



**HAMILTON COUNTY
PUBLIC HEALTH**

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Region 8 HIV Quarterly Report

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New HIV Diagnoses by Month, Region 8, Ohio (January 2018- September 2019)

Table 1. Region 8 New HIV Infections

Month	New Cases of HIV 2018	New Cases of HIV 2019
January	17	16
February	17	15
March	26	27
April	24	28
May	13	11
June	18	14
July	23	22
August	25	18
September	24	13
October	19	
November	23	
December	15	
Total	244	164

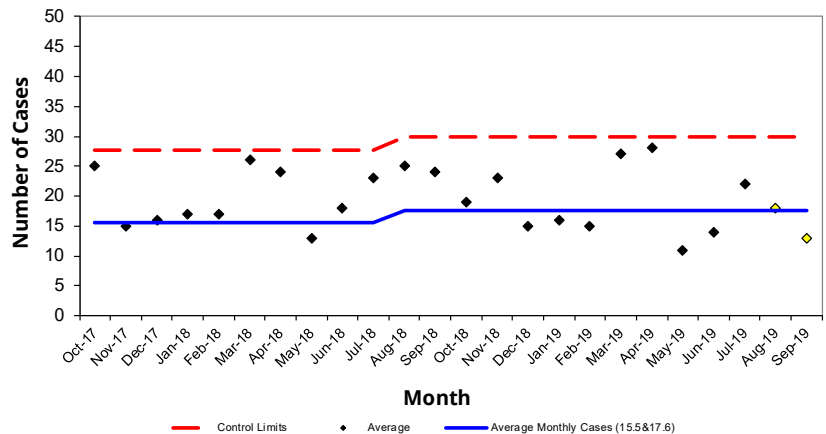
This report was created as a surveillance effort to help prevent new cases of HIV within Region 8 counties (Brown, Butler, Clermont, Clinton, Hamilton, Highland, Warren). Table 1 displays the breakdown of new HIV cases for Region 8 residents for January 2018 through September 2019 on a monthly basis. Only HIV cases where the resident was identified as a new HIV infection by a disease investigation specialist were counted for analysis purposes in this report. In 2018, the highest number of cases was seen in March (26 cases). In 2019, the highest number of new HIV cases occurred in April (28 cases). The average number of new HIV cases per month was 20.3 and 18.2 for the years 2018 and 2019, respectively. The 2019 monthly counts may change in future reports, as lag times in disposition of cases directly affect the case counts presented. Some HIV cases are unable to be located for follow-up with partner services, which may impact total number of cases.

New HIV cases are derived from partner services data in the Ohio Disease Reporting System and may not fully represent all new HIV infections. These data are provisional and subject to change when additional information is gained. Cases are selected based on address at diagnosis. Source: Ohio Department of Health (ODH), Ohio Disease Reporting System (ODRS). Data reported as of 11/18/2019.

Surveillance of New HIV Cases Diagnosed in Region 8, Ohio (July 2017 - September 2019)

One way to monitor HIV infections within Region 8 is through the use of surveillance control charts. Factors that these control charts show are the number of new HIV cases for each month (black diamonds), control limit (red dashed lines), and the average number of cases (solid blue line). Yellow diamonds indicate data that are most likely to change in future reports. Control charts are used to detect unexpected events, such as a single point outside of the control limit, many consecutive points above or below the average line, or two or three consecutive points near a control limit. When anomalies such as these occur, it may be beneficial to examine events surrounding the anomalies in order to devise a strategy to reduce the number of cases in subsequent months or see which strategies already in place are working. Figure 1 illustrates the control chart for new HIV infections from October 2017 to September 2019. All of the monthly counts in this time frame fell below the upper control limit for number of new HIV infections. The average number of cases was calculated from April 2016 to March 2017 (15.5). There was a recalculation of the average starting February 2018 using data from February 2016 to January 2018 (17.6), in result of 8 consecutive cases above the average line.

Figure 1. New HIV Infection Control Chart



New HIV cases are derived from partner services data in the Ohio Disease Reporting System and may not fully represent all new cases of HIV. These data are provisional and subject to change when additional information is gained. Cases are selected based on address at diagnosis. Source: ODH, ODRS. Data reported as of 11/18/2019.

Demographics and Social Factors Associated with High Risk for HIV Infection

Figure 2, below, illustrates the distribution of age among new HIV diagnoses in Region 8 From 2015 to 2019, 25-34 year olds made up the largest percentage of cases. Table 2 compares the race, sex, and risk behavior groups for new HIV infections from January 2018 through September 2019. The data reflect confirmed HIV cases designated as newly testing positive and residing in Region 8. A large disparity in the sex of cases was apparent in 2018 and 2019 as males constituted over 65% of cases in both years. As Table 2 illustrates, the men who have sex with men (MSM) population accounted for 33 percent and 35 percent of new HIV cases in 2018 and 2019, respectively. Table 2 also illustrates, injection drug use (IDU) population accounted for 28 percent (2018) and 27 percent (2019) of new HIV cases. Understanding these demographics and high-risk factors that contribute most to new HIV infections, is vital in formulating specific and effective prevention strategies.

Figure 2. Percentage of New HIV Diagnoses by Age, Region 8, 2015-2019

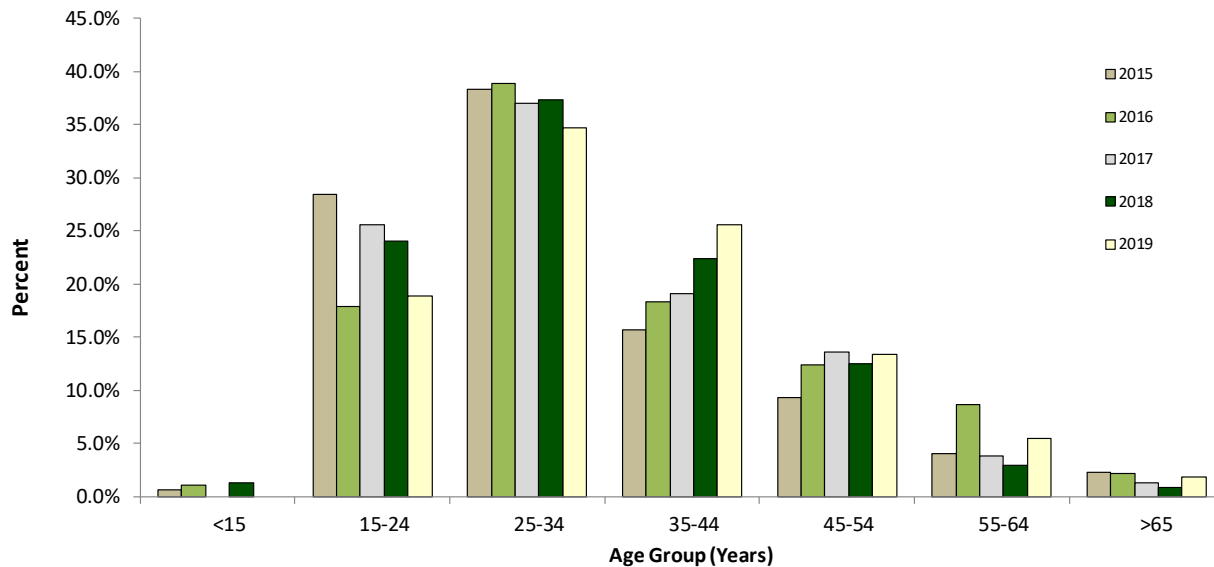


Table 2. Region 8 HIV Demographics				
	Jan.- Dec. 2018		Jan. - Sep. 2019	
	#	%	#	%
Race				
Black	95	39.4%	68	41.5%
White	125	51.9%	84	51.2%
Other	21	8.7%	12	7.3%
Sex				
Male	187	77.6%	113	68.9%
Female	54	22.4%	51	31.1%
Risk Groups				
MSM	79	32.4%	55	33.5%
HRH	83	34.0%	72	43.9%
IDU	67	27.5%	44	26.8%

These data are provisional and subject to change when additional information is gained. New HIV positive cases between January 2018 and September 2019 were used for analysis. Cases were selected based on address at diagnosis. Source: ODH, ODRS. Data reported as of 11/18/2019. Percentages may not total to 100 due to rounding. Percentages are based on availability of data for all cases. High risk heterosexuals (HRH) are residents who are not MSM but participate in risky behaviors such as having sex with men who have sex with men (MSM), HIV+, intravenous drug user (IDU), or anonymous people. HRH status is also determined from factors such as having sex while intoxicated, exchanging sex for drugs, or having previous STIs.

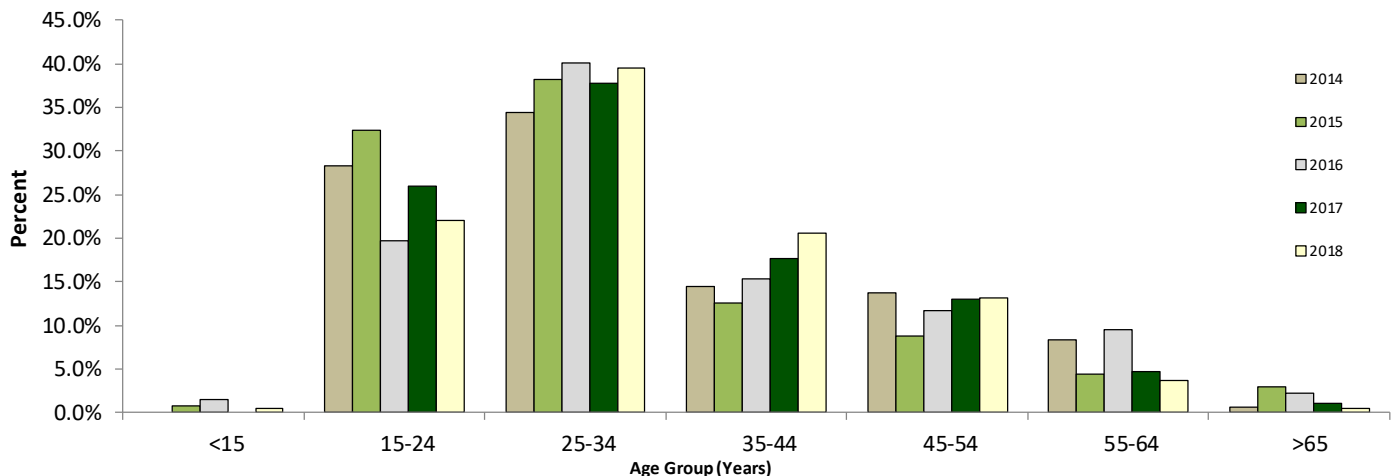
Overview of HIV in Hamilton County

Table 3 displays the breakdown of new HIV cases for Hamilton County residents for January 2018 through September 2019 on a monthly basis. Only HIV cases where the resident was identified as a new HIV infection by a disease investigation specialist were counted for analysis purposes in this report. Figure 3, below, illustrates the distribution of age among new HIV diagnoses in Hamilton County. From 2015 to 2019, 25-34 year olds made up the largest percentage of cases. Table 4 compares the race, sex, and risk behavior groups for new HIV infections from January 2018 through September 2019. Table 5 and 6 displays the breakdown of new HIV cases for select counties in region 8 and the demographic makeup of the newly identified HIV cases.

Month	New Cases of HIV 2018	New Cases of HIV 2019
January	14	11
February	13	13
March	21	20
April	21	22
May	10	8
June	13	11
July	20	21
August	21	15
September	18	10
October	12	0
November	16	0
December	11	0
Total	190	131

	Jan. - Dec. 2018		Jan. - Sep. 2019	
	#	%	#	%
Race				
Black	85	45.5%	62	47.3%
White	86	46.0%	60	45.8%
Other	16	8.6%	9	6.9%
Sex				
Male	140	74.9%	84	64.1%
Female	47	25.1%	47	35.9%
Risk Groups				
MSM	59	31.1%	41	31.3%
HRH	78	41.1%	64	48.9%
IDU	61	32.1%	40	30.5%

Figure 3. Percentage of New HIV Diagnoses by Age, Hamilton County, 2015-2019



Overview of HIV in Select Counties in Region 8

Table 5. Select Counties in Region 8 New HIV Infections by Quarters, 2018-2019

	Brown	Butler	Clermont	Clinton	Highland	Warren
2018-Q1	0	7	2	1	2	0
2018-Q2	0	4	5	1	1	0
2018-Q3	0	8	1	2	0	2
2018-Q4	0	12	2	1	0	3
2019-Q1	0	8	2	1	0	3
2019-Q2	1	4	5	0	1	1
2019-Q3	0	4	3	0	0	0
2019-Q4						

Table 6. Select Counties in Region 8 New HIV Demographics

	Jan. - Dec. 2018		Jan. - Sep 2019	
	#	%	#	%
Race				
Black	10	18.5%	6	18.2%
White	39	72.2%	24	72.7%
Other	5	9.3%	3	9.1%
Sex				
Male	47	87.0%	29	87.9%
Female	7	13.0%	4	12.1%
Risk Group				
MSM	20	37.0%	14	42.4%
HRH	5	9.3%	8	24.2%
IDU	6	11.1%	4	12.1%

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