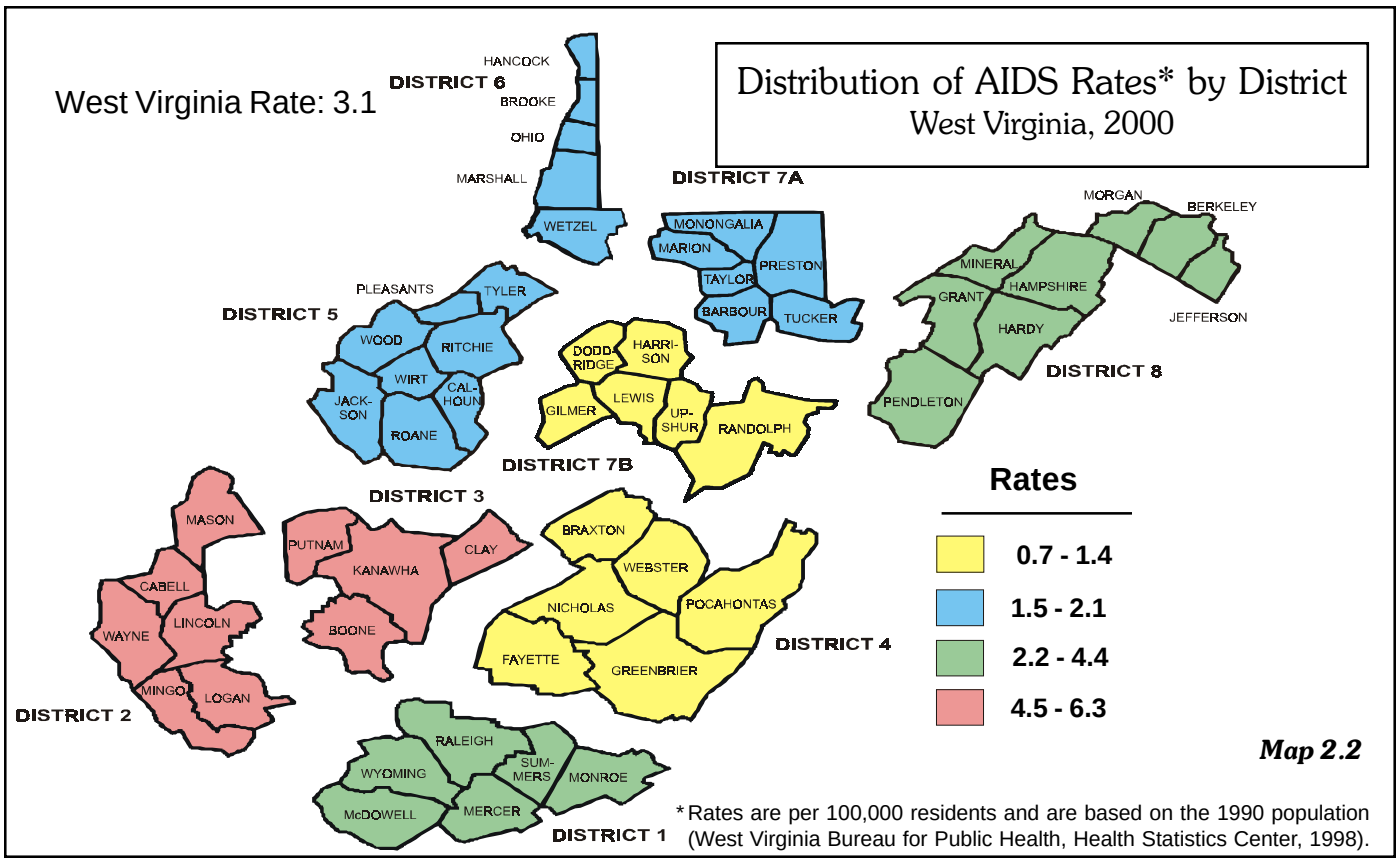


Figure 2.15

Table 2.16 and Figure 2.15 show five years of aggrregated data for female AIDS cases by risk behavior and race for 1996-00. This data identifies heterosexual contact with a high risk partner as the predominate risk behavior for white females (55%) and IDU for black females (56%). The IDU risk behavior appears to occur more for black females (56%) as compared to white females (27%). Table 2.14 shows that IDU is the most commonly reported risk behavior among black females(10 cases, 56%).

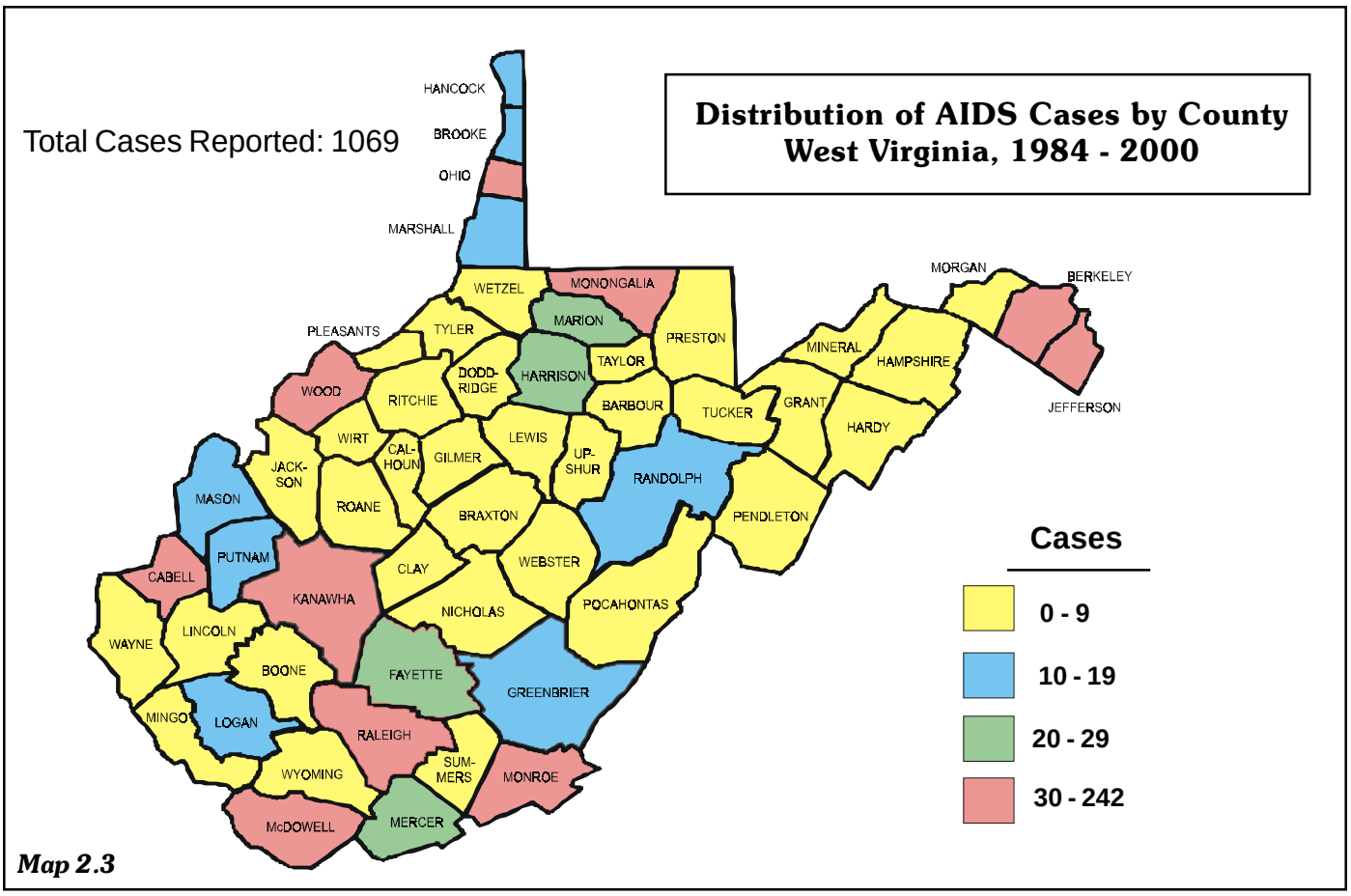


Map 2.1



Map 2.2

*Rates are per 100,000 residents and are based on the 1990 population (West Virginia Bureau for Public Health, Health Statistics Center, 1998).


Total Cases Reported: 1069
Distribution of AIDS Cases by County
West Virginia, 1984 - 2000
HANCOCK
BROOKE
OHIO
MARSHALL
WETZEL
MONONGALIA
MARION
PRESTON
PLEASANTS
TYLER
DODD-RIDGE
HARRISON
TAYLOR
WOOD
RITCHIE
BARBOUR
TUCKER
MORGAN
BERKELEY
MINERAL
HAMPSHIRE
GRANT
HARDY
JEFFERSON
WIRT
CAL-HOUN
GILMER
LEWIS
UP-SHUR
RANDOLPH
JACK-SON
MASON
ROANE
BRAXTON
PENDLETON
PUTNAM
CLAY
WEBSTER
CABELL
KANAWHA
NICHOLAS
POCAHONTAS
WAYNE
LINCOLN
BOONE
FAYETTE
GREENBRIER
MINGO
LOGAN
RALEIGH
WYOMING
SUM-MERS
MONROE
McDOWELL
MERCER
Cases
0 - 9
10 - 19
20 - 29
30 - 242

Map 2.3

Chapter 3:
HIV Infection Cases in West Virginia

West Virginia HIV Infection Cases
1989 - 2000

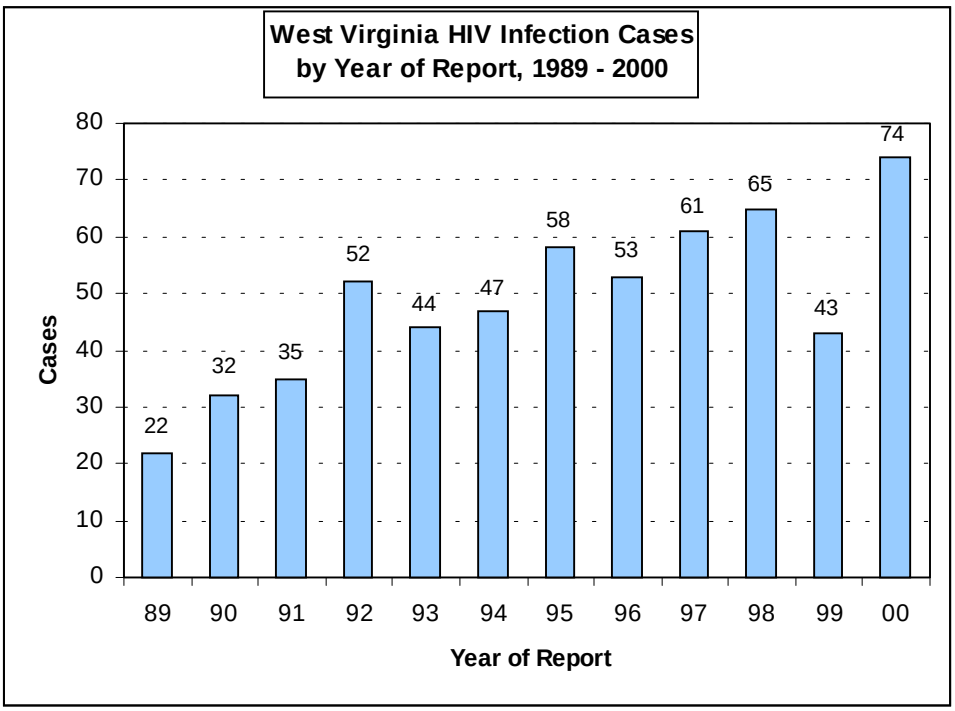


Figure 3.1

West Virginia HIV Infection Cases By Year of Report, 1989 - 2000													
Year of Report	**89**	**90**	**91**	**92**	**93**	**94**	**95**	**96**	**97**	**98**	**99**	**00**	**Total**
HIV Infection Cases	22	32	35	52	44	47	58	53	61	65	43	74	586

Table 3.1

The epidemic curve of reported HIV infection cases by year of report from 1989 through 2000 is displayed in Figure 3.1. Five-hundred eighty six cases of HIV infection were reported during this time period(Table 3.1). In 2000 HIV infection had a significant increase (72%) in reported infection cases compared to the previous year.

The face of HIV data is in constant change. When an individual reported with HIV antibodies is diagnosed with AIDS, the case is removed from this data set and added as an AIDS case. Rates are not calculated for HIV infection reports because case counts for HIV infection are believed to be less complete than reported AIDS cases. This can result from a person not knowing that he or she is HIV positive, or he or she can be asymptomatic and may not have been tested for HIV infection.

Active surveillance continues to monitor the status of the reported cases to determine if a change from HIV to AIDS has occurred. With the introduction of new medications to treat HIV disease, this data set will increase in importance as an indicator of prognosis of HIV-related infection to disease. It is speculated that the period of time from HIV to AIDS will widen as has been shown with the use of new anti-retrovirals, protease inhibitors, combination therapies, and increased prophylaxis for opportunistic infections which promise to lengthen the life-span of individuals living with HIV.

West Virginia Percent of HIV Infection Cases Comparison by Year of Report 1989-2000

The following items are noted from a review of Table 3.2:

- The 20-29 age group showed a decline from 1999 to 2000 (56% and 26%) but, still is the predominate age group among HIV infection cases. This age group represented the largest portion of reported HIV infection cases (39%), followed closely by the 30-39 age group (37%).
- HIV infection cases among whites continued to increase since 1994 but declined from 1998 to 1999 from 74% to 56% and increased in 2000 to 69%.
- Females cases decreased continously from 1994 to 1998 (38% to 25%)but increased in 1999 to 35% and declined again to 22% in 2000. Females were 27% of total HIV infection cases.
- The highest percentage of the reported HIV infection cases was among the MSM risk behavior (43%) followed by IDU(19%). MSM and IDU risk behaviors showed a decrease from 1998 to 1999 (51% and 23%) to (42% and 19%), while IDU remained the same(19%) MSM increased to 50% in 2000.
- Heterosexual contact risk behavior was 16% of HIV infection cases while only 9% of AIDS cases.

Caution should be exercised when interpreting this table. Percentages based on small numbers can fluctuate widely with minimal changes in occurrence. To keep things in perspective, refer to the total number of reported cases sited in the bottom row of the table.

West Virginia Percent of HIV Infection Cases Comparison by Year of Report, 1989 - 2000

Characteristic	89	90	91	92	93	94	95	96	97	98	99	00	Total	
Age Group	**Percent**												#	%
Under 5	0	0	0	0	2	0	0	0	0	2	2	1	**4**	**1**
5-12	0	0	0	0	0	0	0	0	0	2	0	0	**1**	**<1**
13-19	23	13	3	2	2	2	3	0	5	5	2	3	**24**	**4**
20-29	41	31	46	46	41	30	43	51	36	29	56	26	**227**	**39**
30-39	23	50	43	35	41	47	36	36	25	46	26	35	**216**	**37**
40-49	5	3	9	13	11	19	12	11	25	14	12	26	**87**	**15**
50+	9	3	0	4	2	2	5	2	10	3	2	9	**27**	**5**
Gender	**Percent**													
Male	68	63	71	73	80	62	76	74	75	75	65	78	**425**	**73**
Female	32	38	29	27	20	38	24	26	25	25	35	22	**160**	**27**
Race	**Percent**													
White	50	34	46	54	59	53	64	66	64	74	56	69	**351**	**60**
Black	36	56	49	38	36	45	29	32	36	26	42	20	**206**	**35**
Other/Unknown	14	9	6	8	5	2	7	2	0	0	2	11	**29**	**5**
Risk Behavior	**Percent**													
MSM	27	41	31	40	45	30	53	42	39	51	42	50	**250**	**43**
IDU	23	25	26	17	11	26	9	17	16	23	19	19	**109**	**19**
MSM/IDU	0	3	3	6	7	0	3	4	8	2	0	3	**20**	**3**
Adult Hemophilia	5	0	0	2	0	2	0	2	5	0	0	0	**7**	**1**
Heterosexual Contact	14	9	9	17	16	21	21	26	15	11	16	15	**95**	**16**
Transfusion	0	0	0	4	2	2	0	0	0	2	0	0	**5**	**1**
NIR*/Other	32	22	31	13	16	19	14	9	16	9	21	12	**95**	**16**
Pediatric	0	0	0	0	2	0	0	0	0	3	2	1	**5**	**1**
TOTAL CASES	**22**	**32**	**35**	**52**	**44**	**47**	**58**	**53**	**61**	**65**	**43**	**74**	**586**	**100**

*NIR=No Idendified Risk

Table 3.2

West Virginia HIV Infection Cases Among MSM* by Age Group and Race, 1989 - 1994 and 1995 - 2000

West Virginia HIV Infection Cases Among MSM* by Age Group, 1989 - 2000						
Age Group	1989-94		1995-00		Total	
	#	%	#	%	#	%
13-19	4	5	4	2	8	3
20-29	39	46	71	43	110	44
30-39	35	41	62	38	97	39
40-49	7	8	20	12	27	11
50+	0	0	8	5	8	3
Total Cases	**85**	**100**	**165**	**100**	**250**	**100**
% Cases	**34**		**66**		**100**	

Table 3.3

West Virginia HIV Infection Cases Among MSM* by Race, 1989 - 2000						
Race	1989-94		1995-00		Total	
	#	%	#	%	#	%
White	69	81	138	84	207	83
Black	12	14	23	14	35	14
Other	4	5	4	2	8	3
Total Cases	**85**	**100**	**165**	**100**	**250**	**100**
% Cases	**34**		**66**		**100**	

Table 3.4

*MSM = Men who have Sex with Men.

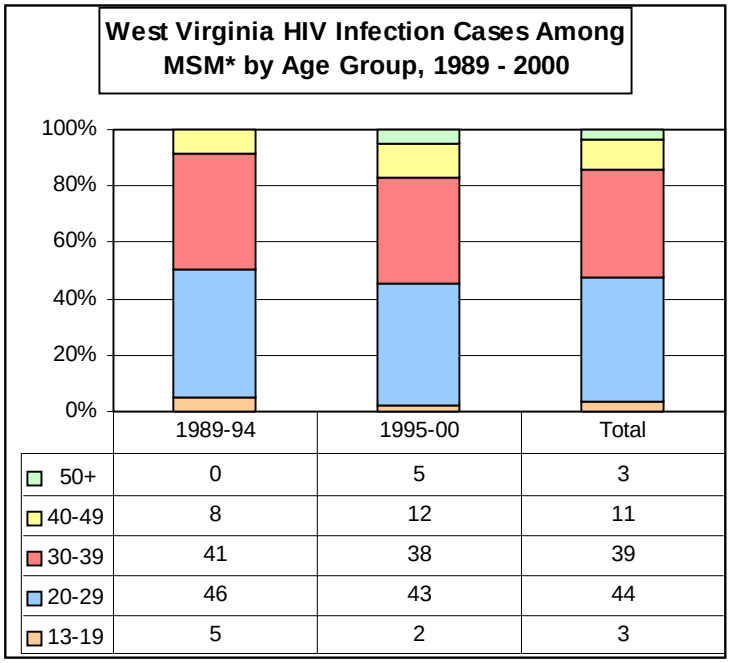


Figure 3.2

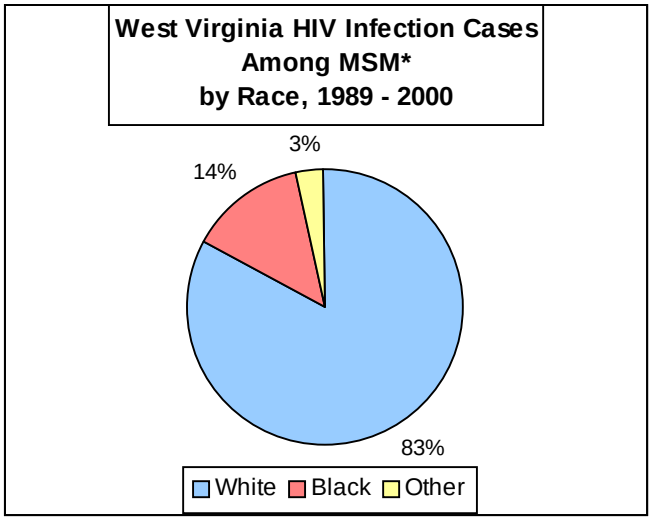


Figure 3.3

HIV infection among MSM are displayed in two 6-year aggregates of data by age groups in Table 3.3. Forty-five percent of HIV infection cases for MSM risk behavior were reported among 13-19 and 20-29 age groups in 1995-00 compared to 51% in the first time period. The 20-29 age group continues to have the highest percentage among MSM risk behavior with HIV infection (110 cases, 44%).

MSM who are HIV infected are compared in two 6-year groupings by race in Table 3.4. Overall, there was a 94% increase in MSM from the first time period to the second period. The total of white males reporting MSM as a risk behavior proportionately greater than black MSM males (83% to 14%). MSM risk behavior continues to be predominate risk of HIV infection among whites (83%).

West Virginia HIV Infection Cases Among IDU* by Age Group, Gender and Race, 1989 - 1994 and 1995-2000

West Virginia HIV Infection Among IDU* by Age Group, 1989 - 2000						
Age Group	1989-94		1995-00		Total	
	#	%	#	%	#	%
13-19	0	0	1	2	1	1
20-29	12	25	13	21	25	23
30-39	25	52	24	39	49	45
40-49	8	17	19	31	27	25
50+	3	6	4	7	7	6
Total Cases	**48**	**100**	**61**	**100**	**109**	**100**
% Cases	**44**		**56**		**100**	

Table 3.5

West Virginia HIV Infection Among IDU* by Gender, 1989 - 2000						
Gender	1989-94		1995-00		Total	
	#	%	#	%	#	%
Male	20	42	34	56	54	50
Female	28	58	27	44	55	50
Total Cases	**48**	**100**	**61**	**100**	**109**	**100**
% Cases	**44**		**56**		**100**	

Table 3.6

West Virginia HIV Infection Among IDU* by Race, 1989 - 2000						
Race	1989-94		1995-00		Total	
	#	%	#	%	#	%
White	8	17	28	46	36	33
Black	35	73	32	52	67	61
Other	5	10	1	2	6	6
Total Cases	**48**	**100**	**61**	**100**	**109**	**100**
% Cases	**44**		**56**		**100**	

Table 3.7

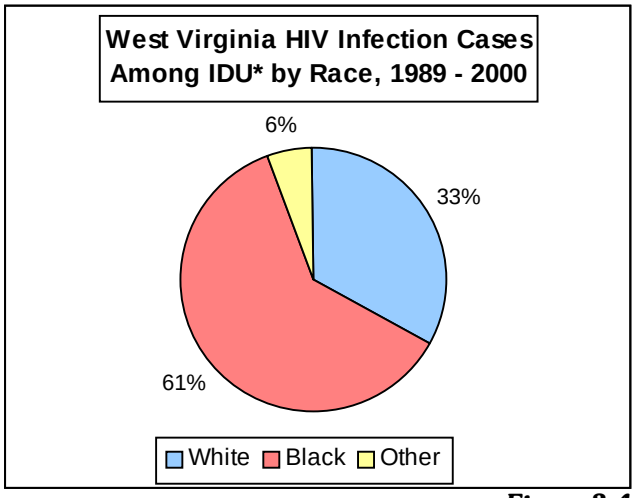


Figure 3.4

***IDU** = **I**njecting **D**rug **U**ser.

HIV infection among IDU in aggregation of two 6-year aggregates of data reported by age group, gender, and race are displayed in Tables 3.5, 3.6, and 3.7.

IDU HIV infection cases by age group appear to indicate that fewer cases are being reported in the 20-29 and 30-39 age groups (25% to 21% and 52% to 39%, respectively), while indicating that more cases are being reported in the 40-49 age group (17% to 31%) (Table 3.5).

Table 3.6 shows that total IDU risk behavior among females is higher than males(58% to 42%) in 1989-94 time period. There appears to have been a decrease in the percentage of IDU risk behavior among females from 1989-94 to 1995-00 (58% to 44%).

The total proportion of black IDUs (61%) was greater than whites (33%), although whites experienced an increase from 1989-94 (17%) to 1995-00 (46%) (Table 3.7).

West Virginia HIV Infection Cases Among Persons With Heterosexual Contact by Age Group, Gender, and Race 1989 - 1994 and 1995 - 2000

West Virginia HIV Infection Cases Among Heterosexuals by Age Group, 1989-2000						
Age Group	1989-94		1995-00		Total	
	#	%	#	%	#	%
13-19	1	3	3	5	4	4
20-29	13	37	27	45	40	42
30-39	12	33	17	28	29	31
40-49	6	16	8	13	14	15
50+	3	8	5	8	8	8
Total Cases	**35**	**97**	**60**	**100**	**95**	**100**
% Cases	**37**		**63**		**100**	

Table 3.8

West Virginia HIV Infection Cases Among Heterosexuals by Gender, 1989-2000						
Gender	1989-94		1995-00		Total	
	#	%	#	%	#	%
Male	12	34	12	20	24	25
Female	23	66	48	80	71	75
Total Cases	**35**	**100**	**60**	**100**	**95**	**100**
% Cases	**37**		**63**		**100**	

Table 3.9

West Virginia HIV Infection Cases Among Heterosexuals by Race, 1989-2000						
Race	1989-94		1995-00		Total	
	#	%	#	%	#	%
White	15	43	31	52	46	49
Black	17	49	24	40	41	43
Other	3	9	5	8	8	8
Total Cases	**35**	**100**	**60**	**100**	**95**	**100**
% Cases	**37**		**63**		**100**	

Table 3.10

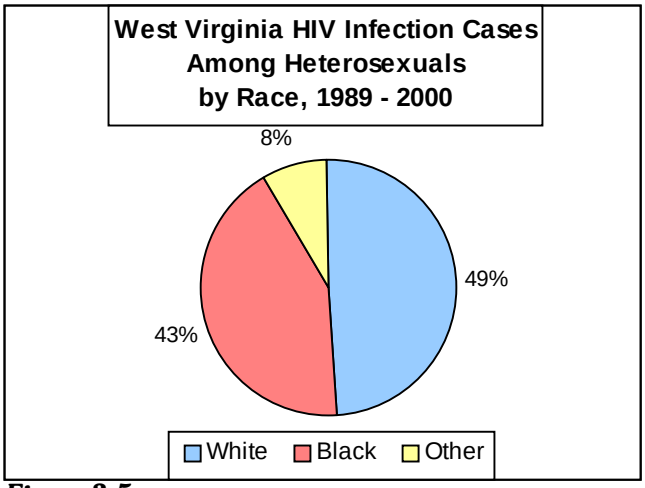


Figure 3.5

HIV infection cases among persons with heterosexual contact in aggregation of two 6-year aggregates of data reported by age group, gender, and race are displayed in Table 3.8, 3.9 and 3.10. Overall, HIV infection cases have increased 71% heterosexual contact cases in 1995-00 compared to 1989-94 time period(35 cases/37% to 60 cases/63%).

The 20-29 age group remained the highest reporting age group among persons with heterosexual contact risk behavior, accounting for (37% and 45%) of the reported case during the 1989-94 and 1995-00 time periods (Table 3.8).

From 1989-94 to 1995-00 time period, the heterosexual risk behavior increased among females (66% to 80%), as compared to males, who experienced a decrease from 34% to 20% (Table 3.9).

When considering race, white heterosexuals reported the highest occurrence of total HIV infection during 1989-00 (46 cases, 49%). Comparing each period, blacks declined proportionally from 49% of reported cases in 1989-94 to 40% in 1995-00. The occurrence of HIV infection among heterosexual whites increased from 43% in 1989-94 to 52% in 1995-00 (Table 3.10).

Note: Percent in columns and charts may not add up to 100% due to rounding.

West Virginia HIV Infection Cases by Age Group and Gender, 1989 - 2000

West Virginia HIV Infection Cases by Age Group and Gender, 1989 - 2000						
Age Group	Male		Female		Total	
	#	%	#	%	#	%
0-12	3	1	2	1	5	1
13-19	13	3	11	7	24	4
20-29	161	38	66	41	227	39
30-39	161	38	55	34	216	37
40-49	68	16	19	12	87	15
50+	20	5	7	4	27	5
Total Cases	**426**	**100**	**160**	**100**	**586**	**100**
% Cases	**73**		**27**		**100**	

Table 3.11

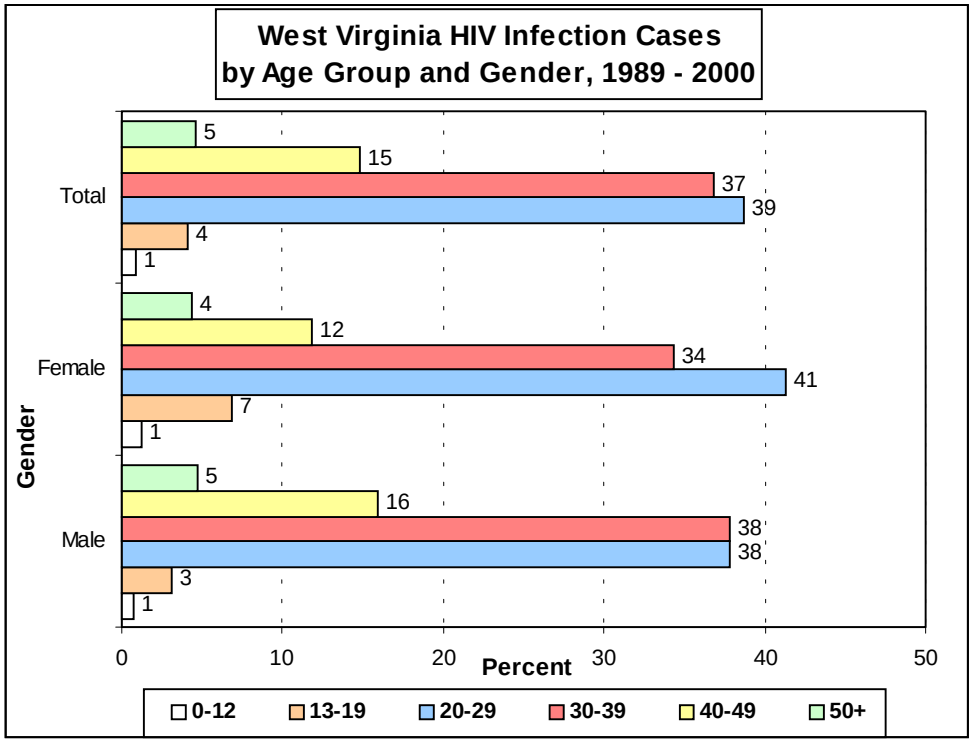


Figure 3.6

Data from 1989 through 2000 indicate that females accounted for 27% of the total reports of HIV infection, while displayed previously as only 13% of AIDS cases. Table 3.11 displays that HIV infection in females is higher in the 0-29 age group than in males in the same age group (49% to 42%) respectively. HIV infection cases among males are equaly affected in 20-29 and 30-39 age groups(161 cases, 38% for both age groups). The 20-29 age group reported 39% of total HIV infection cases, followed closely by the 30-39 age group with 37% of cases (Figure 3.6).

West Virginia HIV Infection Cases by Age Group and Race, 1989 - 2000

Table 3.12

West Virginia HIV Infection Cases by Age Group and Race, 1989 - 2000								
Age Group	White		Black		Other		Total	
	#	%	#	%	#	%	#	%
0-12	4	1	1	0	0	0	5	1
13-19	7	2	14	7	3	10	24	4
20-29	141	40	71	34	15	52	227	39
30-39	131	37	76	37	9	31	216	37
40-49	53	15	33	16	1	3	87	15
50+	15	4	11	5	1	3	27	5
Total Cases	**351**	**100**	**206**	**100**	**29**	**100**	**586**	**100**
% Cases	**60%**		**35%**		**5%**		**100%**	

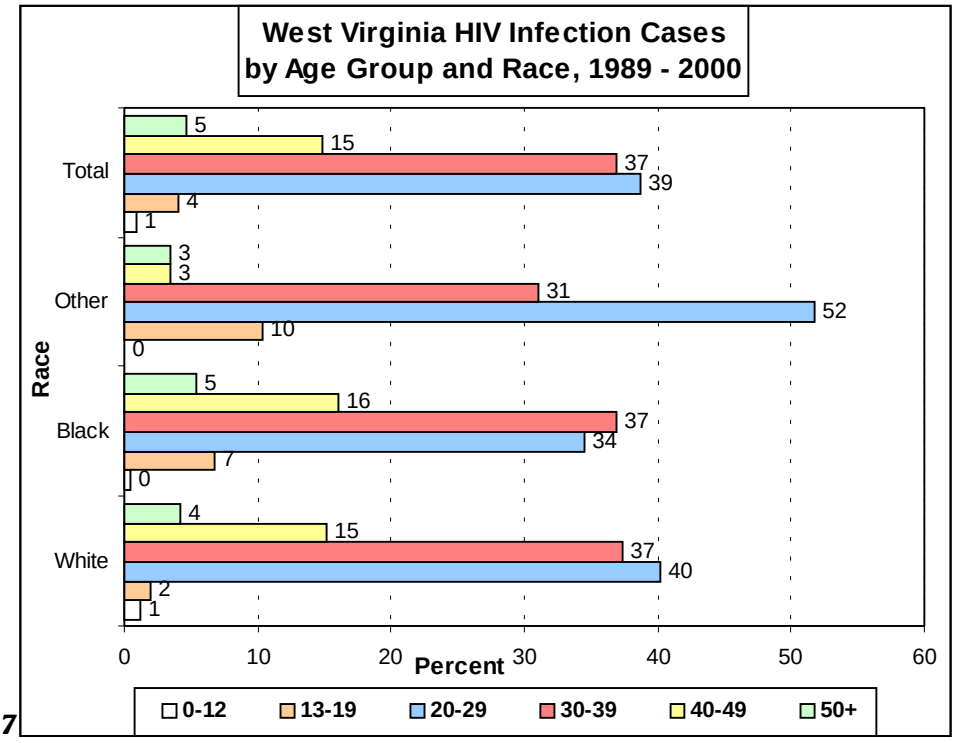


Figure 3.7

Table 3.12 and Figure 3.7 show HIV infection by age group and race from 1989 through 2000. Total HIV reports by race indicate that similar to AIDS, blacks with HIV infection in West Virginia were disproportionately affected, as they comprise 3% of the state's population and 35% of the HIV infection cases reported. When looking at HIV by age and race, whites and blacks were more heavily affected in the 20-29 and 30-39 age groups (141 cases, 40% and 131 cases, 37%) for whites and (71 cases, 34% and 76 cases, 37%) for blacks.

West Virginia HIV Infection Cases by Risk Behavior and Gender 1989 - 1995 and 1996 - 2000

West Virginia HIV Infection Cases by Risk Behaviors and Gender 1989-1994 and 1995-2000																		
Risk Behavior	1989 - 1994						1995 - 2000						Total					
	Male		Female		Total		Male		Female		Total		Male		Female		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
MSM	85	52	0	0	85	37	165	63	0	0	165	47	250	59	0	0	250	43
IDU	20	12	28	40	48	21	34	13	27	30	61	17	54	13	55	34	109	19
MSM/IDU	8	5	0	0	8	3	12	5	0	0	12	3	20	5	0	0	20	3
Coagualtion Disorder	3	2	0	0	3	1	4	2	0	0	4	1	7	2	0	0	7	1
Heterosexual Contact	12	7	23	33	35	15	12	5	48	53	60	17	24	6	71	44	95	16
Transfusion/Transplant	3	2	1	1	4	2	1	0	0	0	1	0	4	1	1	1	5	1
Mother with HIV Risk	1	1	0	0	1	0	2	1	2	2	4	1	3	1	2	1	5	1
Risk Not Specified	30	19	18	26	48	21	34	13	13	14	47	13	64	15	31	19	95	16
TOTAL	**162**	**100**	**70**	**100**	**232**	**100**	**264**	**100**	**90**	**100**	**354**	**100**	**426**	**100**	**160**	**100**	**586**	**100**

Table 3.13

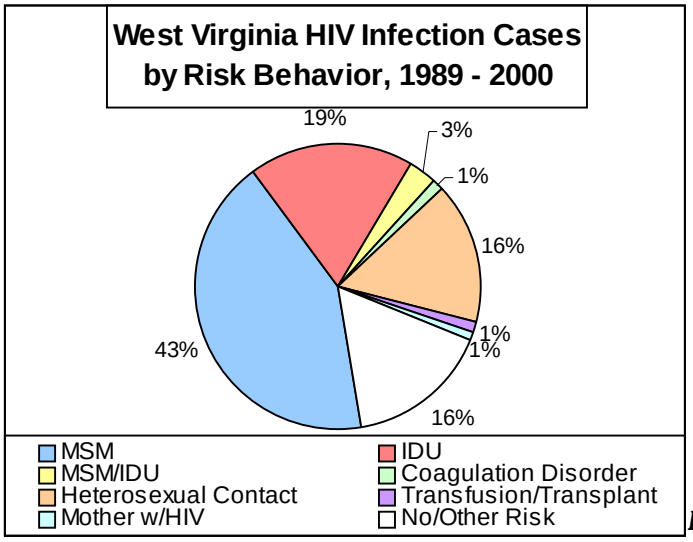


Figure 3.8

Table 3.13 shows HIV infection in these two 6-year aggregates of data by risk behavior and gender. The trend of risk behaviors for males has basically remained the same, with the predominate risk being MSM(43%) followed by IDU(19%). Reported HIV infection cases for females in the 1989-94 time period indicated IDU as the major risk behavior (40%) followed by heterosexual contact (33%). In the 1995-00 time period, heterosexual risk increased to 53% and continued to be the major risk behavior for females and IDU decreased to 30% in this time period. Among total male HIV infection cases, 76% were reported among MSM, IDU, and MSM/IDU. Only 6% of males were reported with high-risk heterosexual contact as a risk behavior. Females were reported mostly as heterosexual contact (44%) followed by IDU (34%). A high percentage of NIR (16%) indicates that people with HIV infection are initially reluctant to reveal their risk behavior or do not know the HIV status of their high risk behavior partners. Active surveillance, investigation, and follow-up are required for collecting more accurate risk behaviors.

Note: Percent in columns and pie charts may not add up to 100% due to rounding.

West Virginia HIV Infection Cases by Risk Behavior and Gender, 1989-2000

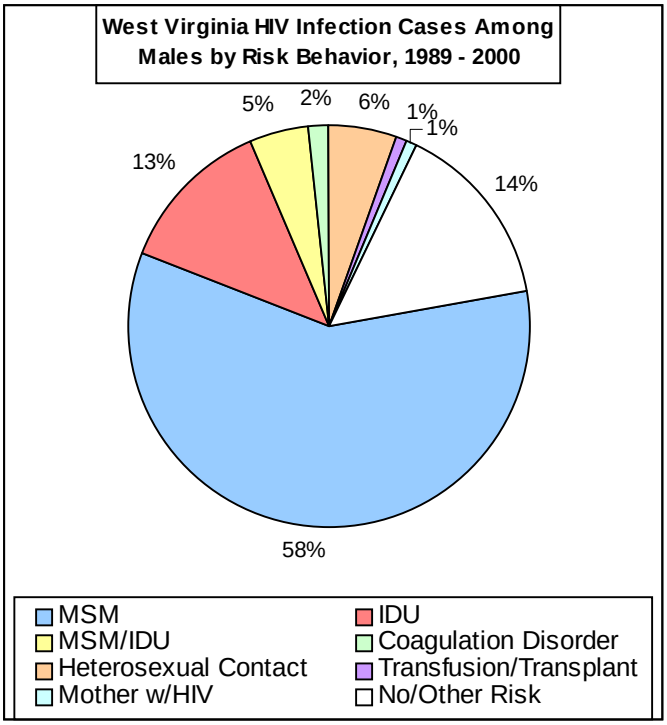


Figure 3.9

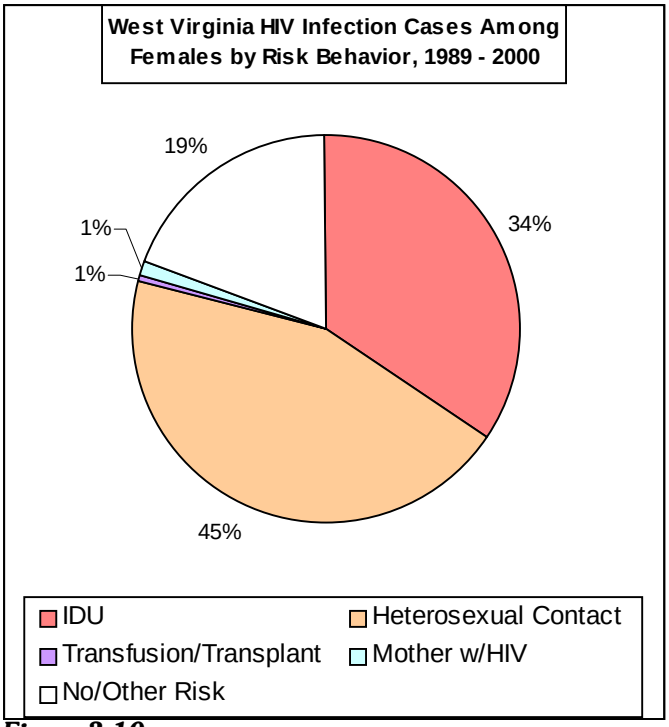


Figure 3.10

Figures 3.6 and 3.7 display proportion of HIV Infection cases among males and females by risk behavior through December 2000.

From 1989 through 2000, 58% of West Virginia's male HIV infection cases reported MSM as their risk behavior followed by IDU (13%), and heterosexual contact (6%). Seventy-six percent of HIV infection cases for males reported MSM and/or IDU as their risk behavior(Figure 3.9).

Figure 3.10 displays that during this same 1989-2000 time period, 45% of females HIV infection cases were predominately infected through heterosexual contact with an at-risk male. Thirty-four percent of the female cases were reported with a risk of injecting drug use, compared to 13% among males. HIV infection cases with no identified risk behavior seem higher among females than of the males, possibly due to females being more reluctant to reveal their risk behavior.

Note: Percent in columns and pie charts may not add up to 100% due to rounding.

West Virginia HIV Infection Cases by Risk Behavior and Race, 1989-2000

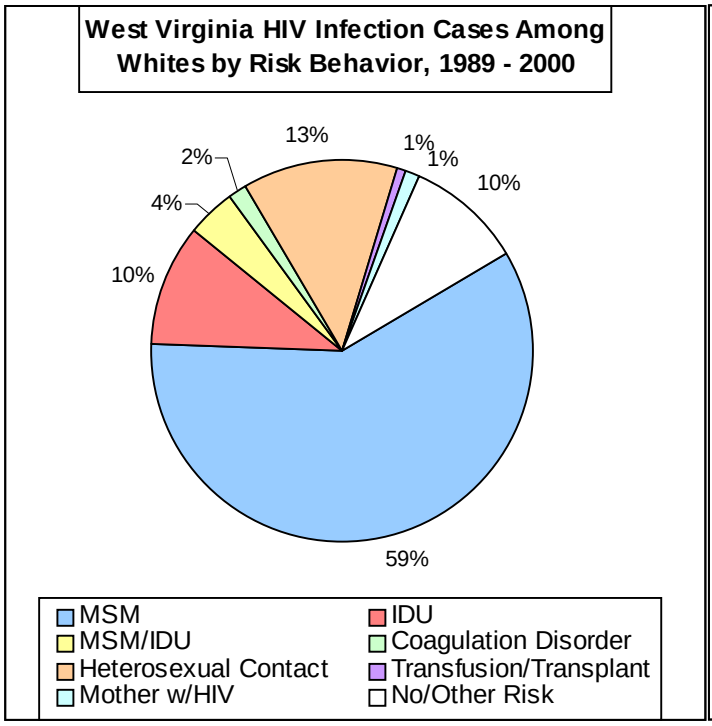


Figure 3.11

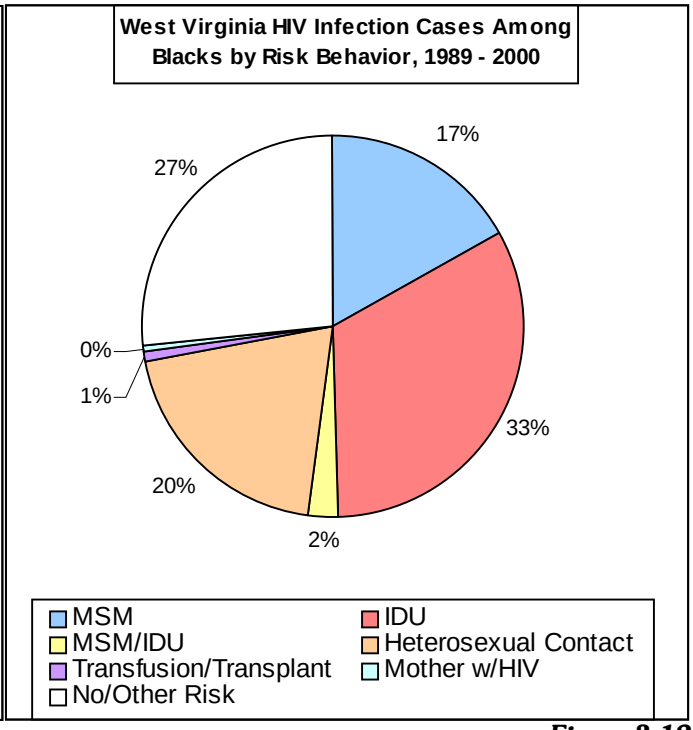


Figure 3.12

Figures 3.11 and 3.12 show distribution of West Virginia HIV infection cases among whites and blacks by risk behavior.

From 1989 through 2000, 59% of West Virginia's white HIV infection cases reported MSM as their risk behavior (Figure 3.6) followed by heterosexual contact (13%). Seventy-three percent of HIV infection cases for whites reported MSM and/or IDU as their risk behavior (Figure 3.8).

Figure 3.12 displays that during the same time period, 33% of blacks reported with HIV infection were predominately Injecting Drug Users (IDU). Seventeen percent of the blacks were reported with MSM risk behavior, compared to 59% among whites. HIV infection due to heterosexual contact accunted for 20% of the black cases, compared to 13% among white. HIV infection cases with no identified risk behavior seem higher among blacks than of the whites(27% to 10%).

Note: Percent in pie charts may not add up to 100% due to rounding.

West Virginia HIV infection Cases Among Males by Risk Behavior and Race, 1996 - 2000

Table 3.14

West Virginia HIV Infection Cases Among Males by Risk Behavior and Race, 1996-2000								
Risk Behavior	White		Black		Other		Total	
	#	%	#	%	#	%	#	%
MSM	110	70	20	36	4	50	134	61
IDU	17	11	14	25	1	13	32	15
MSM/IDU	8	5	2	4	0	0	10	5
Coagulation Disorder	4	3	0	0	0	0	4	2
Heterosexual Contact	3	2	7	13	0	0	10	5
Transfusion/Transplant	1	1	0	0	0	0	1	0
Mother with HIV Risk	1	1	1	2	0	0	2	1
Risk Not Specified	13	8	11	20	3	38	27	12
Total	**157**	**100**	**55**	**100**	**8**	**100**	**220**	**100**

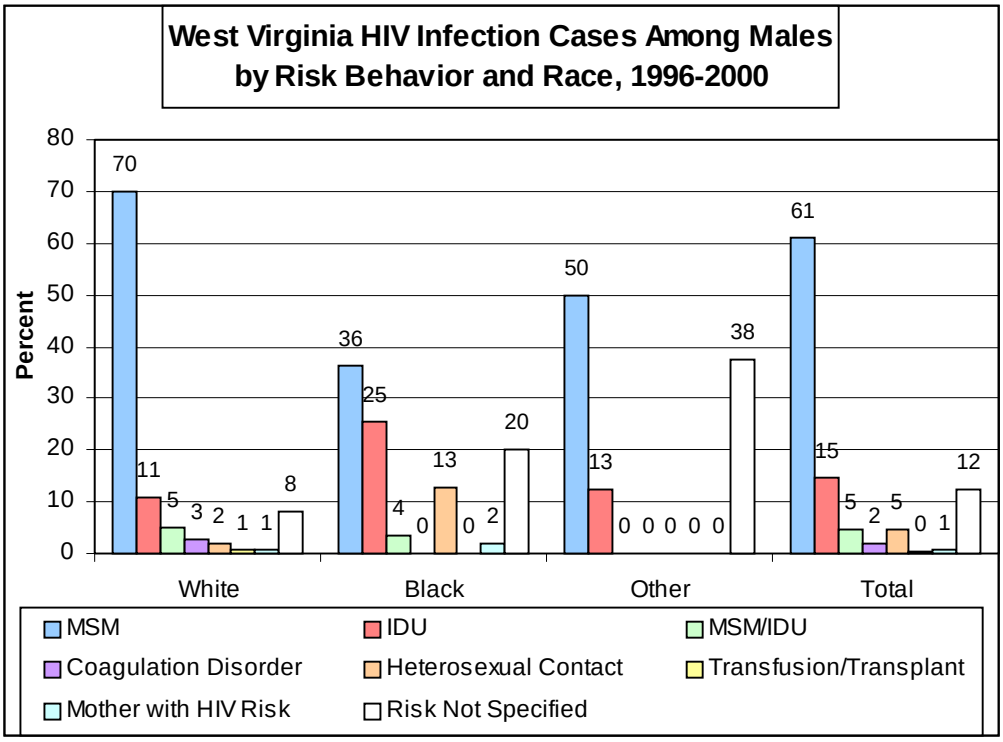


Figure 3.13

Table 3.14 and Figure 3.13 compare males by risk behaviors and race for acquiring HIV infection for 1996 through 2000. White males with HIV infection predominantly reported MSM (70%) as their risk behavior, while black males identified MSM (36%), IDU (25%), and heterosexual contact (13%). NIR's appeared in 27 of 220 reports (12%). The occurrence of NIR's and how they are investigated are explained in the technical notes.

West Virginia HIV infection Cases Among Females by Risk Behavior and Race, 1996 - 2000

West Virginia HIV Infection Cases Among Females by Risk Behavior and Race, 1996-2000								
Risk Behavior	White		Black		Other		Total	
	#	%	#	%	#	%	#	%
IDU	10	25	14	41	0	0	24	32
Heterosexual Contact	24	60	12	35	2	100	38	50
Mother with HIV Risk	2	5	0	0	0	0	2	3
Risk Not Specified	4	10	8	24	0	0	12	16
Total	**40**	**100**	**34**	**100**	**2**	**100**	**76**	**100**

Table 3.15

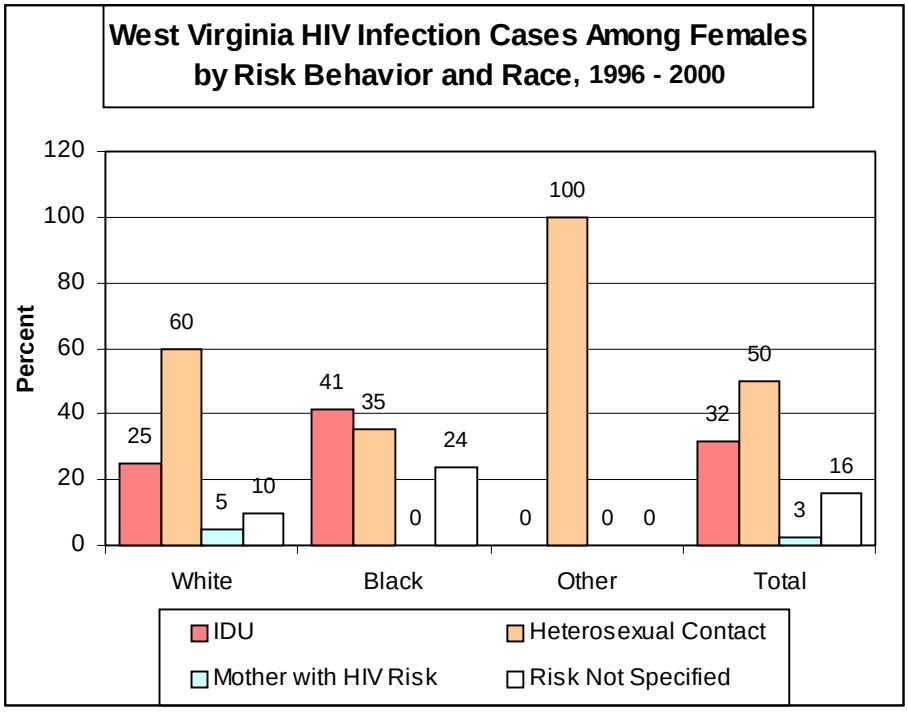
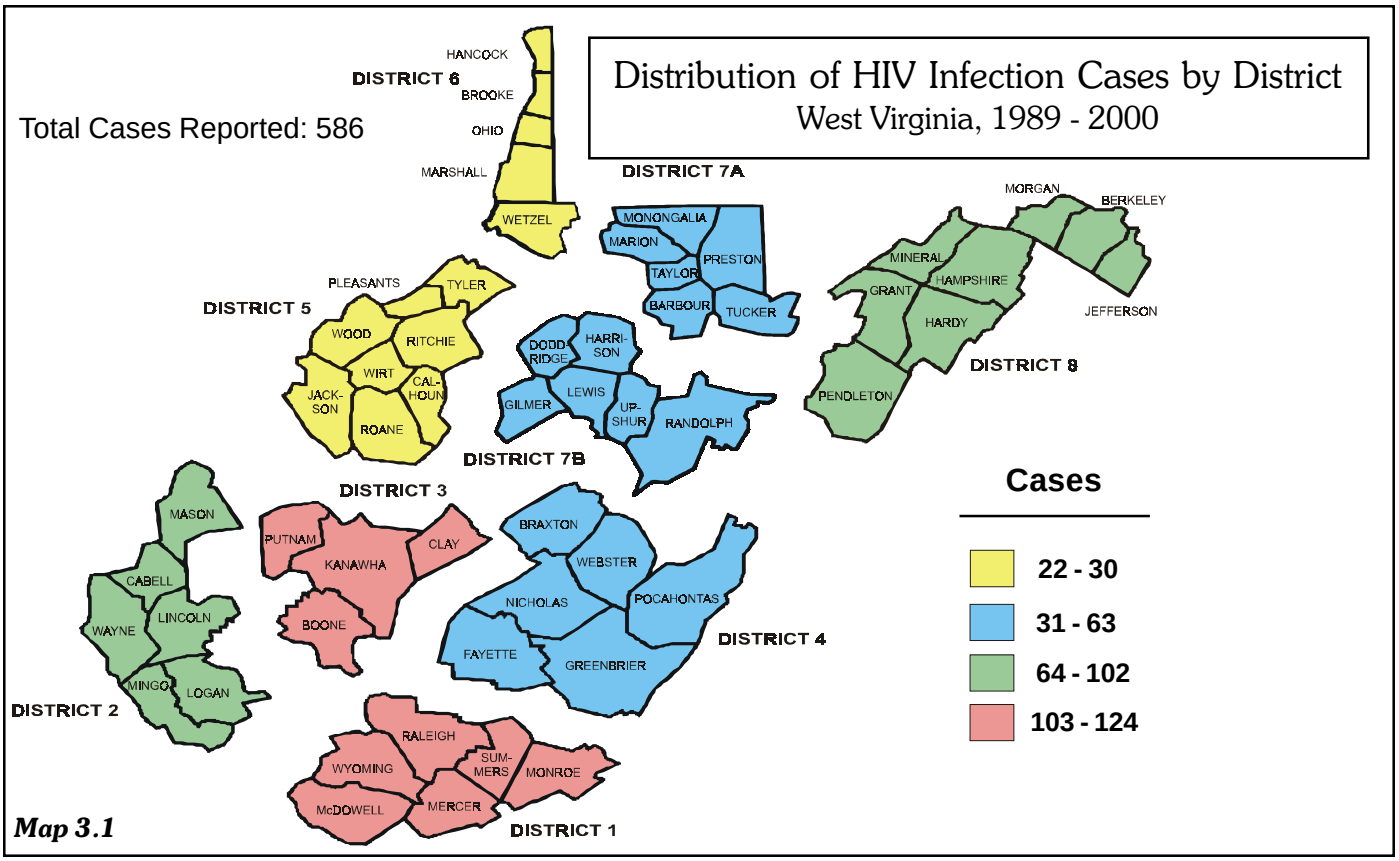


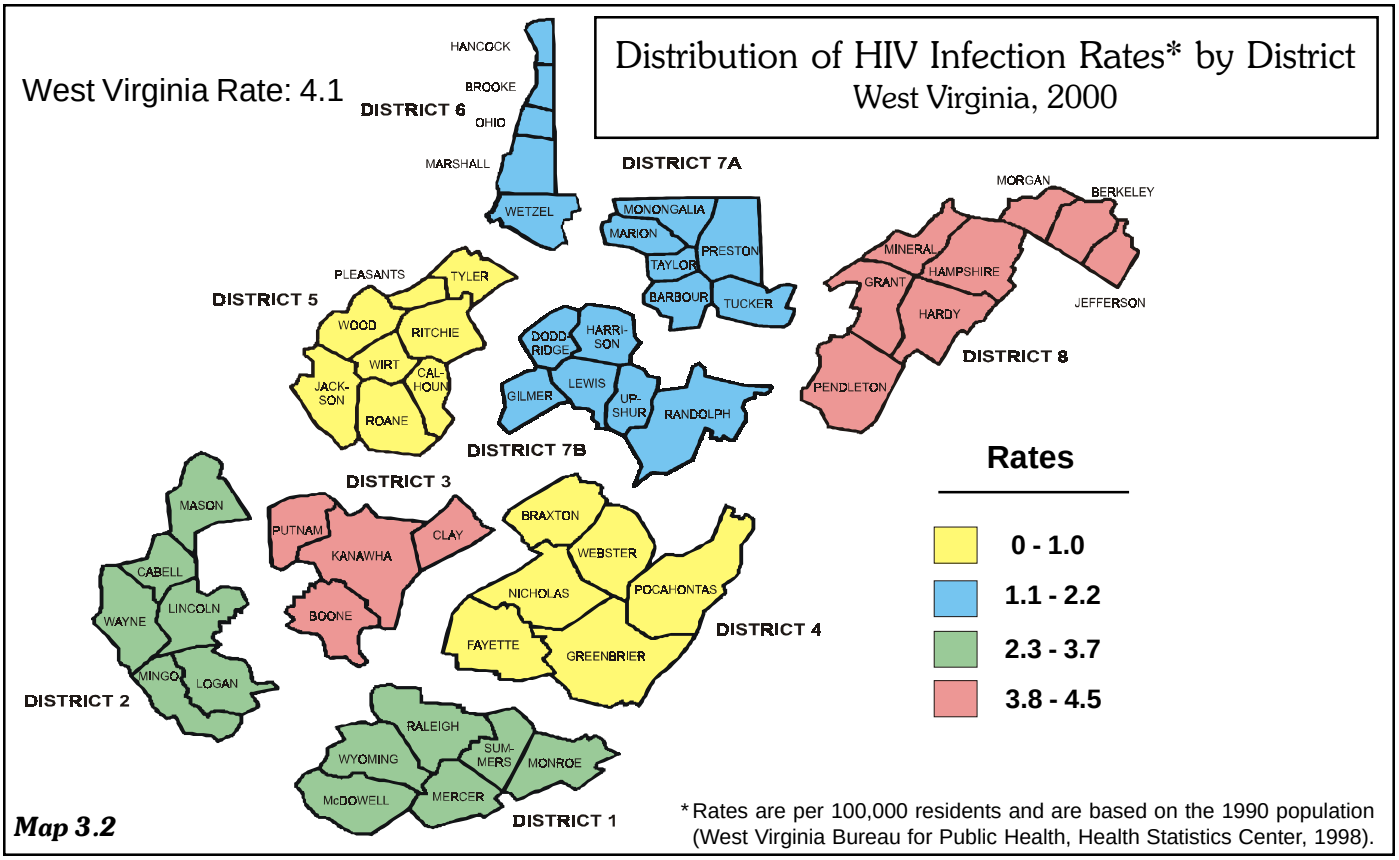
Figure 3.14

Table 3.15 and Figure 3.14 compare females HIV infection reports by risk behavior and race from 1996 through 2000. Heterosexual contact with a high-risk individual remained the most commonly identified risk behavior for both white and black females (60% and 35%, respectively). Keeping in mind that the numbers are very small, IDU appears to be a more frequently reported risk behavior for black females (41%) than for white females (25%). There were two female cases with heterosexual risk behavior belonging to the other race category.

Note: Percent in columns and may not add up to 100% due to rounding.

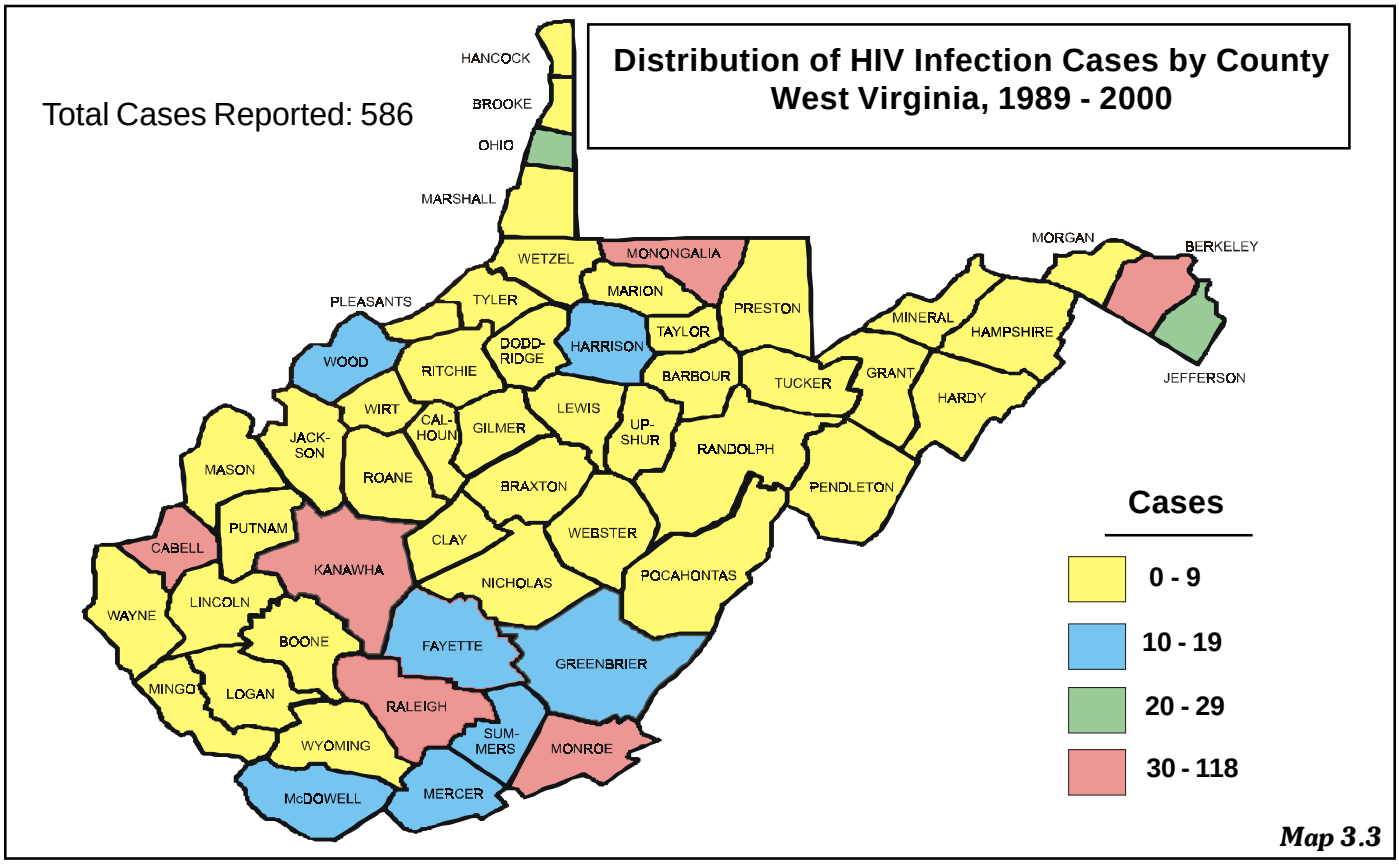


Map 3.1



Map 3.2

*Rates are per 100,000 residents and are based on the 1990 population (West Virginia Bureau for Public Health, Health Statistics Center, 1998).


Distribution of HIV Infection Cases by County
West Virginia, 1989 - 2000
Total Cases Reported: 586
HANCOCK
BROOKE
OHIO
MARSHALL
WETZEL
MONONGALIA
MARION
PRESTON
PLEASANTS
TYLER
TAYLOR
HARRISON
DODD-RIDGE
WOOD
RITCHIE
BARBOUR
TUCKER
WIRT
CAL-HOUN
GILMER
LEWIS
UP-SHUR
RANDOLPH
JACK-SON
ROANE
BRAXTON
MASON
PUTNAM
CLAY
WEBSTER
CABELL
KANAWHA
NICHOLAS
POCAHONTAS
WAYNE
LINCOLN
BOONE
FAYETTE
GREENBRIER
MINGO
LOGAN
RALEIGH
SUM-MERS
MONROE
WYOMING
McDOWELL
MERCER
PENDLETON
GRANT
HARDY
MINERAL
HAMPSHIRE
MORGAN
BERKELEY
JEFFERSON
Cases
0 - 9
10 - 19
20 - 29
30 - 118

Map 3.3

Notes:

Chapter 4:
HIV and AIDS Comparison

West Virginia AIDS and HIV Infection Cases by Age Group, Gender, Race, and Risk Behavior Cumulative through 2000*

The following items are noted from a review of Table 4.1:

- 18% of the AIDS cases are 20-29, but 41% of the HIV infection cases.
- AIDS cases appear older than HIV infection cases as shown in the 30-39 and 40-49 age groups(Table 4.1):
  - 45% AIDS cases are in the 30-39 age group, while 37% are HIV infection cases.
  - 26% AIDS cases are in the 40-49 age group, while 15% are HIV infection cases.
- 13% of AIDS cases are females and 27% of HIV infection cases.
- 18% of AIDS cases are black and 35% HIV infections cases, while comprising only 3% of the state's population.
- When comparing risk behavior for AIDS cases and HIV infection cases:
  - The MSM risk behavior accounted for 56% of adult AIDS cases, while this risk behavior accounted for 43% of adult HIV infection cases.
  - The heterosexual contact risk behavior accounted for 16% of adult HIV infection cases, while accounting for only 9% of adult AIDS cases.

West Virginia AIDS and HIV Infection Cases by Age Group, Gender, Race, and Risk Behavior Cumulative through 2000*

Characteristic	AIDS		HIV		Total	
Age Group	#	%	#	%	#	%
Under 5	7	1	4	1	11	1
5-12	2	<1	1	<1	3	<1
13-19	8	1	24	4	32	2
20-29	190	18	227	39	417	25
30-39	483	45	216	37	699	42
40-49	278	26	87	15	365	22
50+	101	9	27	5	128	8
Gender						
Male	929	87	426	73	1355	82
Female	140	13	160	27	300	18
Race						
White	863	81	351	60	1214	73
Black	194	18	206	35	400	24
Other/Unknown	12	1	29	5	41	2
Risk Behavior						
Adult						
MSM	598	56	250	43	848	52
IDU	174	16	109	19	283	17
MSM/IDU	64	6	20	3	84	5
Coagulation Disorder	37	3	7	1	44	3
Heterosexual Contact	94	9	95	16	189	12
Transfusion/Transplant	34	3	5	1	39	2
No Identified Risk	6	1	5	1	11	1
Other^	53	5	90	15	143	9
Subtotal	**1060**	**100**	**581**	**100**	**1641**	**100**
Pediatric						
Coagulation Disorder	1	11	0	0	1	7
Mother HIV Positive	8	89	5	100	13	93
Subtotal	**9**	**100**	**5**	**100**	**14**	**100**
TOTAL CASES	**1069**	**100**	**586**	**100**	**1655**	**100**

Table 4.1

MSM = **M**en having **S**ex With **M**en; **IDU** = **I**njecting **D**rug **U**ser

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.

^ Other risk behavior includes cases reported with no risk identified that have been closed to follow-up.

Note: Percent in columns may not add up to 100% due to rounding

West Virginia People Livinig with HIV/AIDS by Age Group, Gender, Race, and Risk Behavior, through 2000*

Table 4.2 displays cumulative number of **P**eople **L**iving **W**ith **H**IV/**A**IDS (**PLWHA**), the following items are noted:

- The 20-29 age group among people living with AIDS and HIV reported 16% of the AIDS cases, but 39% of the HIV infection cases and 28% of PLWHA.
- People living with AIDS are older than those living with HIV infection as shown in the 30-39 and 40-49 age groups(Table 4.2):
  - In the 30-39 age group 45% of people living with AIDS, while 37% living with HIV infection and 40% PLWHA.
  - In the 40-49 age group 30% of people living with AIDS, while 15% living with HIV infection.
- Among females 14% living with AIDS and 28% living with HIV infection.
- When comparing risk behavior for AIDS cases and HIV infection cases:
  - The MSM risk behavior accounted for 56% of adults living with AIDS, while it is accounted for 43% of adult living withHIV infection and 49% of PLWHA.
  - The heterosexual contact risk behavior accounted for 17% of adult living with HIV infection, while accounting for only 10% of adult living with AIDS.

West Virginia People Living with HIV/AIDS by Age Group, Gender, Race, and Risk Behavior, through 2000*

Characteristic	AIDS		HIV		PLWHA	
Age Group	#	%	#	%	#	%
Under 5	4	1	4	1	8	1
5-12	0	0	1	<1	1	<1
13-19	4	<1	24	4	28	3
20-29	73	16	215	39	288	28
30-39	204	45	204	37	408	40
40-49	137	30	84	15	221	22
50+	35	8	24	4	59	6
Gender						
Male	393	86	402	72	795	78
Female	64	14	154	28	218	22
Race						
White	360	79	330	59	690	68
Black	89	19	198	36	287	28
Other/Unknown	8	2	28	5	36	4
Risk Behavior						
Adult						
MSM	255	56	239	43	494	49
IDU	78	17	101	18	179	18
MSM/IDU	30	7	17	3	47	5
Coagulation Disorder	12	3	5	1	17	2
Heterosexual Contact	47	10	92	17	139	14
Transfusion/Transplant	3	<1	5	1	8	1
No Identified Risk	6	1	7	1	13	1
Other^	22	5	85	15	107	11
Subtotal	**453**	**99**	**551**	**100**	**1004**	**100**
Pediatric						
Coagulation Disorder	0	0	0	0	0	0
Mother HIV Positive	4	100	5	100	9	100
Subtotal	**4**	**100**	**5**	**100**	**9**	**100**
TOTAL CASES	**457**	**100**	**556**	**100**	**1013**	**100**

Table 4.2

MSM = **M**en having **S**ex With **M**en; **IDU** = **I**njecting **D**rug **U**ser

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.

^ Other risk behavior includes cases reported with no risk identified that have been closed to follow-up.

Note: Percent in columns may not add up to 100% due to rounding

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS Cases, by Age Group and Gender, 1984 - 2000*

Eighty-seven percent of all AIDS and 73% HIV infection cases occurred among males, while 13% and 27% occurred among females respectively(Table 4.3). AIDS cases among the males and females in 30-39 age group was most affected, male 45% and female 49%, while HIV infection more occurred in 20-29 age group for females(41%).

Table 4.4 shows that males and females among people living with HIV/AIDS, the age group most affected was the 30-39 age group. Forty-four percent of AIDS and 38% of HIV infection cases were reported among 30-39 age group for males and 47% of AIDS and 33% of HIV infection cases among the same age group for females. Males among people living with AIDS in 40-49 age group is 31% compare to 25% of females in same age group.

West Virginia AIDS and HIV Infection Cases Comparison by Age Group and Gender, 1984 - 2000*

Age Group	Male						Female						Total	
	AIDS		HIV		Total		AIDS		HIV		Total			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
0-12	4	0	3	1	7	1	5	4	2	1	7	2	**14**	**1**
13-19	8	1	13	3	21	2	0	0	11	7	11	4	**32**	**2**
20-29	161	17	161	38	322	24	29	21	66	41	95	32	**417**	**25**
30-39	414	45	161	38	575	42	69	49	55	34	124	41	**699**	**42**
40-49	252	27	68	16	320	24	26	19	19	12	45	15	**365**	**22**
50+	90	10	20	5	110	8	11	8	7	4	18	6	**128**	**8**
Total Cases	**929**	**100**	**426**	**100**	**1355**	**100**	**140**	**100**	**160**	**100**	**300**	**100**	**1655**	**100**
% AIDS/HIV	**87**		**73**				**13**		**27**				**100**	
% Male/Female	**82**						**18**						**100**	

Table 4.3

West Virginia People Living with HIV/AIDS by Age Group and Gender, 1984 - 2000*

Age Group	Male						Female						Total	
	AIDS		HIV		Total		AIDS		HIV		Total			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
0-12	3	1	3	1	6	1	1	2	2	1	3	1	**9**	**1**
13-19	4	1	13	3	17	2	0	0	11	7	11	5	**28**	**3**
20-29	60	15	150	37	210	26	13	20	65	42	78	36	**288**	**28**
30-39	174	44	153	38	327	41	30	47	51	33	81	37	**408**	**40**
40-49	121	31	65	16	186	23	16	25	19	12	35	16	**221**	**22**
50+	31	8	18	4	49	6	4	6	6	4	10	5	**59**	**6**
Total Cases	**393**	**100**	**402**	**100**	**795**	**100**	**64**	**100**	**154**	**100**	**218**	**100**	**1013**	**100**
% AIDS/HIV	**86**		**72**				**14**		**28**				**100**	
% Male/Female	**78**						**22**						**100**	

Table 4.4

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS Cases, by Age Group and Race, 1984 - 2000*

AIDS cases reported from 1984 through 2000 disproportionately affected blacks. Blacks comprise 3% of West Virginia's population, but were 18% of total AIDS and 35% of HIV infection cases reported (Table 4.5).

Among the people younger than forty years of age(0-39 age group), AIDS cases among whites were primarily younger than blacks(66% to 58%). This trend is also true for people living with AIDS (64%to 53%). The 30-39 age group among PLWHA should be targeted(40%) followed by 20-29 age group(29%) (Table 4.6).

West Virginia AIDS and HIV Infection Cases Comparison by Age Group and Race, 1984 - 2000*

Age Group	White						Black						Other						Total	
	AIDS		HIV		Total		AIDS		HIV		Total		AIDS		HIV		Total			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
0-12	4	0	4	1	8	1	4	2	1	0	5	1	1	8	0	0	1	2	**10**	**1**
13-19	8	1	7	2	15	1	0	0	14	7	14	4	0	0	3	10	3	7	**22**	**2**
20-29	164	19	141	40	305	25	25	13	71	34	96	24	1	8	15	52	16	39	**345**	**25**
30-39	394	46	131	37	525	43	83	43	76	37	159	40	6	50	9	31	15	37	**580**	**43**
40-49	215	25	53	15	268	22	60	31	33	16	93	23	3	25	1	3	4	10	**295**	**22**
50+	78	9	15	4	93	8	22	11	11	5	33	8	1	8	1	3	2	5	**103**	**8**
Total Cases	**863**	**100**	**351**	**100**	**1214**	**100**	**194**	**100**	**206**	**100**	**400**	**100**	**12**	**100**	**29**	**100**	**41**	**100**	**1355**	**100**
% AIDS/HIV	**81**		**60**				**18**		**35**				**1**		**5**				**100**	
% Race	**90**						**7**						**3**						**100**	

Table 4.5

West Virginia People Living with HIV/AIDS by Age Group and Race, 1984 - 2000*

Age Group	White						Black						Other						Total	
	AIDS		HIV		Total		AIDS		HIV		Total		AIDS		HIV		Total			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
0-12	1	0	4	1	5	1	2	2	1	1	3	1	1	13	0	0	1	3	**9**	**1**
13-19	4	1	7	2	11	2	0	0	14	7	14	5	0	0	3	11	3	8	**28**	**3**
20-29	65	18	130	39	195	28	7	8	70	35	77	27	1	13	15	54	16	44	**288**	**28**
30-39	163	45	124	38	287	42	38	43	72	36	110	38	3	38	8	29	11	31	**408**	**40**
40-49	100	28	51	15	151	22	35	39	32	16	67	23	2	25	1	4	3	8	**221**	**22**
50+	27	8	14	4	41	6	7	8	9	5	16	6	1	13	1	4	2	6	**59**	**6**
Total Cases	**360**	**100**	**330**	**100**	**690**	**100**	**89**	**100**	**198**	**100**	**287**	**100**	**8**	**100**	**28**	**100**	**36**	**100**	**1013**	**100**
% AIDS/HIV	**79**		**59**				**19**		**36**				**2**		**5**				**100**	
% Race	**68**						**28**						**4**						**100**	

Table 4.6

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS Cases, by Risk Behavior and Race, 1984 - 2000*

Tables 4.7 and 4.8 display cumulative AIDS and HIV infection cases and people living with HIV/AIDS by Risk Behavior and race through December 31, 2000. Whites among MSM risk behavior were most affected by the AIDS and HIV epidemic, as they accounted for 63% of the reported AIDS cases and 59% of HIV infection cases. The risk behavior most impacting West Virginia's black HIV/AIDS cases was IDU, accounting for 42% of AIDS and 33% of HIV reported cases compared to 47% of blacks living with AIDS and 31% living with HIV infection. The predominate risk behavior for white males was MSM, accounting for 63% of the reported white male cases and 65% of MSM living with AIDS.

West Virginia AIDS and HIV Infection Cases Comparison by Risk Behavior and Race, 1984 - 2000*

Risk Behavior	White						Black						Other						Total	
	AIDS		HIV		Total		AIDS		HIV		Total		AIDS		HIV		Total			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
MSM	543	63	207	59	750	62	51	26	35	17	86	22	4	33	8	28	12	29	**848**	**51**
IDU	90	10	36	10	126	10	81	42	67	33	148	37	3	25	6	21	9	22	**283**	**17**
MSM/IDU	55	6	14	4	69	6	9	5	5	2	14	4	0	0	1	3	1	2	**84**	**5**
Coagulation Disorder	36	4	6	2	42	3	1	1	0	0	1	0	0	0	1	3	1	2	**44**	**3**
Heterosexual Contact	64	7	46	13	110	9	30	15	41	20	71	18	0	0	8	28	8	20	**189**	**11**
Transfusion/Transpla	29	3	3	1	32	3	5	3	2	1	7	2	0	0	0	0	0	0	**39**	**2**
Mother with HIV Risk	4	0	4	1	8	1	4	2	1	0	5	1	1	8	0	0	1	2	**14**	**1**
Risk Not Specified	42	5	35	10	77	6	13	7	55	27	68	17	4	33	5	17	9	22	**154**	**9**
Total Cases	**863**	**100**	**351**	**100**	**1214**	**100**	**194**	**100**	**206**	**100**	**400**	**100**	**12**	**100**	**29**	**100**	**41**	**100**	**1655**	**100**
% HIV/AIDS	**81**		**60**				**18**		**35**				**1**		**5**				**100**	
% Race	**73.4**						**24.2**						**2.5**						**100**	

Table 4.7

West Virginia People Living with HIV/AIDS by Risk Behavior and Race, 1984 - 2000*

Risk Behavior	White						Black						Other						Total	
	AIDS		HIV		Total		AIDS		HIV		Total		AIDS		HIV		Total			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
MSM	234	65	197	60	431	62	19	21	34	17	53	18	2	25	8	29	10	28	**494**	**49**
IDU	35	10	35	11	70	10	42	47	61	31	103	36	1	13	5	18	6	17	**179**	**18**
MSM/IDU	25	7	11	3	36	5	5	6	5	3	10	3	0	0	1	4	1	3	**47**	**5**
Coagulation Disorder	11	3	4	1	15	2	1	1	0	0	1	0	0	0	1	4	1	3	**17**	**2**
Heterosexual Contact	32	9	43	13	75	11	15	17	41	21	56	20	0	0	8	29	8	22	**139**	**14**
Transfusion/Transplar	2	1	3	1	5	1	1	1	2	1	3	1	0	0	0	0	0	0	**8**	**1**
Mother with HIV Risk	1	0	4	1	5	1	2	2	1	1	3	1	1	13	0	0	1	3	**9**	**1**
Risk Not Specified	20	6	33	10	53	8	4	4	54	27	58	20	4	50	5	18	9	25	**120**	**12**
Total Cases	**360**	**100**	**330**	**100**	**690**	**100**	**89**	**100**	**198**	**100**	**287**	**100**	**8**	**100**	**28**	**100**	**36**	**100**	**1013**	**100**
% HIV/AIDS	**79**		**59**				**19**		**36**				**2**		**5**				**100**	
% Race	**68**						**28**						**4**						**100**	

Table 4.8

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS Cases, by Year of Report, 1984-2000*

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS by Year of Report, through 2000*

Year Reported	AIDS			HIV (Not AIDS)			Total		
	Total	Alive		Total	Alive		Total	Alive	
		#	%		#	%		#	%
1984-88	**68**	2	0	**0**	0	0	**68**	2	3
1989	**55**	4	7	**22**	20	91	**77**	24	31
1990	**54**	3	6	**32**	29	91	**86**	32	37
1991	**71**	5	7	**35**	30	86	**106**	35	33
1992	**45**	5	11	**52**	50	96	**97**	55	57
1993	**100**	19	19	**44**	43	98	**144**	62	43
1994	**95**	37	39	**47**	43	91	**142**	80	56
1995	**129**	59	46	**58**	56	97	**187**	115	61
1996	**121**	77	64	**53**	51	96	**174**	128	74
1997	**119**	91	76	**61**	57	93	**180**	148	82
1998	**94**	67	71	**65**	61	94	**159**	128	81
1999	**62**	53	85	**43**	43	100	**105**	96	91
2000	**56**	35	63	**74**	73	99	**130**	108	83
Total	**1,069**	**457**	**43**	**586**	**556**	**95**	**1,655**	**1,013**	**61**

Table 4.9

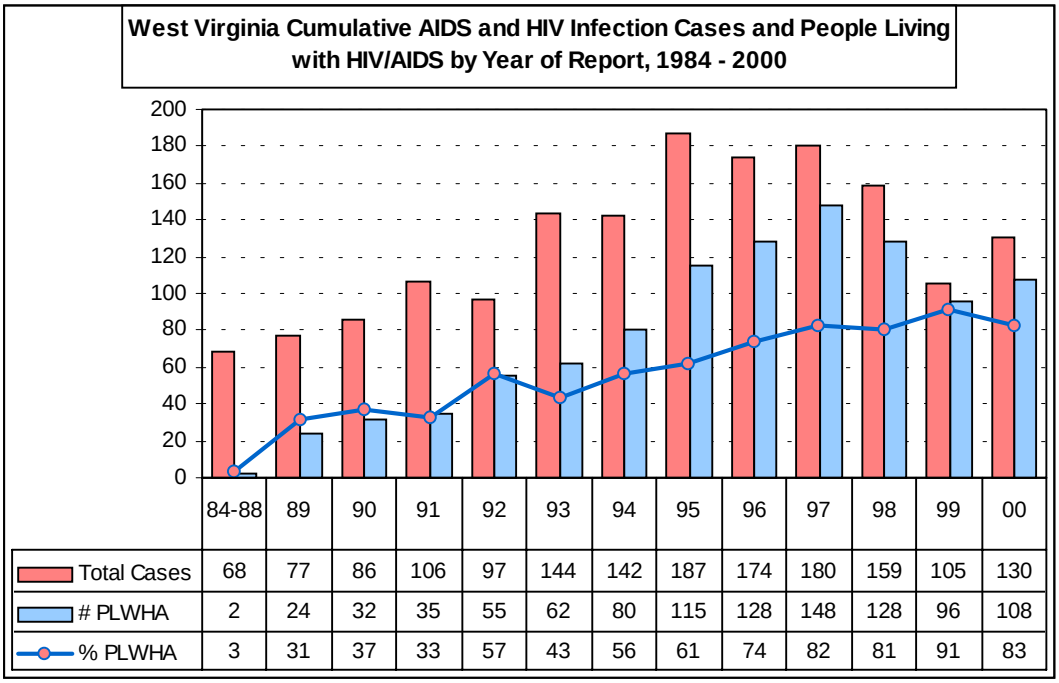


Figure 4.1

Table 4.9 and Figure 4.1 shows that the percentage of survival for HIV infection and AIDS cases continue to increase except the year 2000 due to discovery of new AIDS cases from death registry. While the percentage of survival remained high, the number of HIV infection cases continued to increase (72% increase from 1999). While the number of AIDS cases decreased in 2000, the survival rates for PLWHA continued to increase due to new drug therapies (Table 4.9). This supports benefit of continued quality of care.

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS by Age Group, 1984 - 2000*

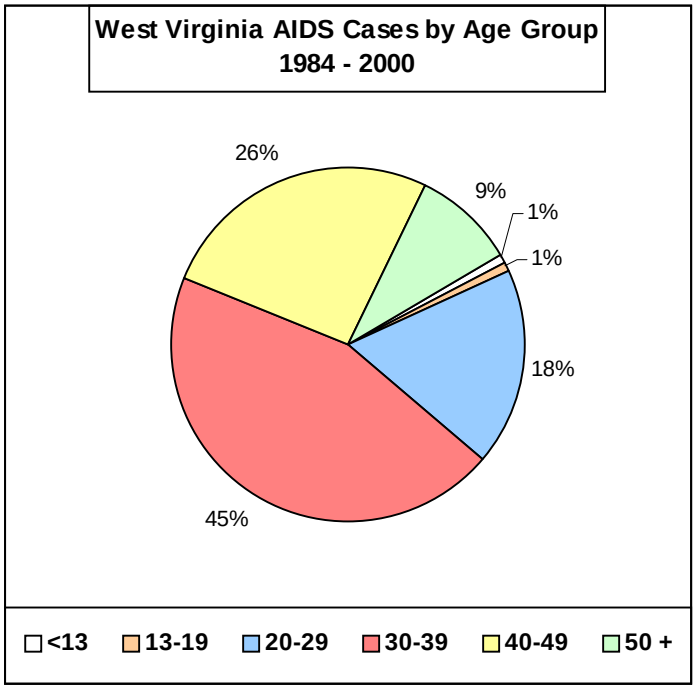


Figure 4.2

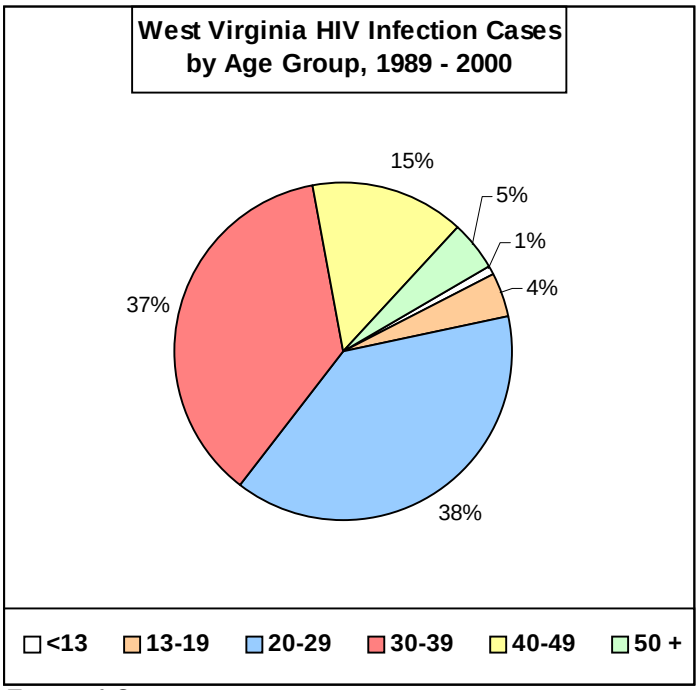


Figure 4.3

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS by Age Group, 1984 - 2000*

Age Group	Cumulative						Alive					
	AIDS		HIV		Total		AIDS		HIV		PLWHA	
	#	%	#	%	#	%	#	%	#	%	#	%
Under 5	7	1	4	1	11	1	4	1	4	1	8	1
5-12	2	0	1	<1	3	<1	0	0	1	<1	1	<1
13-19	8	1	24	4	32	2	4	1	24	4	28	3
20-29	190	18	227	39	417	25	73	16	215	39	288	28
30-39	483	45	216	37	699	42	204	45	204	37	408	40
40-49	278	26	87	15	365	22	137	30	84	15	221	22
50+	101	9	27	5	128	8	35	8	24	4	59	6
Total	**1069**	**100**	**586**	**100**	**1655**	**100**	**457**	**100**	**556**	**100**	**1013**	**100**

Table 4.10

➢ People living with AIDS are older than those living with HIV infection among people 30 years of age and older(83% for AIDS to 56% for HIV).

➢ The 30-39 age group is 45% of AIDS and PLWA, while 37% of HIV and PLWH and 40% PLWHA.

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.
Note: Percent in pie charts may not add up to 100% due to rounding.

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS by Gender, 1984 - 2000*

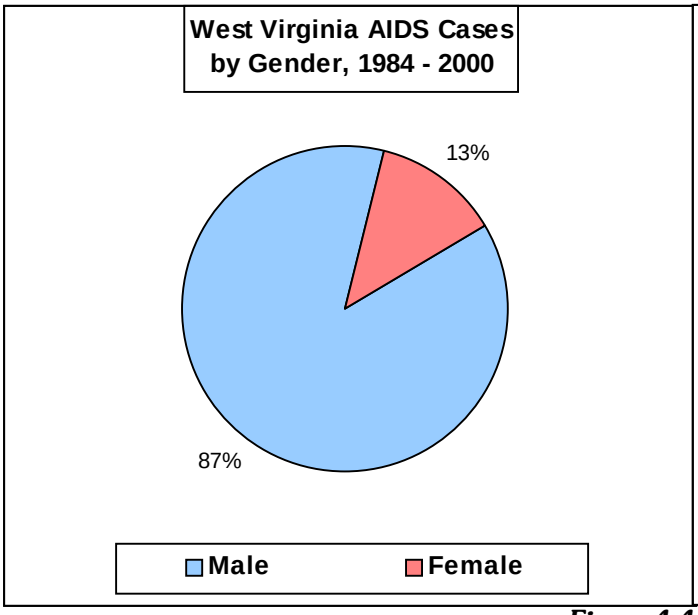


Figure 4.4

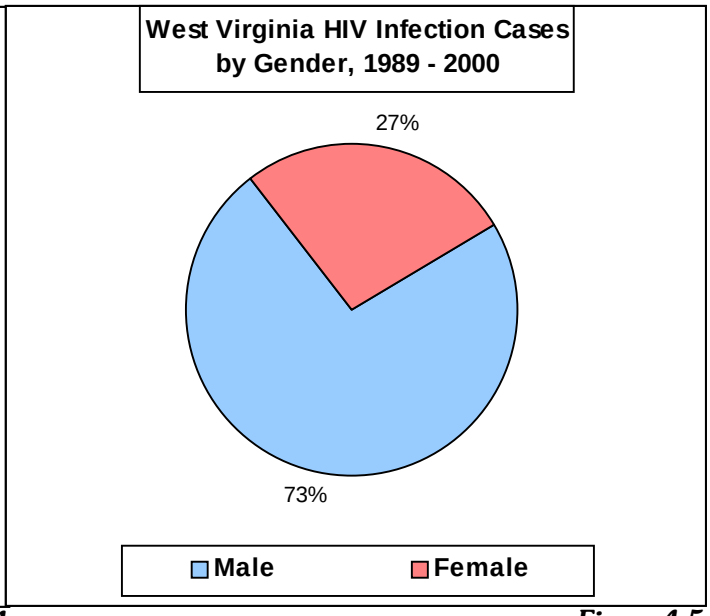


Figure 4.5

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS by Gender, 1984 - 2000*

Gender	Cumulative						Alive					
	AIDS		HIV		Total		AIDS		HIV		PLWHA	
	#	%	#	%	#	%	#	%	#	%	#	%
Male	929	87	426	73	1355	82	393	86	402	72	795	78
Female	140	13	160	27	300	18	64	14	154	28	218	22
Total	**1069**	**100**	**586**	**100**	**1655**	**100**	**457**	**100**	**556**	**100**	**1013**	**100**

Table 4.11

➢ When comparing gender for AIDS, HIV infection cases and PLWHA:

- ❖ Males accounted for 87% of AIDS and 73% of HIV infection cases, while females accounted for 13% of AIDS and 27% of HIV infection cases.
- ❖ Among PLWHA, males accounted for 86% of PLWA, 72% of PLWH and 78% of PLWHA, while females accounting for 14% of PLWA, 28% of PLWH and 22% of PLWHA.

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS by Race, 1984 - 2000*

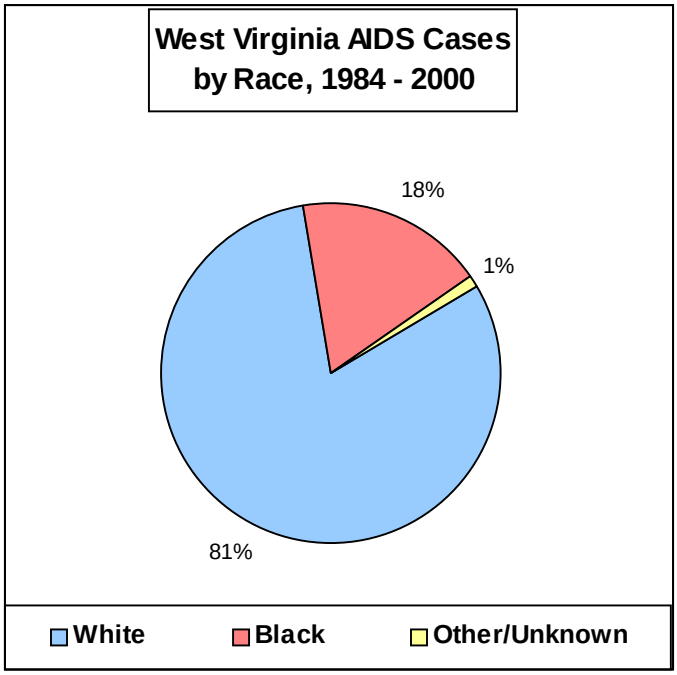


Figure 4.6

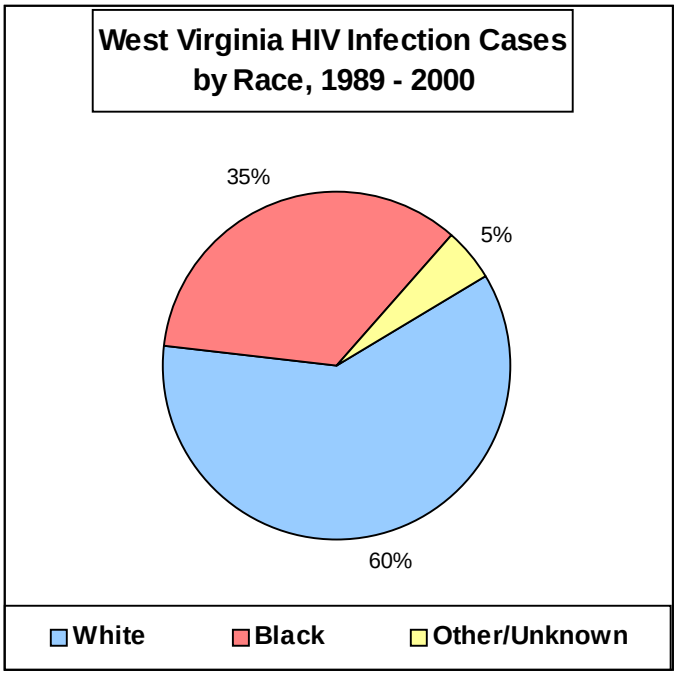


Figure 4.7

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS by Race, 1984 - 2000*

Race	Cumulative						Alive					
	AIDS		HIV		Total		AIDS		HIV		PLWHA	
	#	%	#	%	#	%	#	%	#	%	#	%
White	863	81	351	60	1214	73	360	79	330	59	690	68
Black	194	18	206	35	400	24	89	19	198	36	287	28
Other	12	1	29	5	41	2	8	2	28	5	36	4
Total	**1069**	**100**	**586**	**100**	**1655**	**100**	**457**	**100**	**556**	**100**	**1013**	**100**

Table 4.12

➢ West Virginia population are predominantly whites(96% whites, 3% blacks and 1% others), but blacks are disproportionately affected.

- ❖ Blacks were 18% of AIDS, 35% of HIV infection and 28% of PLWHA.
- ❖ Whites had higher precentage among AIDS than HIV infection(863 cases, 81% for AIDS compared to 351 cases, 60% for HIV). This trend can also be seen among people living with HIV and AIDS(360 cases, 79% for PLWA compare to 330 cases, 59% for PLWH).

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.
Note: Percent in pie charts may not add up to 100% due to rounding.

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS by Risk Behavior, 1984 - 2000*

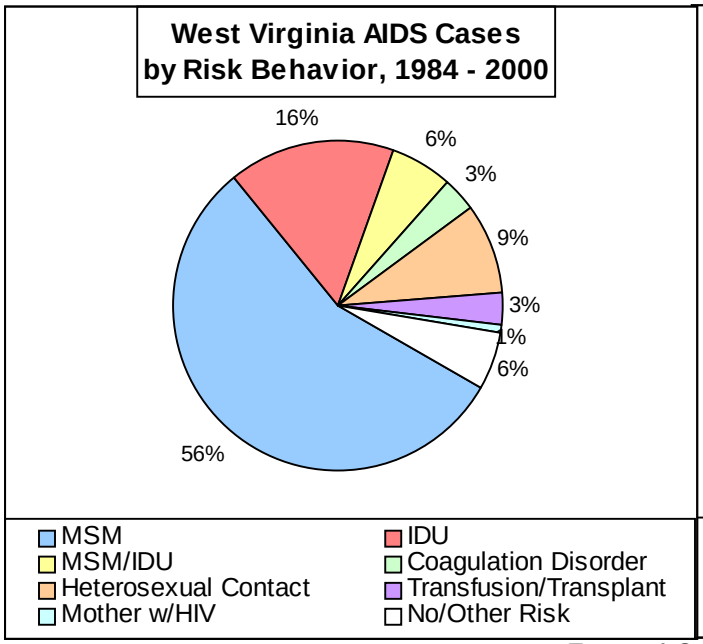


Figure 4.8

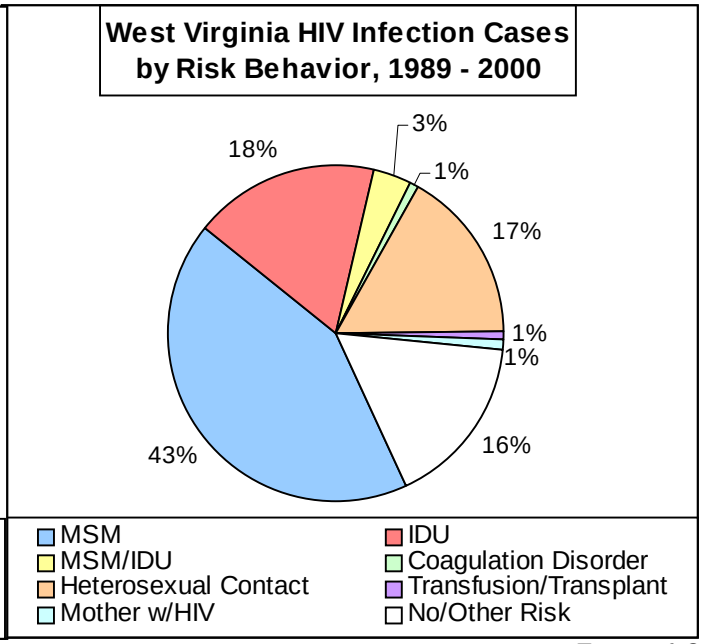


Figure 4.9

West Virginia AIDS and HIV Infection Cases and People Living with HIV/AIDS by Risk Behavior, 1984 - 2000*

Risk Behavior	Cumulative						Alive					
	AIDS		HIV		Total		AIDS		HIV		PLWHA	
	#	%	#	%	#	%	#	%	#	%	#	%
MSM	598	56	250	43	848	51	255	56	239	43	494	49
IDU	174	16	109	19	283	17	78	17	99	18	177	17
MSM/IDU	64	6	20	3	84	5	30	7	17	3	47	5
Coagulation Disorder	37	3	7	1	44	3	12	3	5	1	17	2
Heterosexual Contact	94	9	95	16	189	11	47	10	94	17	141	14
Transfusion/Transplant	34	3	5	1	39	2	3	1	5	1	8	1
Mother w/HIV	9	1	5	1	14	1	4	1	5	1	9	1
No/Other Risk	59	6	95	16	154	9	28	6	92	17	120	12
Total	**1069**	**100**	**586**	**100**	**1655**	**100**	**457**	**100**	**556**	**100**	**1013**	**100**

Table 4.13

➢ When comparing risk behavior for AIDS cases and HIV infection cases and PLWHA:

- ❖ The MSM risk behavior accounted for 56% of AIDS and PLWA, while it accounted for 43% of HIV and PLWH and 49% of PLWHA.
- ❖ The IDU risk behavior accounted for 16% of AIDS, while 19% of HIV and 17% of PLWHA.

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.
Note: Percent in pie charts may not add up to 100% due to rounding.

Notes:

Chapter 5: District to State Comparison of HIV/AIDS in West Virginia

West Virginia AIDS and HIV Infection Cases and Number of People Living with HIV/AIDS by Public Health District, 1984 - 2000*

West Virginia AIDS, HIV Infection Cases, People Living with HIV/AIDS, and Percent Population by Public Health District, AIDS 1984 - 2000, HIV 1989 - 2000

District	% State Population	AIDS				HIV (Not AIDS)				Total			
		Total		Alive		Total		Alive		Total		PLWHA	
		#	%	#	%	#	%	#	%	#	%	#	%
1	13	131	12	57	44	112	19	105	0	243	15	162	67
2	15	159	15	57	36	82	14	77	94	241	15	134	56
3	16	264	25	125	47	124	21	121	98	388	23	246	63
4	8	60	6	22	37	32	5	28	88	92	6	50	54
5	9	76	7	27	36	22	4	20	91	98	6	47	48
6	9	97	9	40	41	28	5	27	96	125	8	67	54
7A	11	95	9	50	53	63	11	61	97	158	10	111	70
7B	8	45	4	17	38	31	5	30	97	76	5	47	62
8	10	142	13	62	44	92	16	87	95	234	14	149	64
Total	100	1,069	100	457	43	586	100	556	95	1,655	100	1,013	61

Table 5.1

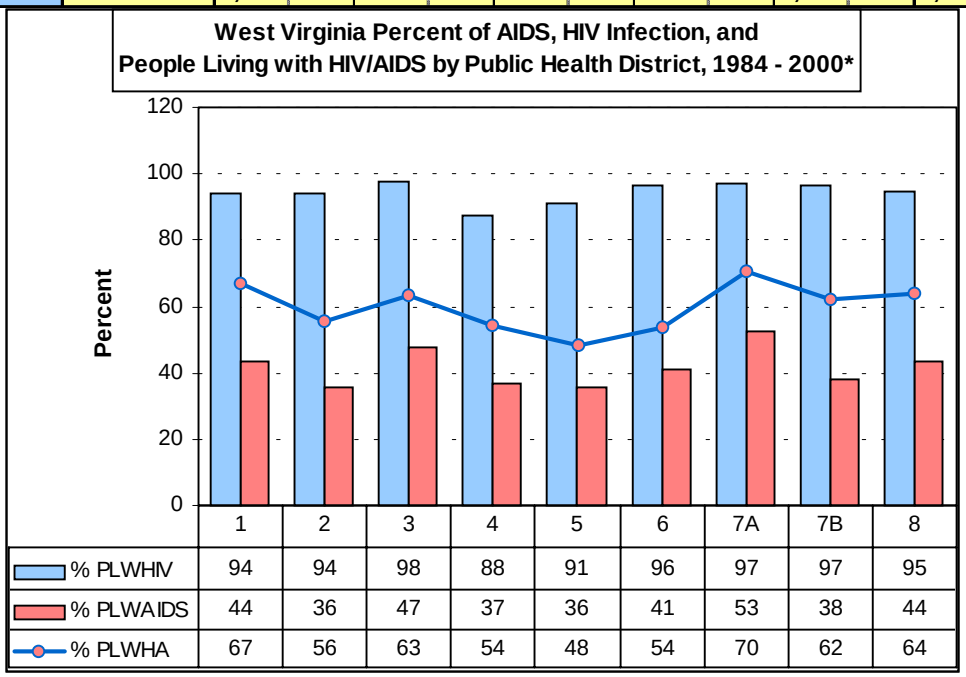


Figure 5.1

Table 5.1 shows that the percentage of survival for HIV infection cases was higher than that of AIDS cases (95% to 43%). As a result of new drug therapies and earlier access to health care, people with identified HIV disease are living longer, and fewer persons with HIV infection are progressing to AIDS.

Figure 5.1 displays cumulative AIDS cases, number of **P**eople **L**iving **W**ith **H**IV/**A**IDS(**PLWHA**), and percentage of survival by public health district. District 7A had the highest percentage of survival (70%) followed by District 1 (67%). It is possible that this was due to easier access to health care providers in these districts and new anti-retrovirals, protease inhibitors, combination therapies, and increased prophylaxis for opportunistic infections.

* AIDS data includes April 1984 through December 2000, and HIV data includes January 1989 through December 2000.

West Virginia AIDS Cases Comparison by Public Health District, 1984 - 2000

West Virginia AIDS Cases Comparison by Public Health District, Age Group, Gender, Race, and Risk Behavior 1984 - 2000																				
Characteristic	Dist 1		Dist 2		Dist 3		Dist 4		Dist 5		Dist 6		Dist 7A		Dist 7B		Dist 8		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Age Group																				
Under 5	2	2	0	0	2	1	1	2	0	0	1	1	0	0	0	0	1	1	7	1
5-12	0	0	0	0	0	0	1	2	0	0	1	1	0	0	0	0	0	0	2	0
13-19	3	2	1	1	1	0	0	0	1	1	0	0	2	2	0	0	0	0	8	1
20-29	30	23	31	19	45	17	9	15	14	18	12	12	20	21	10	22	19	13	190	18
30-39	54	41	74	47	122	46	22	37	42	55	49	51	46	48	21	47	53	37	483	45
40-49	29	22	42	26	76	29	15	25	13	17	27	28	19	20	7	16	50	35	278	26
50+	13	10	11	7	18	7	12	20	6	8	7	7	8	8	7	16	19	13	101	9
Gender																				
Male	109	83	141	89	232	88	52	87	73	96	82	85	84	88	36	80	120	85	929	87
Female	22	17	18	11	32	12	8	13	3	4	15	15	11	12	9	20	22	15	140	13
Race																				
White	74	56	138	87	215	81	49	82	73	96	91	94	83	87	43	96	97	68	863	81
Black	57	44	19	12	46	17	11	18	1	1	6	6	9	9	2	4	43	30	194	18
Other/Unknown	0	0	2	1	3	1	0	0	2	3	0	0	3	3	0	0	2	1	12	1
Risk Behavior																				
MSM	52	40	105	66	181	69	28	47	49	64	60	62	46	48	19	42	58	41	598	56
IDU	36	27	16	10	33	13	11	18	5	7	9	9	14	15	8	18	42	30	174	16
MSM/IDU	10	8	12	8	11	4	3	5	4	5	7	7	6	6	4	9	7	5	64	6
Coag. Disorder	9	7	1	1	4	2	1	2	7	9	0	0	8	8	4	9	3	2	37	3
Hetero. Contact	16	12	12	8	18	7	9	15	2	3	9	9	10	11	4	9	14	10	94	9
Transfusion	1	1	3	2	5	2	3	5	2	3	5	5	2	2	4	9	9	6	34	3
NIR*/Other	5	4	10	6	10	4	3	5	7	9	5	5	9	9	2	4	8	6	59	6
Pediatric	2	2	0	0	2	1	2	3	0	0	2	2	0	0	0	0	1	1	9	1
TOTAL CASES	**131**		**159**		**264**		**60**		**76**		**97**		**95**		**45**		**142**		**1069**	
% of Report	**12**		**15**		**25**		**6**		**7**		**9**		**9**		**4**		**13**		**100**	
% of Population	**13**		**15**		**16**		**8**		**9**		**9**		**11**		**8**		**10**		**100**	

Table 5.2

The distribution of the 1069 AIDS cases by public health district is shown in Table 5.2. District 3 experienced the greatest occurrence of AIDS cases, with 25% of the reports and 16% of the population. Other district with disproportionate occurrence of AIDS cases was District 8 (10% of the population and 13% of reported AIDS cases).

➢ Whites in districts 2, 5, 6, 7A, and 7B were proportionatley more affected (87%, 82%, 96%, 87%, and 96% to 81%) than whites statewide.

➢ Males in districts 2, 3, 4, and 7A were 89%, 88%, 96%, and 88% of reported AIDS cases, as compared to 87% of cases statewide. Females in districts 1, 6, 7B, and 8 should be targeted.

➢ The risk behavior that should be targeted is MSM for AIDS cases in districts 2, 3, 5, and 6(66%, 69%, 64%, and 62% to 56% statewide). IDU in districts 1, 7B, and 8 were proportionately greater than the state (27%, 18%, and 30% to 18%).

West Virginia HIV Infection Cases Comparison by Public Health District, 1989 - 2000

West Virginia HIV Infection Cases Comparison by Public Health District, Age Group, Gender, Race, and Risk Behavior 1989-2000

Characteristic	Dist 1		Dist 2		Dist 3		Dist 4		Dist 5		Dist 6		Dist 7A		Dist 7B		Dist 8		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Age Group																				
Under 5	1	1	0	0	1	1	0	0	0	0	0	0	0	0	2	6	0	0	4	1
5-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0
13-19	2	2	2	2	14	11	2	6	1	5	0	0	0	0	1	3	2	2	24	4
20-29	46	41	42	51	49	40	8	25	9	41	9	32	22	35	14	45	28	30	227	39
30-39	47	42	28	34	39	31	13	41	8	36	15	54	28	44	8	26	30	33	216	37
40-49	15	13	8	10	16	13	6	19	4	18	4	14	8	13	3	10	23	25	87	15
50+	1	1	2	2	5	4	3	9	0	0	0	0	5	8	3	10	8	9	27	5
Gender																				
Male	56	50	60	73	100	81	20	63	19	86	21	75	56	89	23	74	71	77	426	73
Female	56	50	22	27	24	19	12	38	3	14	7	25	7	11	8	26	21	23	160	27
Race																				
White	54	48	66	59	81	72	16	50	19	86	20	71	25	40	25	81	45	49	351	60
Black	55	49	16	14	35	31	14	44	2	9	7	25	29	46	4	13	44	48	206	35
Other/Unknown	3	3	0	0	8	7	2	6	1	5	1	4	9	14	2	6	3	3	29	5
Risk Behavior																				
MSM	35	31	34	41	65	52	10	31	14	64	15	54	29	46	15	48	33	36	250	43
IDU	35	31	11	13	11	9	11	34	0	0	3	11	11	17	4	13	23	25	109	19
MSM/IDU	5	4	3	4	2	2	1	3	0	0	2	7	2	3	1	3	4	4	20	3
Coag. Disorder	3	3	0	0	0	0	1	3	0	0	1	4	1	2	1	3	0	0	7	1
Hetero. Contact	18	16	19	23	15	12	4	13	5	23	6	21	7	11	6	19	15	16	95	16
Transfusion	0	0	0	0	3	2	0	0	0	0	0	0	1	2	0	0	1	1	5	1
NIR*/Other	15	13	15	18	27	22	5	16	3	14	1	4	12	19	2	6	15	16	95	16
Pediatric	1	1	0	0	1	1	0	0	0	0	0	0	0	0	2	6	1	1	5	1
TOTAL CASES	**112**		**82**		**124**		**32**		**22**		**28**		**63**		**31**		**92**		**586**	
% of Report	**19**		**14**		**21**		**5**		**4**		**5**		**11**		**5**		**16**		**100**	
% of Population	**13**		**15**		**16**		**8**		**9**		**9**		**11**		**8**		**10**		**100**	

Table 5.3

The distribution of the 586 HIV infection cases by public health district is shown in Table 5.3. Districts 1, 3, and 8 experienced disproportionate greater occurrence of HIV infection cases, with 19%, 21%, and 16% of the reports and 13%, 16%, and 10% of the state population respectively.

➢ Whites in districts 2, 3, 5, 6, and 7B were proportionatley more affected (80%, 65%, 86%, 71%, and 81% to 60%) than whites statewide. Blacks in districts 1, 4, 7A, and 8 should be targeted.

➢ Males in districts 3, 5, 6, 7A, and 8 were 81%, 86%, 75%, 89%, 74%, and 77% of reported HIV infection cases, as compared to 73% of cases statewide. Females in districts 1, 6, 7B, and 8 should be targeted. Females in District 1 were disproportionately affected when compared to the state(50% to 27%).

➢ The risk behavior that should be targeted is MSM for AIDS in districts 3, 5, 6, 7A, and 7B(52%, 64%, 54%, 46%, and 48% to 43% statewide). IDU in districts 1, 4, and 8 were proportionately greater than the state (31%, 34%, and 25% to 19%). Heterosexual contact risk behavior in District 2 should be targeted.

West Virginia People Living with HIV/AIDS Comparison by Public Health District, 1984 - 2000

West Virginia People Living with HIV/AIDS Comparison by Public Health District, Age Group, Gender, Race, and Risk Behavior AIDS 1984 - 2000, HIV 1989 - 2000																				
Characteristic	**Dist 1**		**Dist 2**		**Dist 3**		**Dist 4**		**Dist 5**		**Dist 6**		**Dist 7A**		**Dist 7B**		**Dist 8**		**PLWHA**	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Age Group																				
Under 5	3	2	0	0	2	1	1	2	0	0	0	0	0	0	2	4	0	0	8	1
5-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0
13-19	2	1	3	2	15	6	2	4	2	4	0	0	1	1	1	2	2	1	28	3
20-29	58	36	47	35	67	27	12	24	12	26	10	15	36	32	15	32	31	21	288	28
30-39	63	39	46	34	95	39	19	38	23	49	39	58	49	44	18	38	56	38	408	40
40-49	26	16	31	23	55	22	11	22	10	21	16	24	17	15	5	11	50	34	221	22
50+	10	6	7	5	12	5	5	10	0	0	2	3	8	7	6	13	9	6	59	6
Gender																				
Male	97	60	104	78	208	85	35	70	42	89	55	82	97	87	35	74	122	82	795	78
Female	65	40	30	22	38	15	15	30	5	11	12	18	14	13	12	26	27	18	218	22
Race																				
White	84	52	111	83	184	75	28	56	42	89	56	84	64	58	40	85	81	54	690	68
Black	75	46	23	17	52	21	21	42	2	4	10	15	35	32	5	11	64	43	287	28
Other/Unknown	3	2	0	0	10	4	1	2	3	6	1	1	12	11	2	4	4	3	36	4
Risk Behavior																				
MSM	63	39	61	46	155	63	18	36	30	64	39	58	52	47	23	49	53	36	494	49
IDU	44	27	20	15	22	9	14	28	2	4	6	9	19	17	7	15	45	30	179	18
MSM/IDU	7	4	8	6	7	3	3	6	1	2	7	10	5	5	3	6	6	4	47	5
Coag. Disorder	6	4	1	1	2	1	1	2	3	6	1	1	3	3	0	0	0	0	17	2
Hetero. Contact	24	15	25	19	22	9	8	16	6	13	11	16	11	10	9	19	23	15	139	14
Transfusion	1	1	0	0	5	2	0	0	0	0	0	0	1	1	0	0	1	1	8	1
NIR*/Other	14	9	19	14	31	13	5	10	5	11	3	4	20	18	3	6	20	13	120	12
Pediatric	3	2	0	0	2	1	1	2	0	0	0	0	0	0	2	4	1	1	9	1
TOTAL CASES	**162**		**134**		**246**		**50**		**47**		**67**		**111**		**47**		**149**		**1013**	
% of Report	**16**		**13**		**24**		**5**		**5**		**7**		**11**		**5**		**15**		**100**	
% of Population	**13**		**15**		**16**		**8**		**9**		**9**		**11**		**8**		**10**		**100**	

Table 5.4

The distribution of the 1013 **P**eople **L**iving **W**ith **H**IV/**A**IDS (**PLWHA**)by public health district is shown in Table 5.4. District 3 has the hightest number and proportion of PLWHA, with 24% of the reports and 16% of the population. Other districts with disproportionate number of PLWHA were District 1 (13% of the population and 16% of PLWHA) and District 8 (10% of the population and 15% of PLWHA).

➢ Blacks in districts 1, 4, 7A, and 8 were disproportionatley affected (46%, 42%, 32%, and 43% to 28%) than whites statewide. Whites in districts 2, 3, 5, 6, and 7B should be targeted.

➢ Males in districts 3, 5, 6, 7A, and 8 were 85%, 89%, 82%, 87%, and 82% of PLWHA, as compared to 78% of cases statewide. Females in District 1 were disproportionately affected when compared to the state(40% to 22%).

➢ The risk behavior that should be targeted is MSM for PLWHA in districts 3, 5, and 6(63%, 64%, and 58% to 49% statewide). IDU in districts 1, 4, and 8 were proportionately greater than the state (27%, 28%, and 30% to 18%). Heterosexual contact risk behavior in districts 2 and 7B should be targeted.

Notes:

Chapter 6:
Patient Counseling and Referral Services

Partner Counseling and Referral Services (PCRS) West Virginia, 2000

In order to prevent the spread of HIV/AIDS, the West Virginia AIDS Program developed a protocol to provide guidance for implemention of the patient counseling and referral services for newly identified HIV and AIDS patients and their spousal, sexual, or needle sharing partners.

The guidelines recommend developing a comprehensive program that offers both sex and needle-sharing partners long-term counseling and support for a lifelong medical condition, including client-centered counseling, support for clients who choose to notify their own partners, and help in seeking medical evaluation and treatment.

These guidelines are aimed at helping service providers develop partner notification services that go beyond one-time contact and address controversial issues, such as violation of confidentiality. The Ryan White Reauthorization Act of 1997, requires states to make a concerted effort to institute partner notification programs.

Partner notification is a service conducted in cooperation with the infected individual, to confidentially inform his/her sexual and injecting partners of their exposure to HIV and offer them counseling, testing, medical, and other services.

Partner notification is one of the most effective tools to contact the individual at high risk of exposure. West Virginia AIDS/STD Program personnel called **D**isease **I**ntervention **S**pecialists (DIS) provide partner notification services, offer risk reduction information, provide counseling and testing, return to patient with test results, and offer assistance to help infected partner to access appropriate services.

PCRS is provided through West Virginia AIDS and STD Program by DIS. An appropriate partner notification service can:

* Help infected individuals, exposed partners and the provider in controlling the spread of HIV disease;

* Educate infected individuals and their partner about the virus and how to reduce risk;

* Inform partners about their HIV status and seek treatment as soon as possible;

* Assist infected individuals in getting medical assistance and counseling and testing through AIDS Prevention Centers (APC) and HIV Care Consortium.

When the infected individual accepts to receive services the provider can find a regimen to reduce the amount of viral load, reduce the risk infection to others, and to live and maintain a healthier life.

These services are strictly confidential for infected individuals and their partners. AIDS and STD Program staff and DISs do not make this information available to any other agencies. All newly identified HIV/AIDS positive individuals should participate in PCRS, but realistically are reluctant to reveal the identity of the partners for different reasons such as retaliation from partners and/or the community or the partners may be residing out of state which make it impossible to provide these services. West Virginia PCRS started in 1999. Table 6.1 displays a summary of these activities that were conducted in West Virginia.

Partner Notification Field Investigation Outcomes Summary Report, by Date Initiated, 2000	
	Partners
Initiated	45
Dispositioned	29
Tested	7
Tested within 3 Days	6
Tested within 5 Days	6
Tested within 7 Days	6
Tested within 14 Days	7
Disposition	
Previous Positive	5
Previous Negative, New Positive	1
Previous Negative, Still Negative	1
Previous Negative, Not Re-tested	0
Not Previously Tested, New Positive	3
Not Previously Tested, New Negative	2
Not Previously Tested, Not Tested Now	0
Sub-Total (Tested)	12
Insufficient Information to begin Investigation	7
Unable To Locate	5
Located, Refused Counseling and Testing	0
Out of Jurisdiction	3
Other	2
Sub-Total (Not Tested)	17
Total Dispositioned	**29**
Total Interview Records	**37**

Table 6.1

Notes:

Chapter 7:
Tuberculosis in West Virginia

West Virginia Matching of Tuberculosis and AIDS Cases 1984-2000

Matching of Tuberculosis and AIDS Cases West Virginia, 1984 - 2000			
Year of Report	**# of TB Cases**	**# of AIDS Cases**	**# of TB Cases With AIDS**
1984	133	6	0
1985	108	7	0
1986	124	10	0
1987	99	25	1
1988	68	20	0
1989	77	55	0
1990	87	54	0
1991	64	71	1
1992	92	45	2
1993	75	100	2
1994	80	94	0
1995	71	129	1
1996	57	121	1
1997	54	119	2
1998	42	94	0
1999	41	63	0
2000	33	56	0
TOTAL	**1,305**	**1,069**	**10**

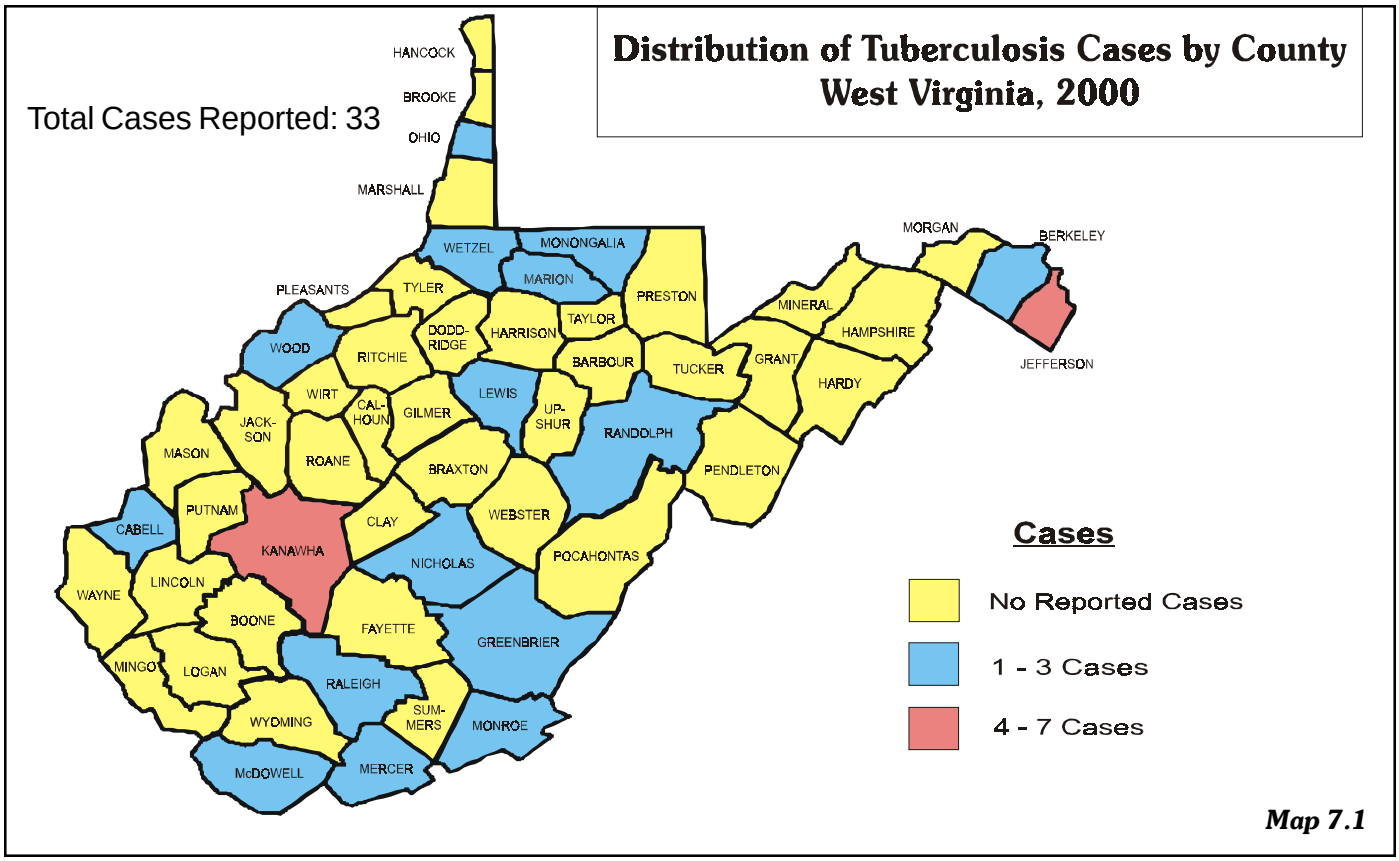
Table 7.1

Tuberculosis, is a disease caused by a bacteria called Mycobacterium tuberculosis. The bacteria can attack any part of the body, but they usually attack the lungs. TB disease was once the leading cause of death in the United States.

In the 1940s, scientists discovered the first of several drugs now used to treat TB. As a result, TB slowly began to disappear in the United States. But TB has come back. After 1984, the number of TB cases reported in the United States began to increase. In 1999, 17,531 of TB cases were reported, but declined to 16,377 cases in 2000.

TB is an airborne disease caused by the bacteria Mycobacterium tuberculosis. It is spread through tiny airborne droplets expelled by an infectious person. Transmission may occur when an uninfected person breathes in these droplets. Whether infection occurs depends upon the the environment where exposure occurred, infectiousness of the person with TB, and the duration of exposure. The closer contact to a person with active TB leads to a greater risk of infection.

TB bacteria become active if the immune system can't stop them from growing. The active bacteria begin to multiply in the body and cause TB disease. Many people who have TB infection never develop TB disease. In these group of people, the TB bacteria remain inactive for a lifetime without causing disease. But other people, especially people who have weak immune systems, the bacteria become active and cause TB disease.



Map 7.1

People infected with HIV virus, the virus that causes AIDS, and peaple living with AIDS have very weak immune systems, therefore very likely to be infected if exposed.

The Tuberculosis Program provides medication and educational services to prevent and control infection and disease caused by Mycobacterium tuberculosis. The West Virginia Tuberculosis Program

under the Division of Surveillance and Disease Control is responsible for disease surveillance, monitoring of statistical trends, and individual case management consultation to county health departments and other health care providers throughout the state.

The West Virginia AIDS and Tuberculosis registries are matched semi-annually to determine if there have been any individuals reported with both diseases. Since the inception of West Virginia's AIDS registry on April 1, 1984, there have been a total of 10 co-infected AIDS/TB cases reported in the state (Table 7.1).

It should be a high priority that HIV positive individuals be screened for TB infection and become candidates for TB preventive therapy. Likewise, persons found to be infected with TB should be counseled about risk behaviors of HIV and offered HIV testing. A concerted effort should be made to screen for HIV or TB following the diagnosis of either disease.

Individuals who are positive for HIV are at special risk of acquiring TB infection. Studies have shown that HIV-positive individuals, when exposed to a person with TB disease and is minimally infectious, or exposed for short periods of time, have developed TB infection and/or disease at much higher rates than typically seen among persons who have healthy immune systems.

Eight three percent (83%) of TB cases occur in the lung. Persons who are HIV-positive are more likely to have TB outside the lung. Normal chest x-rays may result even when the sputum cultures grew TB. Also, when someone is immunosuppressed, which may be caused by disease or immunosuppressive drugs, they may not have the ability to mount an immune response to skin test antigens and therefore the tuberculin skin test may give a false-negative response even though they may have latent TB infection or active TB disease. This is more common as CD4 counts decline, particularly below 400/mm. Standard treatment regimens have proven to be effective for persons who are immunosuppressed. Multi-drug resistant TB (MDR-TB) is a potential problem, though resistance has not occurred in the AIDS population in West Virginia. The rate of drug interaction is relatively high among HIV co-infected TB patients and therefore should be monitored closely. TB-HIV is preventable, and INH is effective for latent TB infection (LTBI). Other treatment regimens have been proven to be effective and are explained in detail in the Morbidity and Mortality Weekly Report (MMWR) prepared by the Centers for Disease Control and Prevention (CDC), June 9, 2000/ Vol. 49/ No. RR-6. Electronic copy is available from CDC's World Wide Web server at ***http://www.cdc.gov.***

Map 7.1 shows that the number of reported cases of active TB disease was higher in the southwestern counties. On average, the central, northern, and eastern counties in West Virginia reported no more than one or two cases of TB.

West Virginia Tuberculosis Mortality 1984 - 2000

West Virginia Tuberculosis Mortality 1984 - 2000			
Year of Report	**# of TB Cases**	**# of TB Deaths**	**State Rates***
1984	133	12	**6.8**
1985	108	19	**5.6**
1986	124	19	**6.5**
1987	99	16	**5.2**
1988	68	8	**3.6**
1989	77	5	**4.1**
1990	87	6	**4.9**
1991	64	6	**3.6**
1992	92	<5	**5.1**
1993	75	6	**4.1**
1994	80	<5	**4.4**
1995	71	5	**3.9**
1996	57	<5	**3.1**
1997	54	10	**3.0**
1998	42	<5	**2.3**
1999	41	5	**2.3**
2000	33	7	**1.8**

Table 7.2

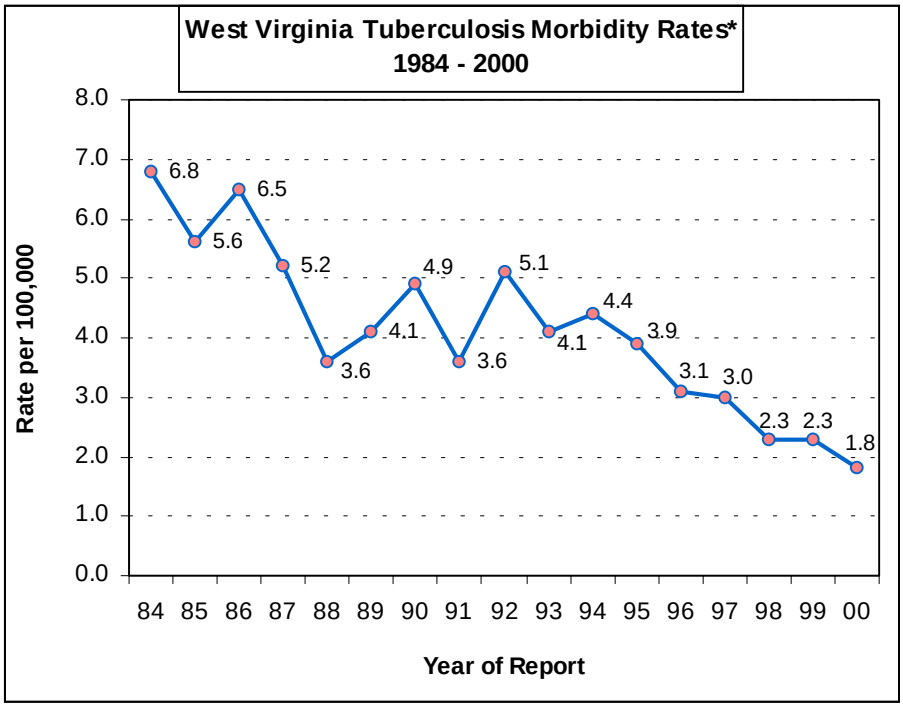


Figure 7.1

*Rates are per 100,000 residents and are based on the 1990 population.

The number of annual tuberculosis deaths in West Virginia has been below 10 since 1988, with the exception of 1997 (Table 7.2). In 1997, 10 deaths occurred, which included all patients diagnosed after death and those who died prior to completing treatment for tuberculosis. Tuberculosis may therefore not have been the actual cause of death. Tuberculosis played a leading role in at least two of the deaths in 1998, and at least one in 1999. Tuberculosis mortality rates continue to decline since 1984 to the lowest ever (1.8) in 2000 (Figure 7.1).

West Virginia Tuberculosis Cases by Age Group and Year of Report

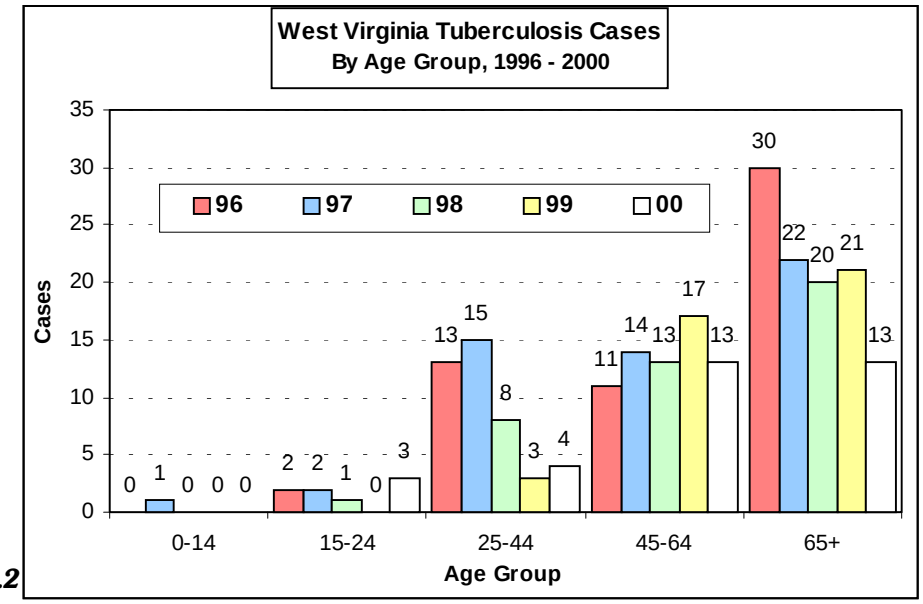


Figure 7.2

Figure 7.2 displays tuberculosis cases from 1996 through 2000 by age group. Cases over the age of 65 had gradually decreased to 48% in 1998, but increased to 51% of annual reported cases in 1999 than had a 48% decline in 2000. Although this age group continues to represent the largest age group of reported cases, none of the cases were nursing home residents. There were no cases of active tuberculosis reported for under the age of 20 in 1998 and none reported under the age of 30 in 1999, while four cases under 30 in 2000.

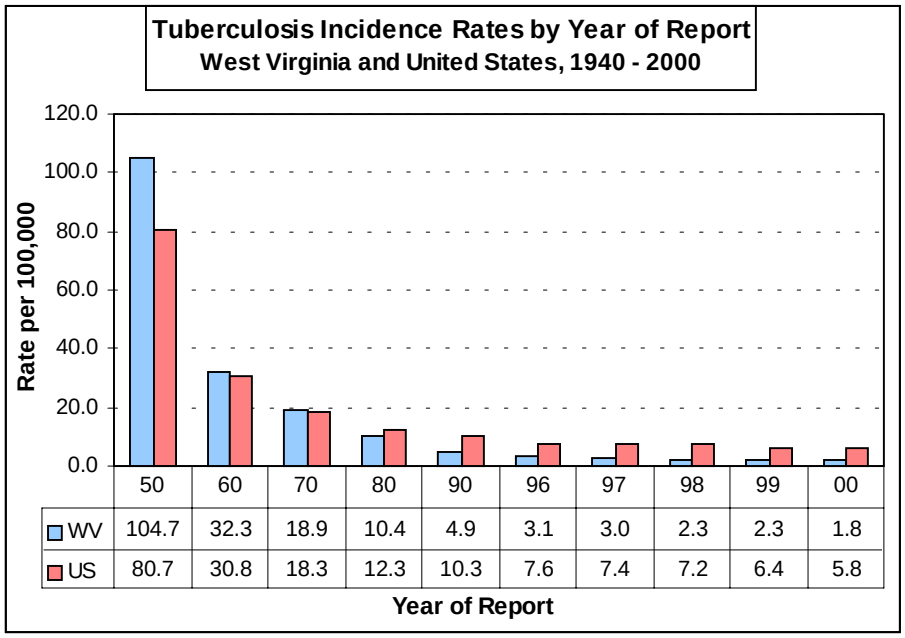


Figure 7.3

Figure 7.3 displays the incidence rate of tuberculosis in West Virginia compared to the United States. In the mid-1900's, West Virginia's case rate of tuberculosis per 100,000 population was greater than the national rate of reported cases. In 1974, West Virginia's rate dropped below the national rate, and the state has maintained a case rate of less than half of the national rate since 1990. In 2000, the same comparison of rates continued, with 1.8 for the West Virginia and 5.8 for the United States.

West Virginia Tuberculosis Cases by Gender, Race, and Year of Report

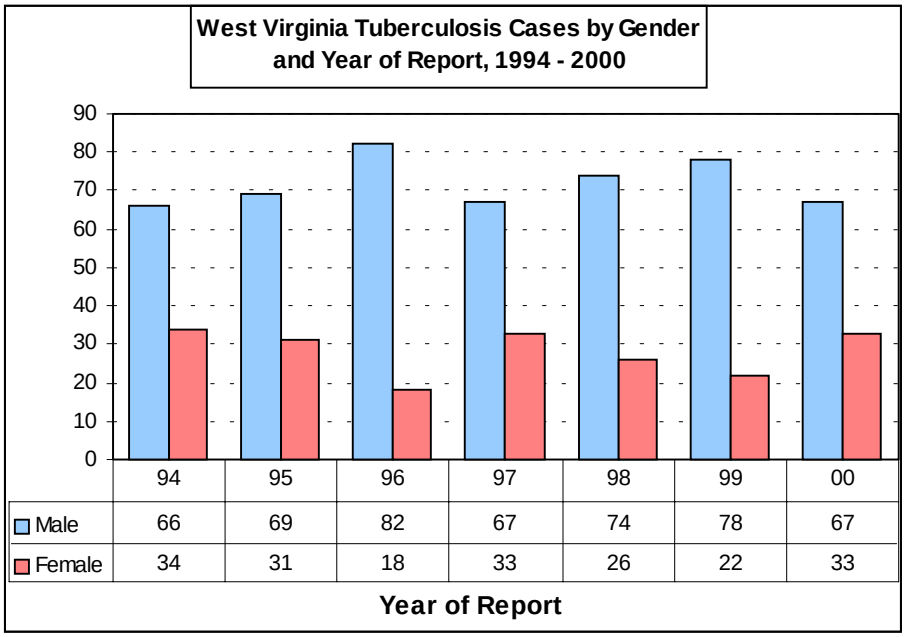


Figure 7.4

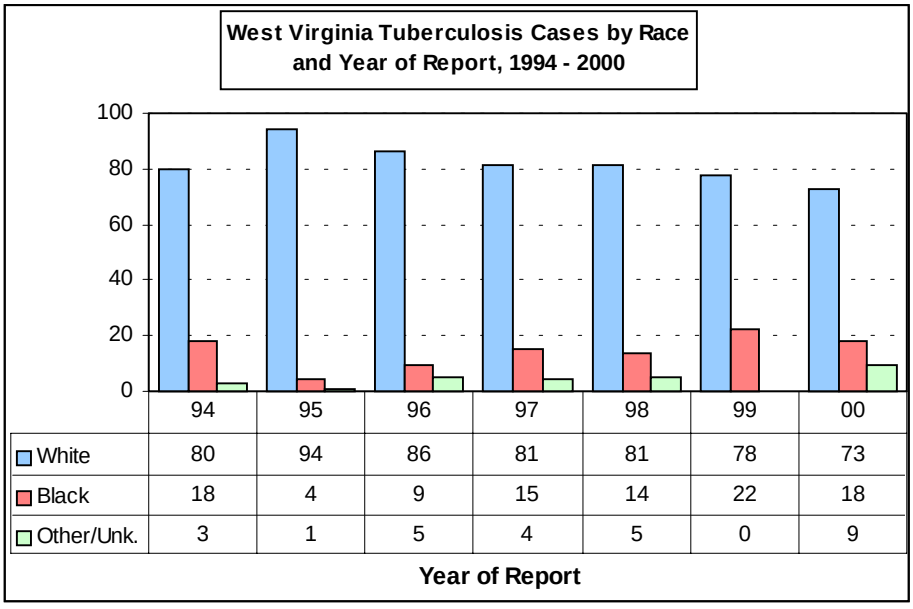


Figure 7.5

TB cases are usually higher among men than among women. From 1994-00, the percentage of TB among the male population continued to increase from 66% in 1994 to 82% in 1996, but declined in 1997 to 67% and increased to 74% in 1998 and continue to increase in 1999 to 78% and declined to 67% in 2000 (Figure 7.4). In 2000, males dominated the cases more than two to one (male 67% to female 33%).

TB cases by race from 1994-00 are displayed in Figure 7.5. West Virginia's population is predominantly white, as are the cases of TB. The percentage of blacks with TB has fluctuated from 18% in 1994 to 4% in 1995, then increased to 9% in 1996, to 15% in 1997, and dropped to 14% in 1998, but increased to 22% in 1999 and declined to 18% in 2000. Blacks accounted for 18% of tuberculosis cases while only 3% of West Virginia's population.

Notes:

Chapter 8:
Sexually Transmitted Diseases in West Virginia

West Virginia Sexually Transmitted Diseases

When comparing the reported cases of chlamydia and gonorrhea, and the rates per 100,000 population by race for the period 1996 to 2000, the following statements can be used in developing the STD Prevention Comprehensive Plan:

- The rates of chlamydia were nearly five times higher than the rates of gonorrhea among whites.
- Blacks were equally affected by both diseases but experienced disproportionate higher rates than the white over the past five years.
- Asians and Hispanics were also disproportionately affected by gonorrhea and chlamydia, experiencing higher rates than the whites over the same five years.
- Youth 15-19 years old experienced gonorrhea over the last five years at rates which were 5 times higher than the entire population (Table 8.3). Rates of chlamydia among youth were four times the general populace rate. Furthermore, over 41% (891/2,156) of all reported cases of chlamydia and over 30% (194/645) of gonorrhea were among the 15-19 year old age group.

West Virginia Chlamydia Cases and Rates* by Race and Year of Report, 1996 - 2000

Race	Population	1996		1997		1998		1999		2000	
		#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
White	**1,725,523**	1,602	93	2,168	126	1,505	87	1,270	74	1,382	80
Black	**56,295**	366	650	637	1,132	462	821	346	615	417	741
Asian	**7,459**	26	349	10	134	13	174	6	80	12	161
Hispanic Origin*	8,489	18	212	47	554	15	177	19	224	20	236
Native American and Other	**4,200**	-	-	-	-	-	-	3	-	1	-
Unknown	-	311	-	1	-	456	-	246	-	324	-
Total	**1,793,477**	**2,323**	**130**	**2,863**	**160**	**2,451**	**137**	**1,890**	**105**	**2,156**	**120**

Table 8.1

* May be of any Race

West Virginia Gonorrhea Cases and Rates* by Race and Year of Report, 1996 - 2000

Race	Population	1996		1997		1998		1999		2000	
		#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
White	**1,725,523**	296	17	433	25	391	23	258	15	263	15
Black	**56,295**	355	631	468	831	375	666	253	449	269	478
Asian	**7,459**	16	215	10	134	4	54	1	13	1	13
Hispanic Origin*	8,489	6	71	9	106	1	12	3	35	5	59
Native American and Other	**4,200**	-	-	-	-	-	-	-	-	-	-
Unknown	-	152	-	0	-	141	-	101	-	107	-
Total	**1,793,477**	**825**	**46**	**920**	**51**	**912**	**51**	**616**	**34**	**645**	**36**

Table 8.2

*** May be of any Race**

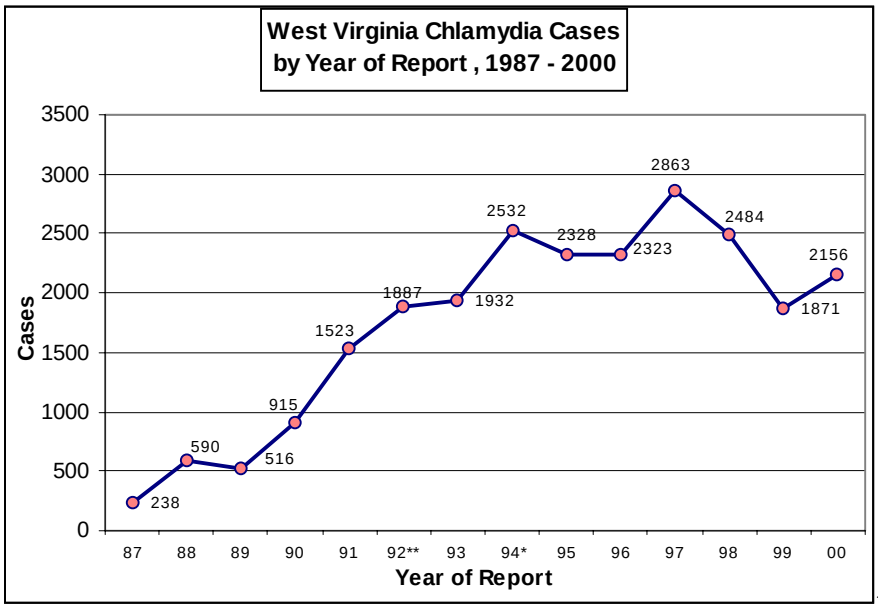
West Virginia Chlamydia and Gonorrhea Cases and Rates* Among 15-19 Age Group by Year of Report, 1996 - 2000

Disease	Population	1996		1997		1998		1999		2000	
		#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Chlamydia	**142,055**	889	626	1,220	859	999	703	785	553	891	627
Gonorrhea	**142,055**	249	175	281	198	275	194	189	133	194	137

Table 8.3

* Rate are per 100,000 residents and are based on the 1990 population.

West Virginia Chlamydia and Gonorrhea Cases, 1987-2000



* Infertility Project Began
** Became Reportable

Figure 8.1

Figure 8.1 displays Chlamydia reported cases from 1987 through 2000. In 2000, West Virginia experienced more than 15% increase in reported cases compared to the previous year. Chlamydia first become reportable in West Virginia by legislative rule in 1992. At that time, most screening was being done in private clinics because no funding was available through public health. Congress passed the "Infertility Bill" in 1993 which made funding available for demonstration projects throughout the country. Region 3, which includes West Virginia, was the second state to participate and does so through a regional committee made up of STD, Family Planning, and Lab Directors, as well as several clinicians. West Virginia began public screening of women in 1994 which led to an increase in reported cases (Figure 8.1). The project was so successful that 1995 and 1996 showed decreases in reported cases. In 1997, West Virginia switched to Gen-Probe PACE 2C technology which increased the sensitivity of the state's screening program and allowed additional cases which were being missed to be found.

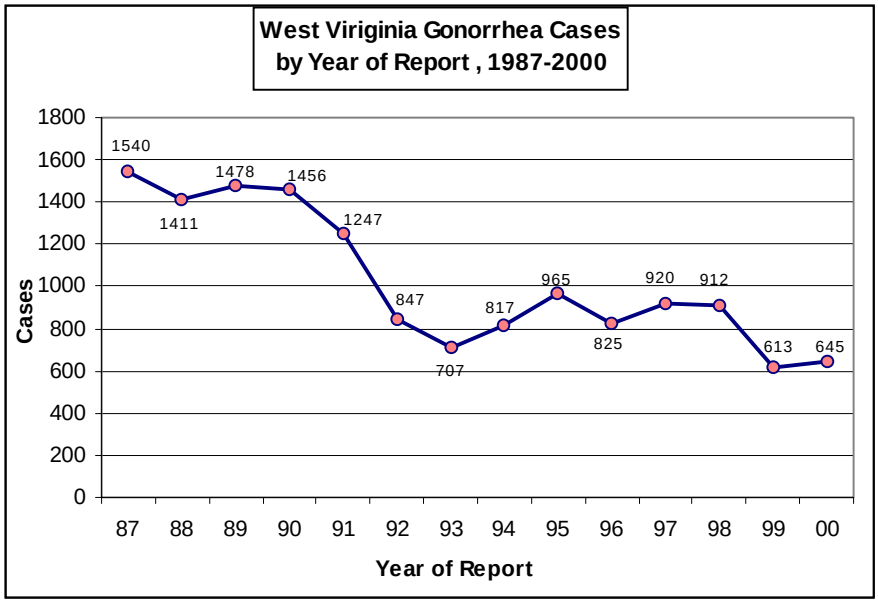


Figure 8.2

In West Virginia, reported cases of gonorrhea had been steadily decreasing from 1986 to 1992 and was well below the Year 2000 objective for the state (Figure 8.2). This trend began to change with increases seen in six consecutive quarters from the fourth quarter of 1993 to the first quarter of 1995. It has since leveled off, and West Virginia's Year 2000 goal has been met.

West Virginia Chlamydia and Gonorrhea by District, 1996-2000

West Virginia Percentage of Total Chlamydia Cases by Public Health District, 1996 - 2000

District	1990 Pop.	% State Pop.	% Cases 1996	% Cases 1997	% Cases 1998	% Cases 1999	% Cases 2000	Five years Median
1	232,632	13	14	16	12	15	13	14
2	261,794	15	14	16	14	14	17	14
3	286,307	16	24	21	27	21	25	24
4	142,155	8	6	5	6	7	5	6
5	168,625	9	8	9	7	7	8	8
6	169,710	9	8	5	6	6	5	6
7A	200,366	11	9	9	9	8	9	9
7B	151,927	8	7	6	6	3	4	6
8	179,961	10	9	8	11	13	12	11
Unk.	N/A	N/A	1	4	3	4	1	3
Total	1,793,477	100	100	100	100	100	100	

Table 8.4

Table 8.4 compares the proportion of the state population in each district with the proportion of chlamydia case reports. District 3 was disproportionately affected by chlamydia. This district, the smallest in geographic size (consisting of only four counties), has 16% of the state's populace but has accounted for nearly one-quarter of the total chlamydia reported in the state over the last five years. This district contains the state's largest city, Charleston, where over 70% of the cases in the district occur. The other districts are primarily rural and have been burdened by chlamydia proportionately to their populations. The exception would be District 8, housing 10% of the state's populace but 12% of total chlamydia reports in 2000. District 1 was too disproportionately affected, housing 13% of the state's population and 13% of total chlamydia reported cases, but 14% median over last five years. Another noteworthy point is that the number of cases without a county of residence declined in 2000.

West Virginia Percent of Total Gonorrhea Cases by Public Health District, 1996 - 2000

District	1990 Pop.	% State Pop.	% Cases 1996	% Cases 1997	% Cases 1998	% Cases 1999	% Cases 2000	% Five Years Median
1	232,632	13	13	11	10	10	7	10
2	261,794	15	10	12	10	10	13	10
3	286,307	16	38	39	34	36	40	38
4	142,155	8	3	5	5	3	2	3
5	168,625	9	2	5	3	4	4	4
6	169,710	9	4	4	8	10	15	8
7A	200,366	11	6	5	8	7	3	6
7B	151,927	8	3	3	3	3	2	3
8	179,961	10	15	15	12	14	14	14
Unk.	N/A	N/A	6	2	7	4	<1	5
Total	1,793,477	100	100	100	100	100	100	

Table 8.5

Table 8.5 is a geographic presentation of gonorrhea distribution among each district. District 3 accounted for over one-third of the reported cases statewide over the last five years and 40% of the reported cases in 2000, although only 16% of the state's population resides there. District 8, housing 10% of the state's populace, accounted for 14% of the statewide reports of gonorrhea during the period. District 8 is primarily rural and has one urban area (Martinsburg), which is located within an hour's drive of Washington, DC, and Baltimore. This district houses the state's largest migrant population (specific data unavailable) and the third largest non-white population, among which over 40% of the district's gonorrhea reports occurred.

West Virginia Chlamydia and Gonorrhea by District and Race, 2000

West Virginia Chlamydia Cases by Public Health District and Race, 2000								
District	White				Non-White			
	District Pop.		Cases		District Pop.		Cases	
	#	%	#	%	#	%	#	%
1	215,812	93	174	60	16,820	7	114	40
2	254,057	97	238	64	7,737	3	132	36
3	270,127	94	278	52	16,180	6	259	48
4	137,016	96	85	74	5,139	4	30	26
5	166,864	99	154	86	1,761	1	25	14
6	165,909	98	87	74	3,801	2	31	26
7A	193,840	97	138	69	6,526	3	61	31
7B	149,791	99	57	68	2,136	1	27	32
8	172,607	96	164	65	7,354	4	88	35
Unk.	-	-	10	71	-	-	4	29
Total	**1,726,023**	**96**	**1,385**	**64**	**67,199**	**4**	**771**	**36**

Table 8.6

Table 8.6 is a breakdown of chlamydia cases in 2000 by race in each district, as compared to the total population by race for each district. In all districts, non-whites were disproportionately affected with chlamydia. In particular, Districts 1 and 3 had non-white case reports which accounted for over one-third of the total reports in the district, although their non-white populations are relatively small (7% and 6%, respectively). Non-whites represent 4% of the total state population but accounted for 36% of the total chlamydia reports in 2000.

West Virginia Gonorrhea Cases by Public Health District and Race, 2000								
District	White				Non-White			
	District Pop.		Cases		District Pop.		Cases	
	#	%	#	%	#	%	#	%
1	215,812	93	16	35	16,820	7	30	65
2	254,057	97	40	47	7,737	3	46	53
3	270,127	94	79	31	16,180	6	178	69
4	137,016	96	5	45	5,139	4	6	55
5	166,864	99	16	70	1,761	1	7	30
6	165,909	98	49	51	3,801	2	47	49
7A	193,840	97	13	62	6,526	3	8	38
7B	149,791	99	5	50	2,136	1	5	50
8	172,607	96	40	43	7,354	4	52	57
Unk.	-	-	3	100	-	-	0	0
Total	**1,726,023**	**96**	**266**	**41**	**67,199**	**4**	**379**	**59**

Table 8.7

Table 8.7 is a breakdown of gonorrhea cases in 2000 by race in each district as compared to the total population by race for each district. In all districts, non-whites were disproportionately affected with gonorrhea. In particular, Districts 1, 2, 3, and 8 had non-white case reports which accounted for over 80% of the total non-white reported cases in the state, although their non-white populations are relatively small (7%, 3%, 6%, and 4%, respectively). Non-whites represent 4% of the total state population but accounted for 59% of the total gonorrhea reports in 2000.

Notes:

Chapter 9:
West Virginia HIV Counseling and Testing

HIV Testing at AIDS Prevention Centers in West Virginia, 1998-2000

Table 9.1 displays the HIV-testing activity at AIDS Prevention Centers (APCs) in the years 1998, 1999 and 2000. APCs in Districts 1, 2, and 3 accounted for 59% (2,842/4,831) in 1998, 53% (1,951/3,651) in 1999, and 53% (1,841/3,467) in 2000, of the total tests done in the state. Furthermore, Districts 1, 2, and 3 accounted for 74% (20/27) in 1998, 73% (11/15), and 29% (6/21) of the total positive results in the state in 2000.

West Virginia HIV Testing at AIDS Prevention Centers by Public Health District, 1998-2000

District	1998				1999				2000			
	Tested		Positive		Tested		Positive		Tested		Positive	
	#	%	#	%	#	%	#	%	#	%	#	%
1	1,262	26	2	7	839	23	3	20	918	26	1	5
2	798	17	5	19	573	16	2	13	536	15	3	14
3	782	16	13	48	539	15	6	40	387	11	2	10
4	178	4	0	0	147	4	1	7	172	5	1	5
5	412	9	2	7	337	9	0	0	334	10	1	5
6	192	4	0	0	199	5	1	7	168	5	4	19
7A	239	5	1	4	181	5	0	0	188	5	1	5
7B	281	6	1	4	274	8	1	7	302	9	2	10
8	429	9	0	0	342	9	0	0	269	8	5	24
Unknown	258	5	3	11	220	6	1	7	193	6	1	5
Total	4,831	100	27	100	3,651	100	15	100	3,467	100	21	100

Table 9.1

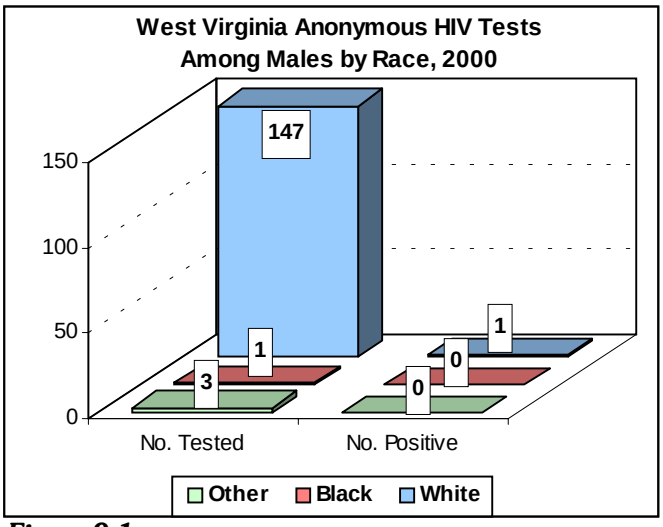


Figure 9.1

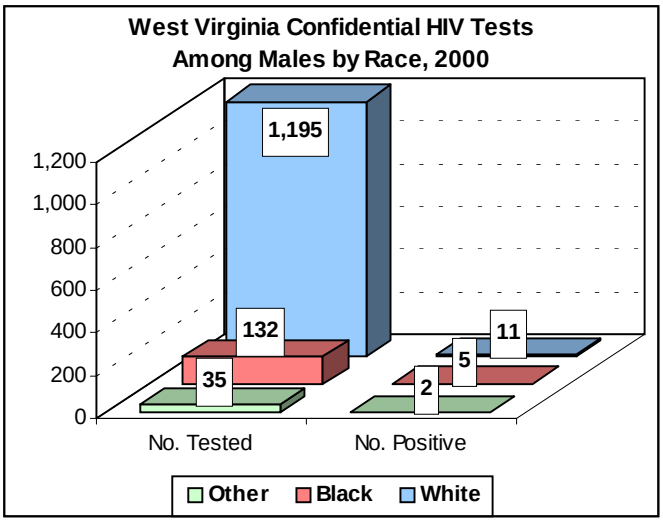


Figure 9.2

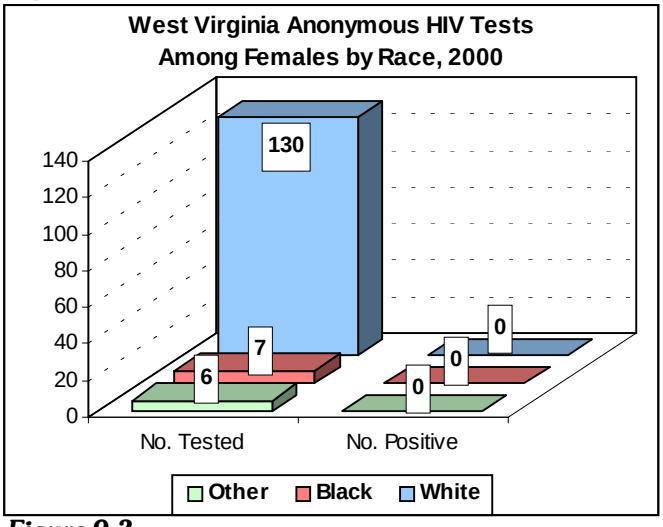


Figure 9.3

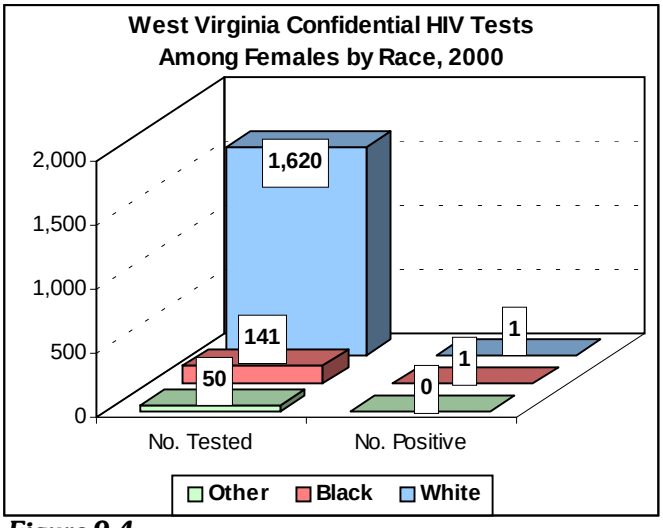


Figure 9.4

West Virginia Men and Women Receiving Federally Funded Anonymous or Confidential HIV Tests, Number and Percent of Positive Tests by Race and Risk Behavior, 2000															
Characteristic	Anonymous						Confidential						Total		
	Male			Female			Male			Female					
	# Tested	Positive #	Positive %	# Tested	Positive #	Positive %	# Tested	Positive #	Positive %	# Tested	Positive #	Positive %	# Tested	Positive #	Positive %
White															
MSM	60	0	0.0	-	-	-	192	5	2.6	-	-	-	252	5	2.0
MSM/IDU	0	0	0.0	-	-	-	2	1	50.0	-	-	-	2	1	50.0
IDU	4	0	0.0	4	0	0.0	36	0	0.0	41	0	0.0	85	0	0.0
Heterosexual	50	0	0.0	87	0	0.0	721	3	0.4	1,164	1	0.1	2,022	4	0.2
Coag. Disorder	0	0	0.0	0	0	0.0	2	0	0.0	1	0	0.0	3	0	0.0
Transfusion	3	0	0.0	2	0	0.0	20	1	5.0	29	0	0.0	54	1	1.9
Other/Unknown	30	1	3.3	37	0	0.0	222	1	0.5	385	0	0.0	674	2	0.3
Subtotal	**147**	**1**	**0.7**	**130**	**0**	**0**	**1,195**	**11**	**0.9**	**1,620**	**1**	**0.1**	**3,092**	**13**	**0.4**
Black															
MSM	0	0	0	-	-	-	7	3	42.9	-	-	-	7	3	43
IDU	0	0	0	0	0	0	7	1	14	0	0	0	7	1	14
Heterosexual	1	0	0	6	0	0	106	1	0.9	110	1	1	223	2	1
Transfusion	0	0	0	0	0	0	1	0	0.0	0	0	0	1	0	0
Other/Unknown	0	0	0	1	0	0	11	0	0.0	31	0	0	43	0	0
Subtotal	**1**	**0**	**0**	**7**	**0**	**0**	**132**	**5**	**3.8**	**141**	**1**	**0.7**	**281**	**6**	**2.1**
Other															
MSM	1	0	0	-	-	-	5	1	20.0	-	-	-	6	1	17
IDU	0	0	0	0	0	0	0	0	0.0	1	0	0	1	0	0
Heterosexual	2	0	0	5	0	0	24	0	0.0	39	0	0	70	0	0
Transfusion	0	0	0	1	0	0	1	0	0.0	1	0	0	3	0	0
Other/Unknown	0	0	0	0	0	0	5	1	20.0	9	0	0	14	1	7
Subtotal	**3**	**0**	**0**	**6**	**0**	**0**	**35**	**2**	**5.7**	**50**	**0**	**0**	**94**	**2**	**2**
TOTAL	**151**	**1**	**0.7**	**143**	**0**	**0**	**1,362**	**18**	**1.3**	**1,811**	**2**	**0.1**	**3,467**	**21**	**0.6**
Test Type	**294**			**8 %**			**3,173**			**92 %**			**3,467**	**100**	
Gender	**Male**	**1,513**		**44 %**			**Female**	**1,954**		**56 %**			**3,467**	**100**	

Table 9.2

- In 2000, white heterosexual contact accounted for over 58% (2,022/3,467) of the total HIV test ing conducted at APCs in the state, while 19%(4/21) of the positives. MSM and MSM/IDU risk behavior amon whites accounted for about 7.4%(257/3,467) of the total HIV tests, while 29%(6/ 21) of the positives(Table 9.2).

- MSM and MSM/IDU among blacks accounted for less than 1%(14/3,467) of the total HIV testing but 19%(4/21) of the postives.

- Males accounted for 44%(1,513/3,467) of the total tests but over 90%(19/21) of all of the positives.

- By test type, anonymous testing accounted for 8% (292/3,467) of the total HIV testing, while confidential accounted for 92%(3,173/3,467) of the total HIV testing. Anonymous testing ac counted for 5%(1/21) of the total postives.

West Virginia HIV Testing at AIDS Prevention Centers by District Comparison

West Virginia HIV Testing at AIDS Prevention Centers, Public Health District Comparison by Age Group, Gender, Race, and Risk Behavior, 2000

Characteristic	Dist 1		Dist 2		Dist 3		Dist 4		Dist 5		Dist 6		Dist 7A		Dist 7B		Dist 8		Unk.~		Total	
	T*	P^	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P
Age Group																						
5-12	1	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	5	0
13-19	240	0	80	0	41	0	34	0	60	0	21	0	28	0	65	0	50	0	33	0	652	0
20-29	403	0	214	0	128	0	62	1	125	1	66	0	85	0	121	2	112	1	75	1	1391	5
30-39	133	1	122	1	113	2	42	0	73	0	32	2	30	0	59	0	50	2	49	2	703	9
40-49	94	0	78	2	70	0	20	0	51	0	37	2	27	0	41	0	36	2	27	2	481	6
50+	39	0	35	0	33	0	11	0	23	0	11	0	16	1	14	0	18	0	5	0	205	1
Unknown	8	0	5	0	2	0	3	0	1	0	1	0	2	0	2	0	3	0	3	0	30	0
Gender																						
Male	295	1	244	2	189	2	71	1	175	0	84	0	87	1	136	2	130	5	102	1	1513	2
Female	623	0	292	1	198	0	101	0	159	1	84	4	101	0	166	0	139	0	91	0	1954	19
Race																						
White	773	1	490	2	348	1	159	0	321	1	161	4	174	1	266	1	220	1	180	1	3092	13
Black	129	0	39	1	13	0	9	1	7	0	7	0	6	0	22	1	39	3	10	3	281	6
Other/Unknown	16	0	7	0	26	1	4	0	6	0	0	0	8	0	14	0	10	1	3	1	94	2
Risk Behavior																						
MSM	24	1	18	0	82	2	12	1	34	0	13	2	20	0	18	1	23	1	23	1	267	9
IDU	20	0	9	0	14	0	2	0	19	0	2	0	5	0	2	0	15	1	5	0	93	1
MSM/IDU	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	1
Coag. Disorder	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0
Hetero. Contact	720	0	305	1	227	0	124	0	202	1	121	2	94	0	210	1	196	1	116	0	2315	6
Transfusion	12	0	9	0	5	0	1	0	9	0	0	0	7	1	4	0	6	0	4	0	57	1
Unknown/Other	140	0	195	2	59	0	32	0	70	0	32	0	62	0	68	0	28	1	44	0	730	3
TOTAL CASES	**918**	**1**	**536**	**3**	**387**	**2**	**172**	**1**	**334**	**1**	**168**	**4**	**188**	**1**	**302**	**2**	**269**	**5**	**193**	**1**	**3467**	**21**
% of Report	**26**		**15**		**11**		**5**		**10**		**5**		**5**		**9**		**8**		**6**		**100**	
% of Population	**13**		**15**		**16**		**8**		**9**		**9**		**11**		**8**		**10**		**-**		**100**	

Table 9.3

* T=No. Tested, ^ P=No. Positive, ~ Unk.= Out of State/Unknown District

- In 2000, District 1 accounted for 26% (918/3,467) of the total HIV testing conducted at APCs in the state, while 13% of the state population but only 4.8% positive reported cases. District 6 and 8 accounted for 13%(437/3,467) of the test conducted, while 43%(9/21) of the positives.

- The 20-29 age group accounted for 40% of the total HIV testing but only 24% of positives, while 30-39 age group 20% of the total HIV testing and 43% of reported postives.

- Males accounted for 56%%(1,954/3,467) of the total tests but over 90%(19/21) of all of the positives.

- By race, blacks accounted for 8% (281/3,467) of the total HIV testing but 29%(6/21) of the positives.

- Heterosexual contact and other risk behaviors accounted for 88%(3,045/3,467) of the total tests and 43%(9/21) of the positives. MSM accounted for 8%(267/3,467) of the total tested, but accounted for 43%(9/21) of the positives(Table 9.3).

GLOSSARY OF TERMS

Anergy - diminished reactivity to specific antigens

APC - AIDS Prevention Center

Asymptomatic - neither causing nor exhibiting symptoms

Extra-pulmonary - not connected with the lungs

HIV Seroprevalence - the positive serologic results of the total number of cases of HIV

IDU - Injecting Drug User

INH - Isoniazid (drug name)

MDR-TB - Multi-Drug Resistant Tuberculosis

MSM - Men having Sex with Men

MSM/IDU - Men having Sex with Men who are also Injecting Drugs User

OI - Opportunistic Infection

Prevalence - total number of cases of a specific disease in existence in a given population at a particular point in time

Prophylaxis - prevention of disease; preventive treatment

Protease - an enzyme that HIV uses to make new copies of itself inside infected cells

Protease Inhibitor - a drug that stops protease from making new copies of HIV that can infect other cells

Seropositive - showing positive results on serological examination; showing a high level of antibody

Symptomatic - indicative (of a particular disease or disorder)

Notes:

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