

BIANNUAL HIV SURVEILLANCE REPORT, OAKLAND 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 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 2012, 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.

TABLE 1. Demographic Information on Prevalent HIV Infection Cases Living in OAKLAND 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	1,180	442	51%	465	53%	907	52%	100.4	903,398	75%
Black	920	369	42%	341	39%	710	41%	437.5	162,303	13%
Hispanic	90	34	4%	34	4%	68	4%	162.2	41,920	3%
Asian/PI	30	10	1%	10	1%	20	1%	29.5	67,789	6%
Am Indian/AN	10	<5	**	<5	**	<5	**	**	2,872	<1%
Multi/Other/Unk	60	14	2%	29	3%	43	2%	N/A	24,080	2%
SEX & RACE										
Male	1,890	718	82%	742	84%	1460	83%	250.3	583,384	49%
White Male	1,080	397	46%	435	49%	832	48%	187.8	443,005	37%
Black Male	680	276	32%	250	28%	526	30%	722.9	72,764	6%
Hispanic Male	70	30	3%	24	3%	54	3%	257.0	21,010	2%
Other Male	60	15	2%	33	4%	48	3%	103.0	46,605	4%
Female	380	153	18%	138	16%	291	17%	47.0	618,978	51%
White Female	100	45	5%	30	3%	75	4%	16.3	460,393	38%
Black Female	240	93	11%	91	10%	184	11%	205.5	89,539	7%
Hispanic Female	20	<5	**	10	1%	14	1%	67.0	20,910	2%
Other Female	20	11	1%	7	1%	18	1%	37.4	48,136	4%
RISK*										
Male-Male Sex (MSM)	1,400	545	63%	538	61%	1083	62%	--	--	--
Injection Drug Use (IDU)	110	35	4%	46	5%	81	5%	--	--	--
MSM/IDU	80	29	3%	36	4%	65	4%	--	--	--
Blood Products	20	7	1%	6	1%	13	1%	--	--	--
Heterosexual Contact (HC)	280	107	12%	108	12%	215	12%	--	--	--
HCFR (Males)	40	11	1%	18	2%	29	2%	--	--	--
HCM (Females)	240	96	11%	90	10%	186	11%	--	--	--
Perinatal	20	7	1%	8	1%	15	1%	--	--	--
Undetermined	360	141	16%	138	16%	279	16%	--	--	--
AGE AT HIV DIAGNOSIS										
0 - 12 years	20	8	1%	9	1%	17	1%	--	--	--
13 - 19 years	90	43	5%	30	3%	73	4%	--	--	--
20 - 24 years	280	136	16%	79	9%	215	12%	--	--	--
25 - 29 years	390	172	20%	130	15%	302	17%	--	--	--
30 - 39 years	800	289	33%	325	37%	614	35%	--	--	--
40 - 49 years	490	165	19%	216	25%	381	22%	--	--	--
50 - 59 years	170	48	6%	80	9%	128	7%	--	--	--
60 years and over	30	10	1%	11	1%	21	1%	--	--	--
Unspecified	0	0	0%	0	0%	0	0%	--	--	--
TOTAL	2,270	871	100%	880	100%	1,751	100%	146	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 / 907 = 996. Thus, 1 out of every 996 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 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	125	64	558	109	62	212
1993	99	73	584	106	69	249
1994	101	86	599	93	84	258
1995	98	80	617	93	77	274
1996	99	51	665	77	45	306
1997	86	31	720	59	28	337
1998	65	22	763	41	18	360
1999	64	28	799	39	25	374
2000	88	25	862	53	25	402
2001	77	22	917	52	19	435
2002	86	12	991	49	9	475
2003	104	25	1070	70	24	521
2004	88	17	1141	54	13	562
2005	113	32	1222	89	26	625
2006	110	23	1309	76	22	679
2007	89	30	1368	56	27	708
2008	90	30	1428	51	26	733
2009	124	20	1532	56	15	774
2010	97	10	1619	56	8	822
2011	100	4	1715	46	4	864
2012	36	0	1,751	16	0	880
TOTAL	2,606	891		1,691	827	

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 1,751. The prevalence of Stage 3 infection, which is a subset of the overall HIV infection prevalence, is 880.

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

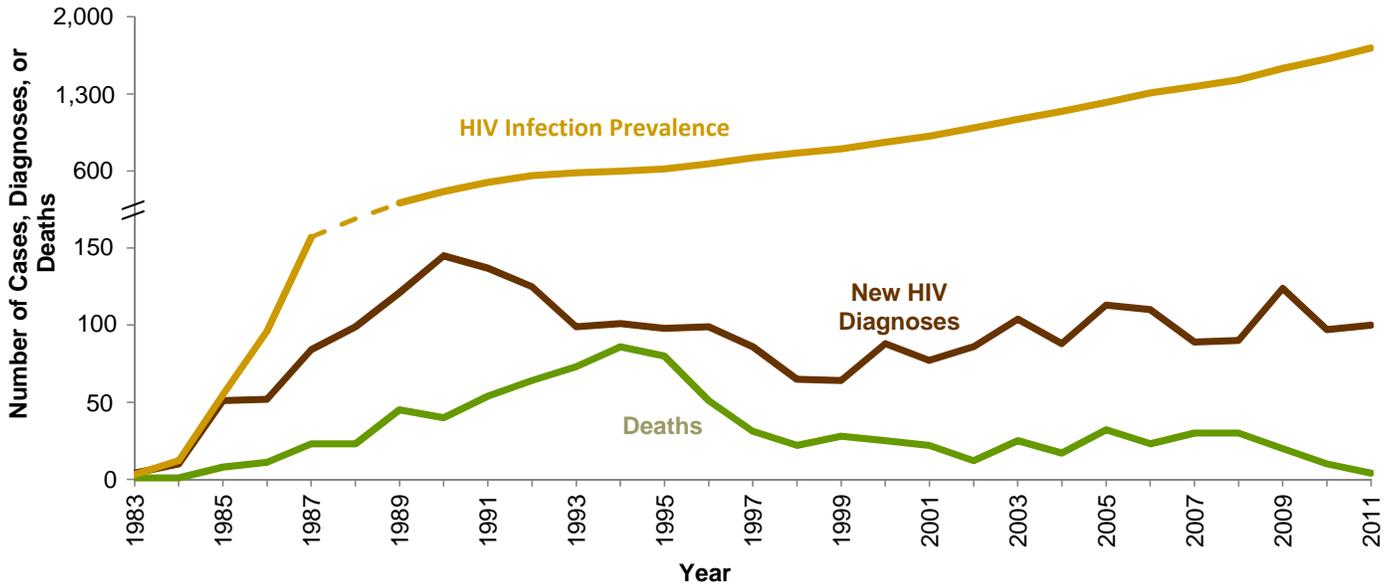


TABLE 4. Comparison of HIV Infection Prevalence in OAKLAND CO. to State

<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.	2,270	871	880	1,751	146	1,691
Michigan Total	19,300	7,057	7,966	15,023	152	17,891



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