

BIANNUAL HIV SURVEILLANCE REPORT, KALAMAZOO COUNTY January 2012

Table of Contents: HIV Surveillance Statistics of Persons Diagnosed in Kalamazoo County

Front Matter	Page
Acronyms and Definitions	i
Prevalence Estimate Calculations	i
Risk Transmission Categories	i
Section 1: Data on Prevalent Cases	
Table 1. Demographic Information on Prevalent HIV Infection Cases	1
Table 2. Sex, Race, and Risk Among Prevalent HIV Infection Cases	2
Section 2: New Diagnoses, Deaths, and Prevalence	
Table 3. New Diagnoses, Deaths, and Prevalence of HIV Infection, by Year	3
Figure 1. New Diagnoses, Deaths, and Prevalence of HIV Infection, by Year	4
Table 4. Comparison of HIV Infection Prevalence to Michigan	4

HIV/STD/VH/TB Epidemiology Section
Division of Communicable Disease
Bureau of Disease Control, Prevention and Epidemiology
Michigan Department of Community Health

Lansing - HIV Surveillance Office
201 Townsend St., 5th Floor
Lansing, MI 48913
517-335-8165

Detroit - HIV Surveillance Office
1151 Taylor St., Room 211B
Detroit, MI 48202
313-876-0353

****WEBSITE****

<http://www.michigan.gov/hivstd>

****WEBSITE****



General HIV

AIDS (Acquired Immune Deficiency Syndrome)

Now referred to as stage 3 HIV infection (see "HIV Infection Stages" below).

HIV (Human Immunodeficiency Virus)

Diagnosis with HIV requires both a positive HIV screening and positive supplemental antibody test or detectable quantity on a virologic test. A standard case definition for HIV infection is used by all states for surveillance. Specific information is required in order to count a case of HIV infection, including a method to uniquely identify an individual. Each case is classified in a HIV infection stage (see below). Once a case reaches stage 3 (AIDS), the case is always considered stage 3 for surveillance purposes, even if his/her health improves (MMWR; December 5, 2008 / Vol. 57 / No. RR--10 / Pg. 1 - 12).

HIV Infection Stages

Stage 1: A case does not have any of the conditions associated with severe HIV infection (called an AIDS-defining condition) and has ≥ 500 CD4 cells/ μ l.

Stage 2: A case has no AIDS-defining condition, but the level of CD4 cells has fallen to 200-499 cells/ μ l.

Stage 3: Diagnosis with any one of 26 AIDS-defining conditions which are indicative of a severe immune deficiency, or a laboratory test demonstrating severe immune deficiency: CD4 count <200 cells/ μ l or CD4 percent $<14\%$. **Previously referred to as AIDS.**

Stage unknown: A case of HIV without information available on CD4 levels or AIDS-defining conditions.

Prevalence Estimate Calculations

HIV prevalence estimates include all persons living in Kalamazoo County at diagnosis of HIV Infection (any stage) and incorporates an approximation of those not reported or not yet diagnosed. All estimates are rounded to the nearest ten, and the minimum estimate given is 10. Prevalence estimates were most recently revised in January 2011, so the estimates in this report may vary in comparison to reports published before the revision.

Risk Transmission Categories - Definitions

Blood Recipients

Hemophiliacs, blood transfusion recipients, and organ recipients who received blood products prior to 1985 & persons documented to have ever received an infected organ or unit of blood.

Heterosexual Contact (HC):

Heterosexual Contact w/ Female Risk (HCFR): Males whose female sexual partners are known to be HIV-infected or at high risk for HIV. These partners meet one of the following criteria: IDU, hemophiliac, HIV infected transfusion recipient, or other HIV infected person of unknown risk.

Heterosexual Contact w/ Male (HCM): Females who have had sex with a male regardless of what is known about the male's HIV status or behaviors.

Please note:

-Males whose only documented risk is sex with a female, and their female partner's risk and HIV status is unknown fall into the undetermined risk category.

Injection Drug Users (IDU)

Persons who have a history of injection drug use.

Men who have sex with men (MSM)

Males who have a history of sexual contact with other men.

MSM/IDU

MSM who also have a history of injection drug use.

Perinatal

HIV transmission from mother to child during birth or through breastfeeding.

Undetermined

Males and females with no identified risk.

TABLE 1. Demographic Information on Prevalent HIV Infection Cases Living in KALAMAZOO CO. at Diagnosis

	REPORTED PREVALENCE †								CENSUS 2010	
	EST PREV*	HIV Infection Non-Stage 3		HIV Infection Stage 3 (AIDS)		Total		Rate per 100,000‡§	Num	Percent
	Num	Num	Percent	Num	Percent	Num	Percent			
RACE/ ETHNICITY †										
White	220	78	51%	84	57%	162	54%	81.0	200,047	80%
Black	170	66	43%	58	39%	124	41%	464.8	26,677	11%
Hispanic	10	<5	**	5	3%	9	3%	---	9,959	4%
Asian/PI	10	<5	**	0	0%	<5	**	**	5,259	2%
Am Indian/AN	0	0	0%	0	0%	0	0%	**	923	<1%
Multi/Other/Unk	10	<5	**	<5	**	<5	**	---	7,466	3%
SEX & RACE										
Male	320	115	76%	123	83%	238	79%	194.2	122,569	49%
White Male	190	65	43%	74	50%	139	46%	142.0	97,854	39%
Black Male	120	45	30%	44	30%	89	30%	683.5	13,022	5%
Hispanic Male	10	<5	**	5	3%	8	3%	---	5,051	2%
Other Male	10	<5	**	0	0%	<5	**	**	6,642	3%
Female	80	37	24%	25	17%	62	21%	48.5	127,762	51%
White Female	30	13	9%	10	7%	23	8%	22.5	102,193	41%
Black Female	50	21	14%	14	9%	35	12%	256.3	13,655	5%
Hispanic Female	10	<5	**	0	0%	<5	**	**	4,908	2%
Other Female	10	<5	**	<5	**	<5	**	**	7,006	3%
RISK*										
Male-Male Sex (MSM)	200	75	49%	75	51%	150	50%	--	--	--
Injection Drug Use (IDU)	30	8	5%	16	11%	24	8%	--	--	--
MSM/IDU	20	9	6%	5	3%	14	5%	--	--	--
Blood Products	10	<5	**	<5	**	<5	**	--	--	--
Heterosexual Contact (HC)	50	26	17%	13	9%	39	13%	--	--	--
HCFR (Males)	10	<5	**	<5	**	6	2%	--	--	--
HCM (Females)	40	22	14%	11	7%	33	11%	--	--	--
Perinatal	10	<5	**	<5	**	<5	**	--	--	--
Undetermined	90	32	21%	36	24%	68	23%	--	--	--
AGE AT HIV DIAGNOSIS										
0 - 12 years	10	<5	**	<5	**	<5	**	--	--	--
13 - 19 years	30	14	9%	7	5%	21	7%	--	--	--
20 - 24 years	50	23	15%	17	11%	40	13%	--	--	--
25 - 29 years	80	31	20%	29	20%	60	20%	--	--	--
30 - 39 years	130	54	36%	43	29%	97	32%	--	--	--
40 - 49 years	80	22	14%	35	24%	57	19%	--	--	--
50 - 59 years	20	6	4%	12	8%	18	6%	--	--	--
60 years and over	10	0	0%	<5	**	<5	**	--	--	--
Unspecified	0		0%		0%	0	0%	--	--	--
TOTAL	400	152	100%	148	100%	300	100%	120	250,331	100%

*See front matter page i for descriptions of prevalence estimate calculations and risk category groupings. Risk categories used in Michigan are redefined as of January 2012. NOTE: Heterosexual contact for males includes only males whose sexual partners are known to be HIV infected or at high risk for HIV (HCFR). Heterosexual contact for females includes all females who have had sex with a male regardless of what is known about the male's HIV status or behaviors (HCM).

† Includes reports that contain patient name or are otherwise unduplicated. <5 and ** = 1, 2, 3, or 4 cases.

‡ To calculate "1 out of x" statements, divide the census number by total reported prevalence. For example, for non-Hispanic whites: 200,047 / 162 = 1,235. Thus, 1 out of every 1,235 non-Hispanic white persons in KALAMAZOO CO. are living with HIV. Rates and "1 out of x" statements are not reliable for <10 cases. Thus, rates for <10 cases are shown as "--".

§ Rates are not reported for risk categories and age at diagnosis because no reliable denominator data exist for these groups.

¶ In this report, persons described as white, black, Asian/Pacific Islander (PI), or American Indian/Alaska Native (AN) are all non-Hispanic; persons described as Hispanic might be of any race.

TABLE 2. Sex, Race, and Risk Among Prevalent HIV Infection Cases Living in KALAMAZOO CO. at Diagnosis

	White		Black		Hispanic		Other or Unknown		All Male	
	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent
Male-Male sex	98	71%	45	51%	5	63%	<5	**	150	63%
Injection Drug Use	6	4%	7	8%	0	0%	0	0%	13	5%
MSM/IDU	8	6%	6	7%	0	0%	0	0%	14	6%
Blood Products	<5	**	<5	**	0	0%	0	0%	<5	**
Heterosexual Contact (HCFR)	<5	**	5	6%	0	0%	0	0%	6	3%
Perinatal	0	0%	0	0%	0	0%	0	0%	0	0%
Undetermined	25	18%	24	27%	<5	**	0	0%	52	22%
Male Subtotal	139	58%	89	37%	8	3%	<5	**	238	100%
	White		Black		Hispanic		Other or Unknown		All Female	
	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent
Injection Drug Use	<5	**	8	23%	0	0%	0	0%	11	18%
Blood Products	0	0%	0	0%	0	0%	0	0%	0	0%
Heterosexual Contact (HCM)	13	57%	19	54%	<5	**	0	0%	33	53%
Perinatal	<5	**	0	0%	0	0%	<5	**	<5	**
Undetermined	6	26%	8	23%	0	0%	<5	**	16	26%
Female Subtotal	23	37%	35	56%	<5	**	<5	**	62	100%
	White		Black		Hispanic		Other or Unknown		Risk All	
	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent
Male-Male sex	98	60%	45	36%	5	56%	<5	**	150	50%
Injection Drug Use	9	6%	15	12%	0	0%	0	0%	24	8%
MSM/IDU	8	5%	6	5%	0	0%	0	0%	14	5%
Blood Products	<5	**	<5	**	0	0%	0	0%	<5	**
Heterosexual Contact (HC)	14	9%	24	19%	<5	**	0	0%	39	13%
HCFR (Males)	<5	**	5	4%	0	0%	0	0%	6	2%
HCM (Females)	13	8%	19	15%	<5	**	0	0%	33	11%
Perinatal	<5	**	0	0%	0	0%	<5	**	<5	**
Undetermined	31	19%	32	26%	<5	**	<5	**	68	23%
RACE ALL	162	54%	124	41%	9	3%	5	2%	300	100%

TABLE 3. New Diagnoses, Deaths, and Prevalence of HIV Infection in KALAMAZOO CO., by Year

Year	<i>HIV Infection (all stages)</i>			<i>HIV Infection Stage 3 (AIDS)</i>		
	New HIV Diagnoses	Deaths	Prevalence	New Stage 3 Diagnoses	Deaths	Prevalence
1983	1	0	1	1	0	1
1984	2	0	3	0	0	1
1985	8	2	9	3	2	2
1986	9	1	17	1	1	2
1987	16	4	29	7	4	5
1988	14	4	39	10	4	11
1989	23	4	58	7	4	14
1990	39	10	87	21	10	25
1991	24	8	103	10	8	27
1992	22	7	118	14	7	34
1993	20	13	125	25	12	47
1994	21	14	132	22	13	56
1995	21	14	139	28	13	71
1996	26	12	153	21	12	80
1997	17	15	155	22	13	89
1998	15	3	167	12	2	99
1999	16	5	178	5	5	99
2000	10	8	180	9	8	100
2001	12	5	187	6	5	101
2002	9	4	192	1	4	98
2003	13	8	197	5	6	97
2004	25	3	219	7	2	102
2005	18	5	232	14	3	113
2006	13	4	241	7	3	117
2007	10	8	243	9	6	120
2008	16	4	255	11	4	127
2009	23	6	272	9	5	131
2010	14	2	284	9	2	138
2011	16	0	300	10	0	148
TOTAL	473	173		306	158	

The prevalence of HIV in Michigan has steadily increased, since persons with HIV are living longer. This is largely due to improved anti-retroviral therapy.

The increase in HIV prevalence is also reflected in Figure 1 on page 5, which shows that the number of persons diagnosed, while stable for the last several years, is greater than the number of deaths each year. This directly contributes to the increase in prevalence. The current reported prevalence of HIV infection in KALAMAZOO CO. is 300. The prevalence of Stage 3 infection, which is a subset of the overall HIV infection prevalence, is 148.

As implied, the HIV infection section displays data on all persons with HIV, including those with Stage 3 infection, as well as those who have not progressed to Stage 3. Thus, persons represented in the Stage 3 section are also represented in the HIV infection section. The number of reported deaths includes deaths directly attributable to presence of HIV infection as well as deaths due to other causes.

NOTE: Reporting for recent years may not be complete. Data are not adjusted to account for reporting delays.

FIGURE 1. New Diagnoses, Deaths, and Prevalence of HIV Infection in KALAMAZOO CO., by Year

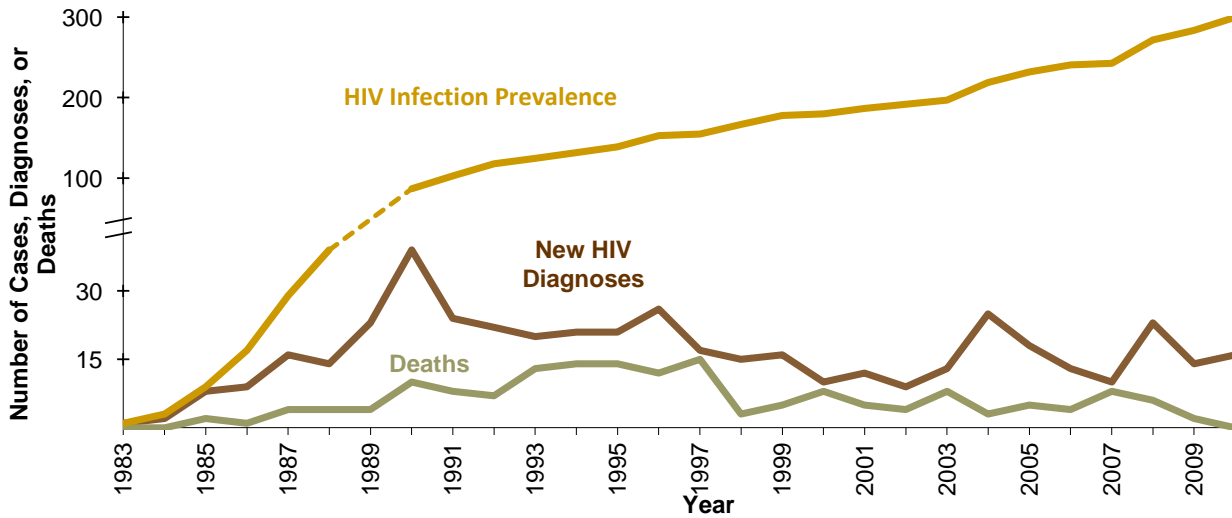


TABLE 4. Comparison of HIV Infection Prevalence in KALAMAZOO CO. to State

<i>Residence at Diagnosis</i>	<i>Estimated Prevalence</i>	<i>Reported Prevalence</i>				<i>Cumulative Stage 3</i>
		<i>HIV Infection Non-Stage 3</i>	<i>HIV Infection Stage 3 (AIDS)</i>	<i>Total</i>	<i>Rate</i>	
Kalamazoo Co.	400	152	148	300	120	306
Michigan Total	19,300	6,860	7,855	14,715	149	17,669



Michigan Department of Community Health
 HIV/STD/VH/TB Epidemiology Section
 Division of Communicable Disease
 Bureau of Disease Control, Prevention and Epidemiology
<http://www.michigan.gov/hivstd>

Lansing Office 201 Townsend St., 5th Floor
 Lansing, MI 48913
 517-335-8165

Detroit Office 1151 Taylor St., Room 211B
 Detroit, MI 48202
 313-876-0353