



Detroit, Michigan HIV Surveillance Report New Diagnoses and Prevalence Tables

All data as of July 1, 2019



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Michigan's HIV Surveillance Program collects, interprets, and disseminates population level data regarding persons living with HIV (PLWH) and persons at risk of contracting the virus. Since 2001, the program has produced semi-annual reports for a wide audience. Beginning in 2016, these reports were overhauled and split into two parts. "HIV & STD's in Michigan - an overview" presents the most relevant information using graphical, user-friendly displays and can be found on our website. To explore current, pressing issues regarding the HIV epidemic, please review that report. This report, "Detroit, Michigan HIV Surveillance Report, New Diagnoses and Prevalence Tables", contains the most commonly requested regional data.

The old surveillance reports utilized residence at diagnosis (the CDC standard) and therefore any person diagnosed in Michigan, regardless of their current location, was included. However, due to population changes, as well as the extended lifespan among PLWH, it is more appropriate to include only those currently living in Michigan. Due to differences in the underlying dataset, do not compare any numbers or figures in the new Detroit, Michigan HIV Surveillance Report to reports preceding 2016.

Key Definitions

The Basics

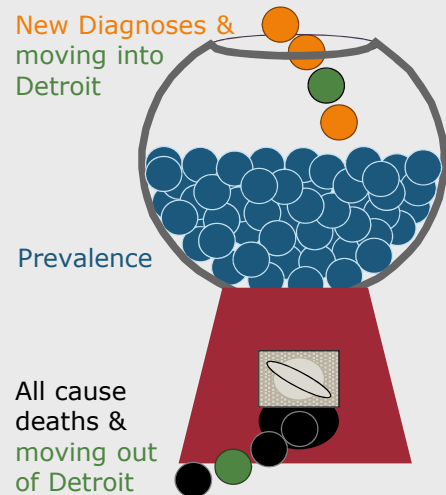
New Diagnoses: The number of cases newly diagnosed over a given period of time, usually a year. In HIV surveillance new diagnoses do not necessarily represent new infections as newly diagnosed persons may have been infected for many years.

Prevalence: The total number of persons currently living with HIV (PLWH).

Reported Prevalence: The number of diagnosed persons who were reported to surveillance.

Estimated Prevalence: The CDC estimates that 13% of PLWH in Michigan are not diagnosed. In other words, the reported prevalence is 87% of the estimated prevalence. The undiagnosed PLWH are distributed by county based on the proportion of PLWH living there (Table 4 of Michigan HIV Surveillance Report). When displayed as a number, the estimated prevalence is rounded up to the nearest ten.

HIV Stages: Stage 3 (formally called AIDS) refers to persons with a CD4 count of <200 cells. Once a person progresses to stage 3, the CD4 count may improve, but that person is still categorized as stage 3. Stages 0, 1, or 2 (aka non-stage 3) refer to persons who have never progressed to stage 3.



Linkage, Care, and Viral Suppression

Linked to Care: The proportion of newly diagnosed PLWH who have visited a doctor at least eight days after diagnosis (assessed by CD4, viral load, or genotype test).

In Care: The proportion of PLWH who visit a doctor at least once during a calendar year (assessed by CD4, viral load, or genotype test).

Community Viral Suppression: The proportion virally suppressed ($\leq 200c/mL$) out of *all* PLWH.
Higher levels of community viral suppression reduce HIV transmission.

Viral Suppression (VS) Rate: The proportion virally suppressed ($\leq 200c/mL$) out of PLWH *in care*.

Demographics

Race: In this report, persons described as white, Black, Asian/Native Hawaiian/Pacific Islander, or American Indian/Alaska Native are all non-Hispanic/Latino(a); persons described as Hispanic may be of any race.

Gender: When available, this report utilizes current gender. When missing, gender is assumed to match sex at birth. Surveillance is aware that transgender persons are underreported and, many times, are categorized as the gender of their birth sex. This is because current gender did not become available for collection until 2010. Michigan surveillance anticipates that the reporting of current gender identity will continue to improve.

Risk Categories and Hierarchy

MSM: Men who have sex with men.

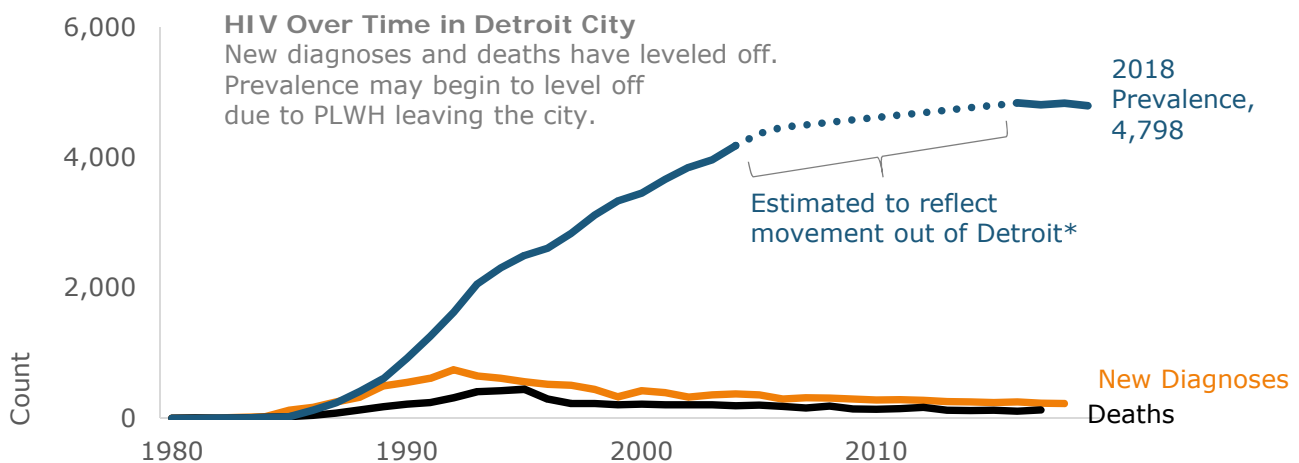
PWID: Persons who inject drugs.

Heterosexual: Males: men who are not MSM or PWID and reported sex with an HIV positive female or a female at risk (includes CDC and HRSA definitions).

Females: females who are not a PWID and reported sex with a male.

Blood Products: 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.

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



*PLWH have left Detroit since the beginning of the epidemic, the this number was unknown until 2015. To avoid the appearance that all movement occurred in 2015, the emigration count (854) was distributed evenly between 2004 and 2014. This estimation was not needed at state or regional levels as movement was low.

Table 1. New Diagnoses, Deaths, and Prevalence of HIV Infection by Year in the City of Detroit

Year	HIV Infection - All Stages			HIV Stage 3 Infection		
	Diagnoses	Deaths	Prevalence	Diagnoses	Deaths	Prevalence
1981	2	1	1	2	1	1
1982	2	0	3	2	0	3
1983	12	4	11	10	4	9
1984	21	11	21	21	11	19
1985	123	25	119	40	25	34
1986	164	44	239	74	41	67
1987	249	79	409	140	74	133
1988	321	124	606	205	122	216
1989	492	175	923	301	167	350
1990	546	212	1,257	342	203	489
1991	610	237	1,630	415	224	680
1992	743	311	2,062	578	294	964
1993	649	404	2,307	506	379	1,091
1994	612	423	2,496	481	393	1,179
1995	558	444	2,610	466	407	1,238
1996	520	292	2,838	375	273	1,340
1997	503	222	3,119	328	196	1,472
1998	440	223	3,336	316	194	1,594
1999	327	205	3,458	291	180	1,705
2000	423	216	3,665	325	183	1,847
2001	389	206	3,848	247	174	1,920
2002	324	206	3,966	268	179	2,009
2003	355	204	4,117	271	168	2,112
2004	371	192	4,296	266	162	2,216
2005	359	198	4,457	305	164	2,357
2006	295	178	4,574	225	145	2,437
2007	311	156	4,729	213	136	2,514
2008	308	187	4,850	228	147	2,595
2009	293	140	5,003	191	111	2,675
2010	280	138	5,145	204	120	2,759
2011	282	144	5,283	191	112	2,838
2012	274	165	5,392	146	130	2,854
2013	253	119	5,526	176	100	2,930
2014	251	118	5,659	128	86	2,972
2015	237	122	4,839	129	101	2,684
2016	251	106	4,809	134	78	2,654
2017	227	124	4,838	101	99	2,628
2018	225	--	4,798	85	--	2,508
Total	12,602	6,355		8,726	5,583	

The current reported prevalence of HIV infection in Detroit is 4,798 cases. The prevalence of stage 3 HIV infection, which is a subset of the overall HIV infection prevalence, is 2,508 cases. The HIV infection columns display data on all persons with HIV, including those with stage 3.

The number of reported deaths includes those directly attributable to the presence of HIV infection as well as those due to other causes. Reported deaths for the most recent year is incomplete.

Prevalence

on January 1, 2019

Table 2. Demographic Information of City of Detroit Residents Living with HIV

Demographic Group	Estimated Prevalence	Reported HIV Infection							2018 Census Estimates	
		Non Stage 3		Stage 3		Total			Count	%
		Count	%	Count	%	Count	%	Rate per 100,000		
Total	5,590	2,290	100%	2,509	100%	4,799	100%	679.2	706,574	100%
Race/Ethnicity										
Black	4,950	1,996	87%	2,249	90%	4,245	88%	779.7	544,427	77%
Hispanic	200	93	4%	76	3%	169	4%	330.2	51,177	7%
White	310	149	7%	113	5%	262	5%	401.6	65,232	9%
Other	150	52	2%	71	3%	123	3%	268.9	45,738	6%
Asian/NH/PI	10	4	<1%	3	<1%	7	<1%	--	9,744	1%
Am Indian/AN	10	5	<1%	1	<1%	6	<1%	--	2,428	<1%
Multi/Other	130	43	2%	67	3%	110	2%	327.7	33,566	5%
Gender & Race										
Male	4,140	1,712	75%	1,834	73%	3,546	74%	1,057.7	335,256	47%
Black	3,620	1,474	64%	1,633	65%	3,107	65%	1,233.5	251,892	36%
Hispanic	150	74	3%	48	2%	122	3%	467.2	26,112	4%
White	270	124	5%	100	4%	224	5%	657.3	34,077	5%
Other	110	40	2%	53	2%	93	2%	401.3	23,175	3%
Female	1,320	514	22%	617	25%	1,131	24%	304.6	371,318	53%
Black	1,200	464	20%	563	22%	1,027	21%	351.1	292,535	41%
Hispanic	50	17	<1%	25	<1%	42	<1%	167.6	25,065	4%
White	50	23	1%	12	<1%	35	<1%	112.3	31,155	4%
Other	40	10	<1%	17	<1%	27	<1%	119.7	22,563	3%
Transgender	150	64	3%	58	2%	122	3%	--	N/A	N/A
Black	130	58	3%	53	2%	111	2%	--	N/A	N/A
Hispanic	10	2	<1%	3	<1%	5	<1%	--	N/A	N/A
White	10	2	<1%	1	<1%	3	<1%	--	N/A	N/A
Other	10	2	<1%	1	<1%	3	<1%	--	N/A	N/A
Risk										
MSM	2,870	1,254	55%	1,209	48%	2,463	51%	--	N/A	N/A
PWID	450	112	5%	266	11%	378	8%	--	N/A	N/A
MSM/PWID	160	49	2%	88	4%	137	3%	--	N/A	N/A
Heterosexual	1,140	440	19%	531	21%	971	20%	--	N/A	N/A
Males	240	82	4%	120	5%	202	4%	--	N/A	N/A
Females	900	358	16%	411	16%	769	16%	--	N/A	N/A
Blood Products	10	1	<1%	2	<1%	3	<1%	--	N/A	N/A
Perinatal	60	19	<1%	27	1%	46	<1%	--	N/A	N/A
Undetermined	940	415	18%	386	15%	801	17%	--	N/A	N/A
Current Age (in years)*										
0-12	20	6	<1%	3	<1%	9	<1%	--	130,608	18%
13-19	70	47	2%	7	<1%	54	1%	75.1	71,938	10%
20-24	330	228	10%	54	2%	282	6%	464.6	60,696	9%
25-29	740	444	19%	187	7%	631	13%	1,197.5	52,693	7%
30-39	1,140	543	24%	431	17%	974	20%	1,141.0	85,363	12%
40-49	1,150	405	18%	579	23%	984	21%	1,129.7	87,101	12%
50-59	1,370	403	18%	773	31%	1,176	25%	1,340.5	87,728	12%
60+	810	214	9%	475	19%	689	14%	528.2	130,448	18%

These data may be found by county in the Michigan Statewide HIV Surveillance Report (Table 4)

https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982_46000_46003-35962--,00.html#current

on January 1, 2019

Table 3. Demographic Information and Care and Viral Suppression (VS) Rates of City of Detroit Residents Living with HIV

Gender & Race/Risk	Current Age														
	<13 yrs			13-19			20-24			25-29			30-39		
	Count	Care Rate	VS Rate	Count	Care Rate	VS Rate	Count	Care Rate	VS Rate	Count	Care Rate	VS Rate	Count	Care Rate	VS Rate
Total	9	.	.	54	86%	75%	282	85%	79%	631	80%	72%	974	78%	80%
Male	7	.	.	45	81%	88%	236	84%	79%	517	79%	72%	728	78%	83%
Race															
Black	4	.	.	43	80%	87%	217	83%	79%	472	79%	71%	628	76%	83%
Hispanic	0	.	.	1	.	.	8	.	.	16	81%	92%	31	86%	84%
White	1	.	.	0	.	.	7	.	.	15	92%	91%	46	91%	83%
Other	2	.	.	1	.	.	4	.	.	14	71%	80%	23	74%	82%
Risk															
MSM	N/A	N/A	N/A	38	81%	85%	204	86%	80%	425	82%	74%	595	79%	84%
PWID	N/A	N/A	N/A	0	.	.	1	.	.	1	.	.	3	.	.
Heterosexual	N/A	N/A	N/A	0	.	.	4	.	.	12	64%	67%	22	68%	87%
Other/Unk	7	.	.	7	.	.	27	71%	64%	79	63%	58%	108	71%	81%
Female	2	.	.	3	.	.	33	93%	83%	92	83%	70%	197	79%	75%
Race															
Black	2	.	.	2	.	.	31	92%	83%	86	82%	69%	174	81%	76%
Hispanic	0	.	.	0	.	.	0	.	.	2	.	.	7	.	.
White	0	.	.	1	.	.	2	.	.	1	.	.	9	.	.
Other	0	.	.	0	.	.	0	.	.	3	.	.	7	.	.
Risk															
PWID	N/A	N/A	N/A	0	.	.	1	.	.	1	.	.	12	58%	29%
Heterosexual	N/A	N/A	N/A	1	.	.	24	95%	94%	58	83%	71%	152	83%	75%
Other/Unk	2	.	.	2	.	.	8	.	.	33	81%	68%	33	68%	90%
Transgender	0	.	.	6	.	.	13	91%	70%	22	82%	67%	49	87%	63%
Race															
Black	0	.	.	5	.	.	13	91%	70%	21	81%	71%	43	85%	68%
Hispanic	0	.	.	0	.	.	0	.	.	0	.	.	3	.	.
White	0	.	.	0	.	.	0	.	.	0	.	.	2	.	.
Other	0	.	.	1	.	.	0	.	.	1	.	.	1	.	.
Risk															
Sex with Male	N/A	N/A	N/A	6	.	.	13	91%	70%	22	82%	67%	47	86%	61%
Other/Unk	0	.	.	0	.	.	0	.	.	0	.	.	2	.	.



Continued on Next Page



Care and VS rates not shown for frequencies <10

Care and VS data may be found by county and select city in the Michigan Statewide HIV Surveillance Report (Table 5)

https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982_46000_46003-35962--,00.html#current

on January 1, 2019

Table 3. Demographic Information and Care and Viral Suppression (VS) Rates of City of Detroit Residents Living with HIV

Gender & Race/Risk	Current Age									Total*		
	40-49			50-59			60+			Count	Care Rate	VS Rate
	Count	Care Rate	VS Rate	Count	Care Rate	VS Rate	Count	Care Rate	VS Rate	Count	Care Rate	VS Rate
Total	984	82%	85%	1,176	83%	89%	689	84%	91%	4,799	82%	84%
Male	645	82%	86%	870	84%	88%	498	85%	91%	3,546	82%	84%
Race												
Black	554	82%	84%	755	84%	87%	434	83%	90%	3,107	81%	83%
Hispanic	26	77%	100%	27	78%	95%	13	92%	92%	122	83%	92%
White	49	83%	94%	66	85%	96%	40	93%	97%	224	87%	93%
Other	16	94%	93%	22	86%	83%	11	91%	100%	93	82%	85%
Risk												
MSM	439	87%	86%	529	87%	89%	262	91%	92%	2,492	84%	84%
PWID	13	58%	67%	75	81%	78%	110	71%	88%	203	74%	83%
Heterosexual	60	77%	80%	65	74%	85%	39	79%	90%	202	75%	84%
Other/Unk	133	73%	88%	201	81%	88%	87	86%	90%	649	76%	84%
Female	323	83%	83%	295	81%	93%	186	83%	92%	1,131	82%	85%
Race												
Black	294	83%	83%	269	82%	93%	169	82%	92%	1,027	83%	85%
Hispanic	15	93%	100%	11	70%	100%	7	.	.	42	75%	90%
White	10	80%	71%	5	.	.	7	.	.	35	76%	91%
Other	4	.	.	10	90%	78%	3	.	.	27	89%	75%
Risk												
PWID	38	79%	82%	63	76%	91%	60	71%	90%	175	74%	85%
Heterosexual	234	85%	84%	192	83%	96%	100	89%	95%	761	85%	87%
Other/Unk	51	78%	79%	40	79%	77%	26	85%	81%	195	79%	78%
Transgender	16	69%	100%	11	80%	88%	5	.	.	122	83%	70%
Race												
Black	14	71%	100%	11	80%	88%	4	.	.	111	83%	73%
Hispanic	2	.	.	0	.	.	0	.	.	5	.	.
White	0	.	.	0	.	.	1	.	.	3	.	.
Other	0	.	.	0	.	.	0	.	.	3	.	.
Risk												
Sex with Male	15	73%	100%	9	.	.	4	.	.	116	84%	68%
Other/Unk	1	.	.	2	.	.	1	.	.	6	.	.

Virally suppressed individuals have a better prognosis and are less likely to transmit the virus compared to unsuppressed individuals. Receiving routine care is the first step in achieving viral suppression (VS). The following groups struggle to obtain care, achieve VS, or both:

Overall, Detroit residents are in care and achieve VS less often than the state averages (82% in care and 84% VS compared to 84% and 89%).

Compared to the Detroit averages, PWID and heterosexual men have low care rates, along with those in their 30's.

While persons who identify as transgender are in care at an average rate, they are not virally suppressed nearly as frequently. The same is true for those under 40 years old.

Care and VS rates not shown for frequencies <10

Care and VS data may be found by county and select city in the Michigan Statewide HIV Surveillance Report (Table 5)

https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982_46000_46003-35962--,00.html#current

During 2018

Table 4. Demographic Information of City of Detroit Residents Newly Diagnosed with HIV

Demographic Group	New HIV Diagnoses			2018 Census Estimates		New Stage 3	
	Count	% of Total	Rate per 100,000	Count	% of Total	Count	% of HIV Prevalence
Total	225	100%	31.8	706,574	100%	93	2%
Race/Ethnicity							
Black	201	89%	36.9	544,427	77%	86	2%
Hispanic	8	4%	--	51,177	7%	1	1%
White	13	6%	19.9	65,232	9%	3	1%
Other	3	1%	--	45,738	6%	3	2%
Asian/NH/PI	0	0%	--	9,744	1%	0	0%
Am Indian/AN	0	0%	--	2,428	<1%	0	0%
Multi/Other	3	1%	--	33,566	5%	3	3%
Gender & Race							
Male	175	78%	52.2	335,256	47%	63	2%
Black	156	69%	61.9	251,892	36%	59	2%
Hispanic	6	3%	--	26,112	4%	1	1%
White	10	4%	29.3	34,077	5%	2	1%
Other	3	1%	--	23,175	3%	1	1%
Female	42	19%	11.3	371,318	53%	28	2%
Black	37	16%	12.6	292,535	41%	25	2%
Hispanic	2	<1%	--	25,065	4%	0	0%
White	3	1%	--	31,155	4%	1	3%
Other	0	0%	--	22,563	3%	2	7%
Transgender	8	4%	--	N/A	N/A	2	2%
Black	8	4%	--	N/A	N/A	2	2%
Hispanic	0	0%	--	N/A	N/A	0	0%
White	0	0%	--	N/A	N/A	0	0%
Other	0	0%	--	N/A	N/A	0	0%
Risk							
MSM	118	52%	--	N/A	N/A	41	2%
PWID	10	4%	--	N/A	N/A	9	2%
MSM/PWID	5	2%	--	N/A	N/A	3	2%
Heterosexual	39	17%	--	N/A	N/A	22	2%
Males	2	<1%	--	N/A	N/A	2	1%
Females	37	16%	--	N/A	N/A	20	3%
Blood Products	0	0%	--	N/A	N/A	0	0%
Perinatal	0	0%	--	N/A	N/A	1	2%
Undetermined	53	24%	--	N/A	N/A	17	2%
Age (in years)							
<13	0	0%	--	130,608	18%	0	0%
13-19	22	10%	30.6	71,938	10%	3	6%
20-24	47	21%	77.4	60,696	9%	6	2%
25-29	61	27%	115.8	52,693	7%	23	4%
30-39	50	22%	58.6	85,363	12%	16	2%
40-49	21	9%	24.1	87,101	12%	20	2%
50-59	15	7%	17.1	87,728	12%	16	1%
60+	9	4%	--	130,448	18%	9	1%

New stage 3 includes persons who progressed to stage 3 last year. Newly diagnosed individuals who progressed to Stage 3 in the same year are counted in "New HIV Diagnoses" and "New Stage 3", however most only fall into one group. The "% of HIV prevalence" is the proportion of the demographic who progressed to stage 3 (denominator from table 2 - e.g. of PLWH in 2018, 2% progressed to stage 3).

These data may be found by county in the Michigan Statewide HIV Surveillance Report (Table 8)

https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982_46000_46003-35962--,00.html#current

Table 5. Demographic Information and Linkage to Care Rates of City of Detroit Residents Newly Diagnosed with HIV

Demographic Info Gender & Race/Risk	Age at HIV Diagnosis														Total Linkage	
	13-19		20-24		25-29		30-39		40-49		50-59		60+			
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Total	22	82%	47	40%	61	31%	50	46%	21	43%	15	40%	9	.	225	44%
Male	21	81%	39	44%	48	27%	36	47%	14	43%	10	50%	7	.	175	45%
Race																
Black	20	85%	33	45%	44	27%	31	48%	11	55%	10	50%	7	.	156	47%
Hispanic	0	.	3	.	0	.	2	.	1	.	0	.	0	.	6	.
White	0	.	2	.	4	.	3	.	1	.	0	.	0	.	10	40%
Other	1	.	1	.	0	.	0	.	1	.	0	.	0	.	3	.
Risk																
MSM	19	79%	31	45%	32	34%	20	50%	6	.	5	.	4	.	117	50%
PWID	0	.	1	.	2	.	1	.	3	.	0	.	0	.	7	.
Heterosexual	0	.	0	.	1	.	0	.	0	.	0	.	1	.	2	.
Unknown	2	.	7	.	13	8%	15	47%	5	.	5	.	2	.	49	31%
Female	0	.	6	.	12	42%	11	36%	7	.	4	.	2	.	42	38%
Race																
Black	0	.	5	.	12	42%	9	.	7	.	3	.	1	.	37	38%
Hispanic	0	.	0	.	0	.	0	.	0	.	1	.	1	.	2	.
White	0	.	1	.	0	.	2	.	0	.	0	.	0	.	3	.
Other	0	.	0	.	0	.	0	.	0	.	0	.	0	.	0	.
Risk																
PWID	0	.	1	.	0	.	1	.	0	.	0	.	1	.	3	.
Heterosexual	0	.	5	.	11	45%	8	.	7	.	3	.	1	.	35	46%
Unknown	0	.	0	.	1	.	2	.	0	.	1	.	0	.	4	.
Transgender	1	.	2	.	1	.	3	.	0	.	1	.	0	.	8	.
Race																
Black	1	.	2	.	1	.	3	.	0	.	1	.	0	.	8	.
Hispanic	0	.	0	.	0	.	0	.	0	.	0	.	0	.	0	.
White	0	.	0	.	0	.	0	.	0	.	0	.	0	.	0	.
Other	0	.	0	.	0	.	0	.	0	.	0	.	0	.	0	.
Risk																
Sex with Male	1	.	2	.	1	.	3	.	0	.	1	.	0	.	8	.
Unknown	0	.	0	.	0	.	0	.	0	.	0	.	0	.	0	.

The linkage rate is the proportion of those newly diagnosed who received a CD4, viral load, or genotype 9-30 days following diagnosis. <13 years of age is not listed due to small sample size.

Linkage data by county and select city may be found in the Michigan Statewide HIV Surveillance Report (Table 9)

https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982_46000_46003-35962--,00.html#current

The Michigan Statewide HIV Surveillance Report also includes information regarding:

- 1) County and select city level data for reported prevalence, estimated prevalence, care rate, and viral suppression rate.
- 2) Number of acute diagnoses by county. An acute diagnosis indicates a person was diagnosed shortly after infection
- 3) Pediatric Diagnoses for the past 5 years.

Follow the link to reach these data

https://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2982_46000_46003-35962--,00.html#current