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**

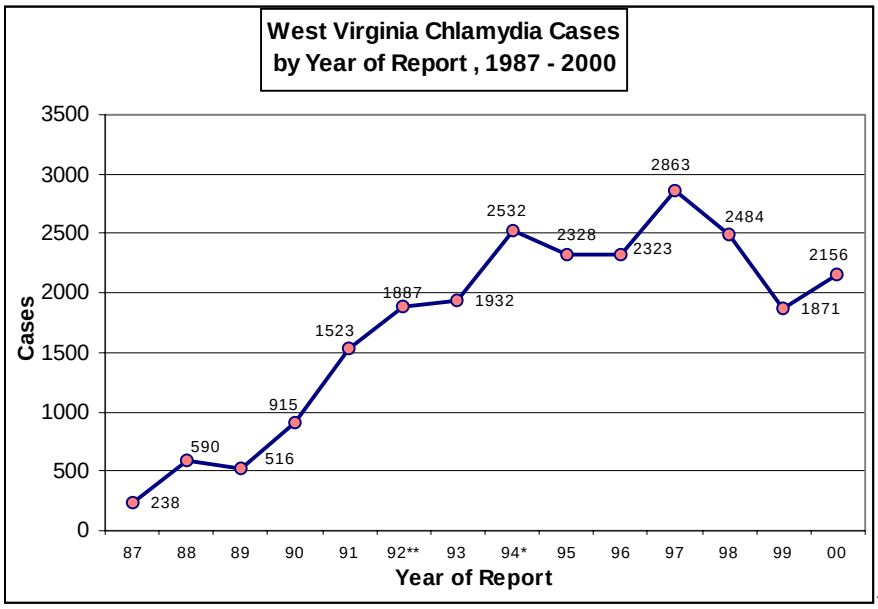
West Virginia Chlamydia and Gonorrhea Cases and Rates* Among 15-19 Age Group by Year of Report, 1996 - 2000

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.

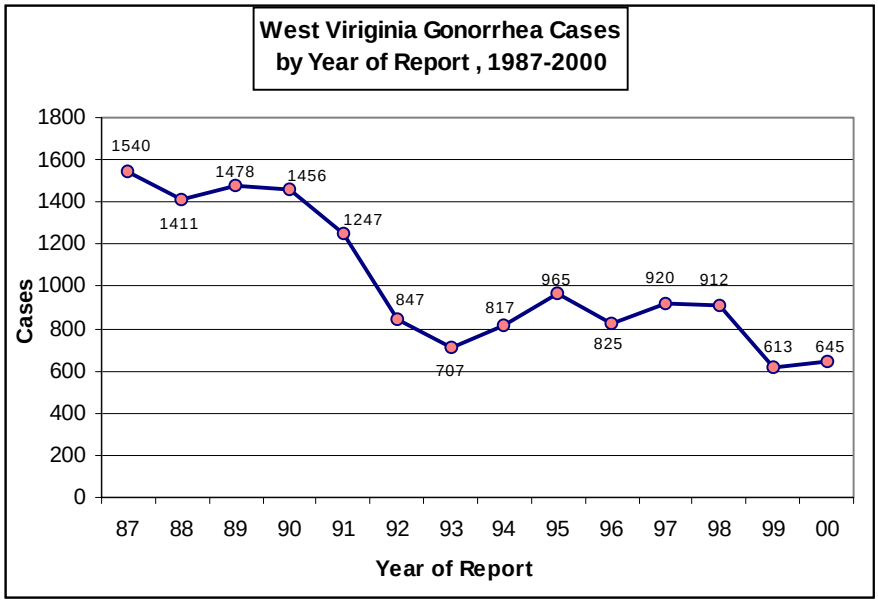


Figure 8.2

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: