

BIANNUAL HIV SURVEILLANCE REPORT OAKLAND COUNTY January 2013

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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 2013, 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.

-Exposure categories are only calculated at the state level due to small numbers at the county and city level. For more information regarding exposure categories, and how they differ from transmission categories, please refer to the statewide statistics.

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.

Michigan Department
of Community Health



Rick Snyder, Governor
James K. Haveman, Director

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

	REPORTED PREVALENCE [†]								CENSUS 2011 ESTIMATES	
	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	1,210	456	51%	457	51%	913	51%	101	903,093	75%
Black	970	376	42%	356	40%	732	41%	436	167,792	14%
Hispanic	90	37	4%	32	4%	69	4%	158	43,665	4%
Asian/PI	30	11	1%	10	1%	21	1%	30	70,343	6%
Am Indian/AN	10	<5	**	<5	**	<5	**	**	2,971	<1%
Multi/Other/Unk	60	16	2%	32	4%	48	3%	N/A	22,281	2%
SEX & RACE										
Male	1,980	751	84%	745	84%	1,496	84%	255	586,862	48%
White Male	1,110	412	46%	427	48%	839	47%	189	442,889	37%
Black Male	720	286	32%	259	29%	545	30%	727	74,946	6%
Hispanic Male	70	32	4%	23	3%	55	3%	251	21,907	2%
Other Male	80	21	2%	36	4%	57	3%	121	47,120	4%
Female	390	148	16%	143	16%	291	16%	47	623,283	52%
White Female	100	44	5%	30	3%	74	4%	16	460,204	38%
Black Female	250	90	10%	97	11%	187	10%	201	92,846	8%
Hispanic Female	20	5	1%	9	1%	14	1%	64	21,758	2%
Other Female	20	9	1%	7	1%	16	1%	33	48,475	4%
RISK*										
Male-Male Sex (MSM)	1,480	576	64%	540	61%	1,116	62%	--	--	--
Injection Drug Use (IDU)	100	32	4%	45	5%	77	4%	--	--	--
MSM/IDU	90	32	4%	35	4%	67	4%	--	--	--
Blood Products	20	6	1%	6	1%	12	1%	--	--	--
Heterosexual Contact (HC)	290	104	12%	113	13%	217	12%	--	--	--
HCFR (Males)	40	8	1%	20	2%	28	2%	--	--	--
HCM (Females)	250	96	11%	93	10%	189	11%	--	--	--
Perinatal	20	7	1%	9	1%	16	1%	--	--	--
Undetermined	370	142	16%	140	16%	282	16%	--	--	--
AGE AT HIV DIAGNOSIS										
0 - 12 years	20	8	1%	10	1%	18	1%	--	--	--
13 - 19 years	100	47	5%	30	3%	77	4%	--	--	--
20 - 24 years	310	150	17%	85	10%	235	13%	--	--	--
25 - 29 years	410	178	20%	133	15%	311	17%	--	--	--
30 - 39 years	820	290	32%	328	37%	618	35%	--	--	--
40 - 49 years	500	168	19%	212	24%	380	21%	--	--	--
50 - 59 years	170	47	5%	81	9%	128	7%	--	--	--
60 years and over	30	11	1%	9	1%	20	1%	--	--	--
Unspecified	0	0	0%	0	0%	0	0%	--	--	--
TOTAL	2,370	899	100%	888	100%	1,787	100%	148	1,210,145	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: 903,093 / 913 = 989. Thus, 1 out of every 989 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.

[¶] 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	668	80%	376	69%	39	71%	33	58%	1,116	75%
Injection Drug Use	20	2%	21	4%	<5	**	5	9%	49	3%
MSM/IDU	43	5%	17	3%	0	0%	7	12%	67	4%
Blood Products	7	1%	0	0%	<5	**	<5	**	9	1%
Heterosexual Contact (HCFR)	8	1%	18	3%	<5	**	<5	**	28	2%
Perinatal	<5	**	<5	**	0	0%	<5	**	9	1%
Undetermined	91	11%	109	20%	11	20%	7	12%	218	15%
Male Subtotal	839	56%	545	36%	55	4%	57	4%	1496	100%
FEMALE	White		Black		Hispanic		Other or Unknown		All Female	
	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent
Injection Drug Use	9	12%	16	9%	<5	**	0	0%	28	10%
Blood Products	<5	**	0	0%	0	0%	0	0%	<5	**
Heterosexual Contact (HCM)	48	65%	121	65%	11	79%	9	56%	189	65%
Perinatal	0	0%	5	3%	0	0%	<5	**	7	2%
Undetermined	14	19%	45	24%	0	0%	5	31%	64	22%
Female Subtotal	74	25%	187	64%	14	5%	16	5%	291	100%
ALL	White		Black		Hispanic		Other or Unknown		Risk All	
	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent
Male-Male sex	668	73%	376	51%	39	57%	33	45%	1,116	62%
Injection Drug Use	29	3%	37	5%	6	9%	5	7%	77	4%
MSM/IDU	43	5%	17	2%	0	0%	7	10%	67	4%
Blood Products	10	1%	0	0%	<5	**	<5	**	12	1%
Heterosexual Contact (HC)	56	6%	139	19%	12	17%	10	14%	217	12%
HCFR (Males)	8	1%	18	2%	<5	**	<5	**	28	2%
HCM (Females)	48	5%	121	17%	11	16%	9	12%	189	11%
Perinatal	<5	**	9	1%	0	0%	5	7%	16	1%
Undetermined	105	12%	154	21%	11	16%	12	16%	282	16%
RACE ALL	913	51%	732	41%	69	4%	73	4%	1787	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	4	1	3	2	1	1
1984	10	1	12	8	1	8
1985	51	8	55	11	8	11
1986	52	11	96	17	11	17
1987	84	23	157	43	23	37
1988	99	23	233	53	23	67
1989	121	45	309	61	45	83
1990	145	40	414	79	38	124
1991	137	54	497	92	51	165
1992	126	64	559	109	62	212
1993	100	73	586	106	69	249
1994	101	86	601	93	84	258
1995	99	80	620	94	77	275
1996	99	51	668	77	45	307
1997	86	31	723	59	28	338
1998	65	22	766	41	18	361
1999	62	28	800	39	25	375
2000	86	25	861	52	25	402
2001	77	22	916	52	19	435
2002	85	12	989	49	9	475
2003	104	25	1068	70	24	521
2004	88	17	1139	54	13	562
2005	115	33	1221	89	27	624
2006	109	24	1306	76	23	677
2007	86	31	1361	56	27	706
2008	90	31	1420	51	26	731
2009	124	22	1522	56	16	771
2010	104	23	1603	56	15	812
2011	111	19	1695	49	12	849
2012	97	5	1,787	44	5	888
TOTAL	2,717	930		1,738	850	

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 1,787. The prevalence of Stage 3 infection, which is a subset of the overall HIV infection prevalence, is 888.

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

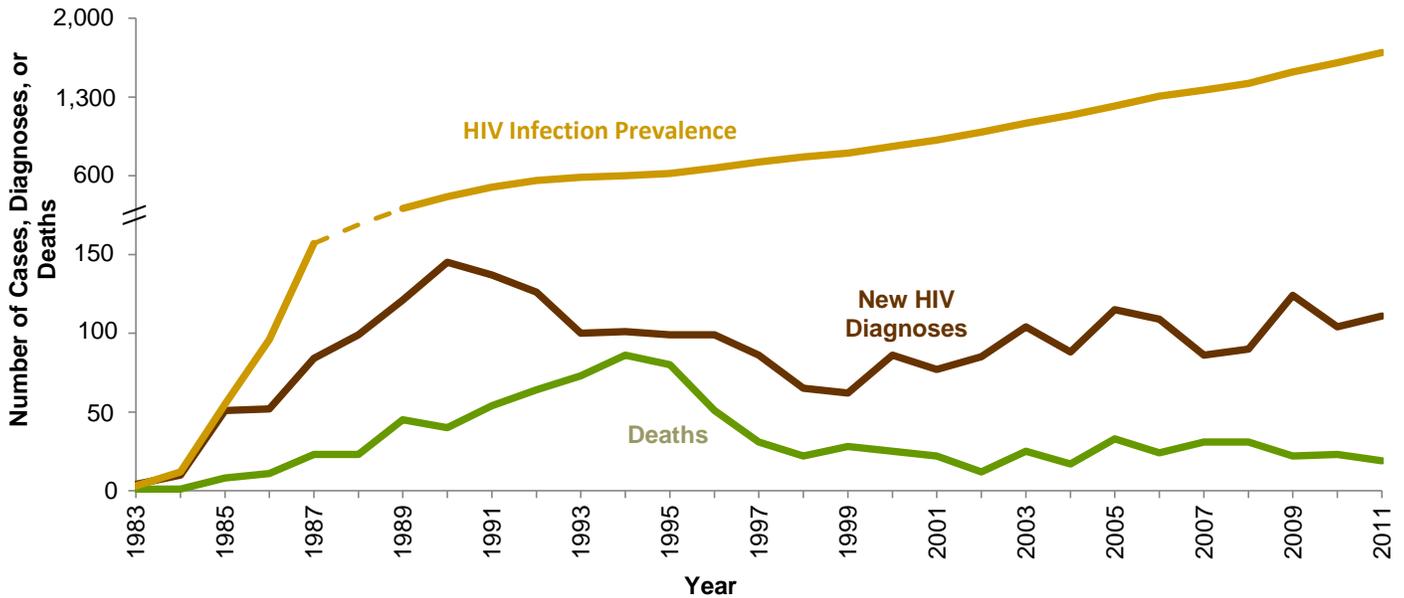


TABLE 4. Comparison of HIV Infection Prevalence in OAKLAND CO. to State

<i>Residence at Diagnosis</i>	<i>Estimated Prevalence</i>	<i>Reported Prevalence</i>				<i>Cumulative Stage 3</i>
		HIV Infection Non-Stage 3	HIV Infection Stage 3 (AIDS)	Total	Rate	
Oakland Co.	2,370	899	888	1,787	148	1,738
Michigan Total	19,800	7,169	7,912	15,081	153	18,130