

BIANNUAL HIV SURVEILLANCE REPORT, KENT COUNTY July 2012

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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 Kent 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 KENT CO. at Diagnosis**REPORTED PREVALENCE[†]**

	EST PREV*	HIV Infection Non-Stage 3		HIV Infection Stage 3 (AIDS)		Total		Rate per 100,000^{‡§}	CENSUS 2010	
	Num	Num	Percent	Num	Percent	Num	Percent		Num	Percent
RACE/ ETHNICITY[‡]										
White	530	188	52%	221	47%	409	49%	89.3	457,769	76%
Black	380	124	34%	165	35%	289	35%	512.7	56,372	9%
Hispanic	140	40	11%	69	15%	109	13%	186.5	58,437	10%
Asian/PI	10	4	**	6	1%	10	1%	70.9	14,095	2%
Am Indian/AN	10	1	**	2	**	<5	**	**	2,075	<1%
Multi/Other/Unk	20	6	2%	6	1%	12	1%	N/A	13,874	2%
SEX & RACE										
Male	820	257	71%	377	80%	634	76%	214.8	295,102	49%
White Male	480	162	45%	207	44%	369	44%	165.1	223,462	37%
Black Male	210	59	16%	103	22%	162	19%	590.6	27,430	5%
Hispanic Male	120	31	9%	58	12%	89	11%	298.5	29,813	5%
Other Male	20	5	1%	9	2%	14	2%	72.2	19,397	3%
Female	260	106	29%	92	20%	198	24%	64.4	307,520	51%
White Female	50	26	7%	14	3%	40	5%	17.1	234,307	39%
Black Female	160	65	18%	62	13%	127	15%	438.8	28,942	5%
Hispanic Female	30	9	2%	11	2%	20	2%	69.9	28,624	5%
Other Female	10	6	2%	5	1%	11	1%	70.3	15,647	3%
RISK*										
Male-Male Sex (MSM)	560	187	52%	245	52%	432	52%	--	--	--
Injection Drug Use (IDU)	50	13	4%	22	5%	35	4%	--	--	--
MSM/IDU	40	19	5%	15	3%	34	4%	--	--	--
Blood Products	10	0	0%	2	**	<5	**	--	--	--
Heterosexual Contact (HC)	250	91	25%	100	21%	191	23%	--	--	--
HCFR (Males)	40	9	2%	25	5%	34	4%	--	--	--
HCM (Females)	200	82	23%	75	16%	157	19%	--	--	--
Perinatal	20	8	2%	4	**	12	1%	--	--	--
Undetermined	160	45	12%	81	17%	126	15%	--	--	--
AGE AT HIV DIAGNOSIS										
0 - 12 years	20	9	2%	4	**	13	2%	--	--	--
13 - 19 years	50	17	5%	25	5%	42	5%	--	--	--
20 - 24 years	150	64	18%	55	12%	119	14%	--	--	--
25 - 29 years	190	75	21%	71	15%	146	18%	--	--	--
30 - 39 years	360	109	30%	172	37%	281	34%	--	--	--
40 - 49 years	210	68	19%	94	20%	162	19%	--	--	--
50 - 59 years	70	18	5%	39	8%	57	7%	--	--	--
60 years and over	20	3	**	9	2%	12	1%	--	--	--
Unspecified	0	0	0%	0	0%	0	0%	--	--	--
TOTAL	1,080	363	100%	469	100%	832	100%	138	602,622	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: 457,769 / 409 = 1,119. Thus, 1 out of every 1,119 non-Hispanic white persons in KENT 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 KENT CO. at Diagnosis

	White		Black		Hispanic		Other or Unknown		All Male	
	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent
MALE										
Male-Male sex	301	82%	76	47%	50	56%	5	36%	432	68%
Injection Drug Use	5	1%	11	7%	4	**	0	0%	20	3%
MSM/IDU	21	6%	8	5%	3	**	2	**	34	5%
Blood Products	2	**	0	0%	0	0%	0	0%	2	**
Heterosexual Contact (HCFR)	6	2%	18	11%	7	8%	3	**	34	5%
Perinatal	2	**	5	3%	0	0%	0	0%	7	1%
Undetermined	32	9%	44	27%	25	28%	4	**	105	17%
Male Subtotal	369	58%	162	26%	89	14%	14	2%	634	100%
FEMALE										
Injection Drug Use	<5	**	10	8%	<5	**	<5	**	15	8%
Blood Products	0	0%	0	0%	0	0%	0	0%	0	0%
Heterosexual Contact (HCM)	35	88%	97	76%	15	75%	10	91%	157	79%
Perinatal	0	0%	3	**	2	**	0	0%	5	3%
Undetermined	4	**	17	13%	0	0%	0	0%	21	11%
Female Subtotal	40	20%	127	64%	20	10%	11	6%	198	100%
ALL										
Male-Male sex	301	74%	76	26%	50	46%	5	20%	432	52%
Injection Drug Use	6	1%	21	7%	7	6%	<5	**	35	4%
MSM/IDU	21	5%	8	3%	<5	**	<5	**	34	4%
Blood Products	<5	**	0	0%	0	0%	0	0%	<5	**
Heterosexual Contact (HC)	41	10%	115	40%	22	20%	13	52%	191	23%
HCFR (Males)	6	1%	18	6%	7	6%	<5	**	34	4%
HCM (Females)	35	9%	97	34%	15	14%	10	40%	157	19%
Perinatal	<5	**	8	3%	<5	**	0	0%	12	1%
Undetermined	36	9%	61	21%	25	23%	<5	**	126	15%
RACE ALL	409	49%	289	35%	109	13%	25	3%	832	100%

TABLE 3. New Diagnoses, Deaths, and Prevalence of HIV Infection in KENT 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	3	1	3	2	1	2
1985	23	3	23	7	3	6
1986	25	3	45	3	3	6
1987	39	5	79	10	5	11
1988	47	10	116	18	9	20
1989	66	20	162	35	20	35
1990	64	16	210	33	16	52
1991	76	28	258	53	26	79
1992	59	29	288	67	28	118
1993	50	47	291	52	47	123
1994	48	43	296	52	43	132
1995	48	37	307	48	36	144
1996	43	33	317	36	30	150
1997	33	28	322	37	27	160
1998	34	18	338	23	17	166
1999	45	13	370	25	12	179
2000	53	15	408	32	13	198
2001	41	14	435	29	10	217
2002	53	9	479	27	8	236
2003	50	9	520	31	6	261
2004	53	10	563	31	8	284
2005	59	14	608	42	10	316
2006	52	17	643	45	13	348
2007	47	14	676	38	14	372
2008	38	7	707	24	7	389
2009	54	7	754	36	5	420
2010	37	7	784	25	5	440
2011	39	4	819	26	4	462
2012	17	4	832	11	4	469
TOTAL	1,280	461		888	426	

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 4, 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 Kent Co. is 832. The prevalence of Stage 3 infection, which is a subset of the overall HIV infection prevalence, is 469.

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 KENT CO., by Year

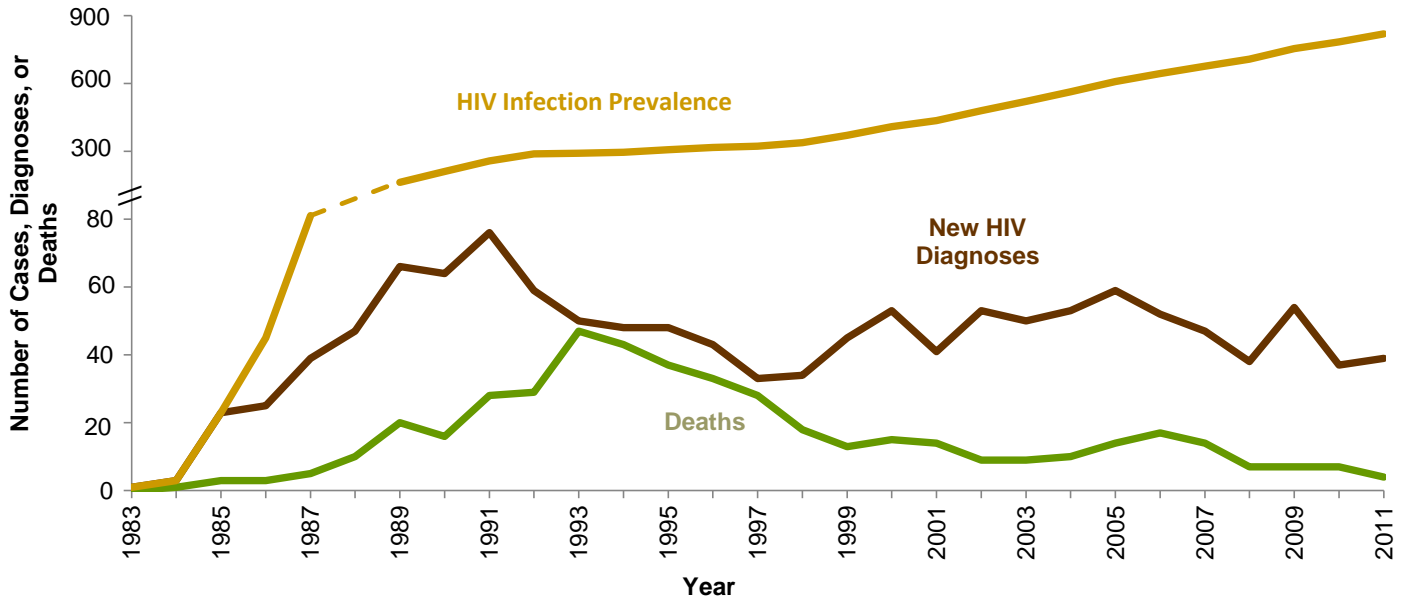


TABLE 4. Comparison of HIV Infection Prevalence in KENT CO. to State

<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>	
Kent Co.	1,080	363	469	832	138	888
Michigan Total	19,300	7,057	7,966	15,023	152	17,891



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