

BIANNUAL HIV SURVEILLANCE REPORT, OAKLAND CO. January 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 OAKLAND CO. 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.

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.

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.

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

RACE/ ETHNICITY ^x	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			
White	1,180	422	51%	463	54%	885	52%	98	903,398	75%
Black	910	355	43%	328	38%	683	40%	421	162,303	13%
Hispanic	90	32	4%	33	4%	65	4%	155	41,920	3%
Asian/PI	30	10	1%	11	1%	21	1%	31	67,789	6%
Am Indian/AN	10	<5	**	<5	**	<5	**	**	2,872	<1%
Multi/Other/Unk	50	14	2%	22	3%	36	2%	N/A	24,080	2%
SEX & RACE										
Male	1,880	688	82%	726	85%	1414	84%	242	583,384	49%
White Male	1,080	379	45%	433	50%	812	48%	183	443,005	37%
Black Male	670	266	32%	241	28%	507	30%	697	72,764	6%
Hispanic Male	70	28	3%	24	3%	52	3%	248	21,010	2%
Other Male	60	15	2%	28	3%	43	3%	92	46,605	4%
Female	370	147	18%	132	15%	279	16%	45	618,978	51%
White Female	100	43	5%	30	3%	73	4%	16	460,393	38%
Black Female	230	89	11%	87	10%	176	10%	197	89,539	7%
Hispanic Female	20	<5	**	9	1%	13	1%	62	20,910	2%
Other Female	20	11	1%	6	1%	17	1%	35	48,136	4%
RISK*										
Male-Male Sex (MSM)	1,390	520	62%	529	62%	1049	62%	--	--	--
Injection Drug Use (IDU)	110	35	4%	46	5%	81	5%	--	--	--
MSM/IDU	80	27	3%	36	4%	63	4%	--	--	--
Blood Products	20	8	1%	6	1%	14	1%	--	--	--
Heterosexual Contact (HC)	270	103	12%	100	12%	203	12%	--	--	--
HCFR (Males)	40	11	1%	18	2%	29	2%	--	--	--
HCM (Females)	230	92	11%	82	10%	174	10%	--	--	--
Perinatal	20	8	1%	8	1%	16	1%	--	--	--
Undetermined	350	134	16%	133	16%	267	16%	--	--	--
AGE AT HIV DIAGNOSIS										
0 - 12 years	20	9	1%	9	1%	18	1%	--	--	--
13 - 19 years	90	42	5%	27	3%	69	4%	--	--	--
20 - 24 years	270	129	15%	75	9%	204	12%	--	--	--
25 - 29 years	390	166	20%	128	15%	294	17%	--	--	--
30 - 39 years	800	275	33%	324	38%	599	35%	--	--	--
40 - 49 years	490	158	19%	210	24%	368	22%	--	--	--
50 - 59 years	160	47	6%	76	9%	123	7%	--	--	--
60 years and over	20	9	1%	9	1%	18	1%	--	--	--
Unspecified	0	0	0%	0	0%	0	0%	--	--	--
TOTAL	2,250	835	100%	858	100%	1,693	100%	141	1,202,362	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: 903,398 / 885 = 1,021. Thus, 1 out of every 1,021 non-Hispanic white persons in OAKLAND 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.

^x 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 OAKLAND CO. at Diagnosis

MALE	White		Black		Hispanic		Other or Unknown		All Male	
	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent
Male-Male sex	642	79%	344	68%	37	71%	26	60%	1049	74%
Injection Drug Use	22	3%	22	4%	<5	**	<5	**	51	4%
MSM/IDU	42	5%	17	3%	0	0%	<5	**	63	4%
Blood Products	9	1%	0	0%	<5	**	<5	**	11	1%
Heterosexual Contact (HCFR)	8	1%	19	4%	<5	**	<5	**	29	2%
Perinatal	<5	**	<5	**	0	0%	<5	**	9	1%
Undetermined	87	11%	101	20%	10	19%	<5	**	202	14%
Male Subtotal	812	57%	507	36%	52	4%	43	3%	1414	100%
FEMALE	White		Black		Hispanic		Other or Unknown		All Female	
	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent
Injection Drug Use	11	15%	16	9%	<5	**	0	0%	30	11%
Blood Products	<5	**	0	0%	0	0%	0	0%	<5	**
Heterosexual Contact (HCM)	44	60%	111	63%	10	77%	9	53%	174	62%
Perinatal	<5	**	<5	**	0	0%	<5	**	7	3%
Undetermined	14	19%	45	26%	0	0%	6	35%	65	23%
Female Subtotal	73	26%	176	63%	13	5%	17	6%	279	100%
ALL	White		Black		Hispanic		Other or Unknown		Risk All	
	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent
Male-Male sex	642	73%	344	50%	37	57%	26	43%	1049	62%
Injection Drug Use	33	4%	38	6%	6	9%	<5	**	81	5%
MSM/IDU	42	5%	17	2%	0	0%	<5	**	63	4%
Blood Products	12	1%	0	0%	<5	**	<5	**	14	1%
Heterosexual Contact (HC)	52	6%	130	19%	11	17%	10	17%	203	12%
HCFR (Males)	8	1%	19	3%	<5	**	<5	**	29	2%
HCM (Females)	44	5%	111	16%	10	15%	9	15%	174	10%
Perinatal	<5	**	8	1%	0	0%	5	8%	16	1%
Undetermined	101	11%	146	21%	10	15%	10	17%	267	16%
RACE ALL	885	52%	683	40%	65	4%	60	4%	1693	100%

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

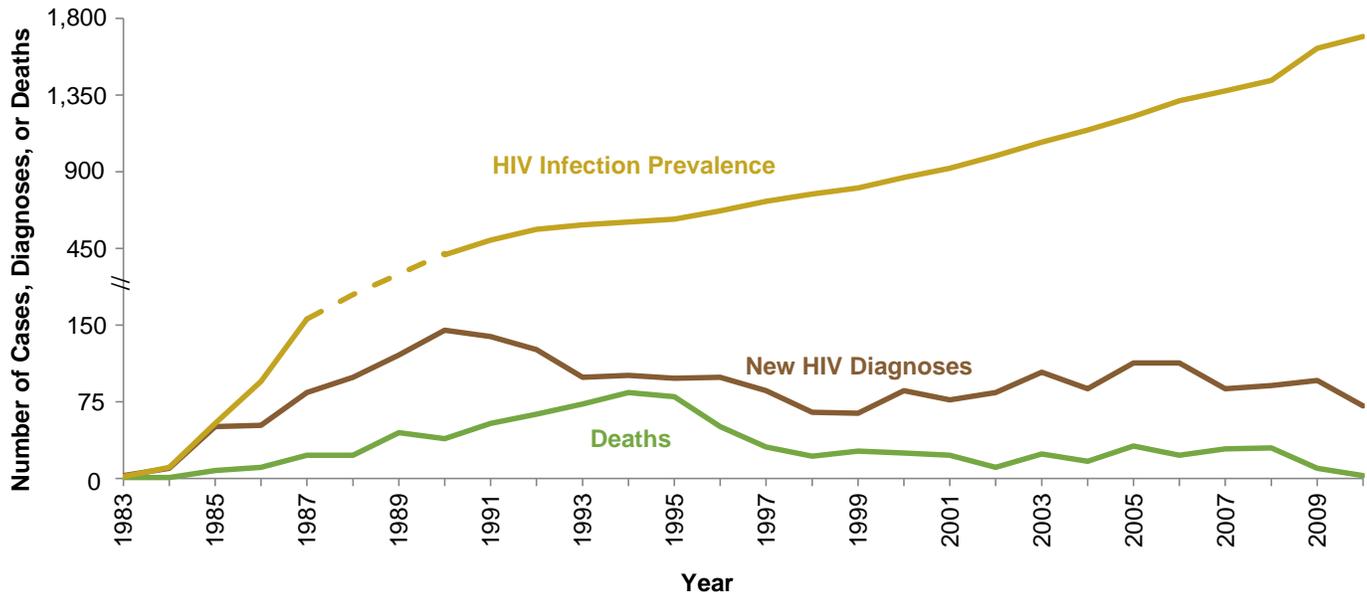
Year	<i>HIV Infection (all stages)</i>			<i>HIV Infection Stage 3 (AIDS)</i>		
	New HIV Diagnoses	Deaths	Prevalence	New Stage 3 Diagnoses	Deaths	Prevalence
1983	3	1	2	2	1	1
1984	10	1	11	8	1	8
1985	51	8	54	11	8	11
1986	52	11	95	17	11	17
1987	84	23	156	43	23	37
1988	99	23	232	53	23	67
1989	121	45	308	61	45	83
1990	145	39	414	79	37	125
1991	139	54	499	92	51	166
1992	126	63	562	109	61	214
1993	99	73	588	106	69	251
1994	101	84	605	93	83	261
1995	98	80	623	93	77	277
1996	99	51	671	77	45	309
1997	86	31	726	59	28	340
1998	65	22	769	41	18	363
1999	64	27	806	39	24	378
2000	86	25	867	53	25	406
2001	77	23	921	52	20	438
2002	84	11	994	49	9	478
2003	104	24	1,074	70	23	525
2004	88	17	1,145	54	13	566
2005	113	32	1,226	89	26	629
2006	113	23	1,316	76	22	683
2007	88	29	1,375	56	27	712
2008	91	30	1,436	51	26	737
2009	123	20	1,539	56	15	778
2010	96	10	1,625	54	8	824
2011	71	3	1,693	37	3	858
TOTAL	2,576	883		1,680	822	

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 OAKLAND CO. is 1,693. The prevalence of Stage 3 infection, which is a subset of the overall HIV infection prevalence, is 858.

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 OAKLAND CO., by Year**TABLE 4. Comparison of HIV Infection Prevalence in OAKLAND 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>	
Oakland Co.	2,250	835	858	1,693	141	1,680
Michigan Total	19,300	6,860	7,855	14,715	149	17,669