HAMILTON COUNTY PUBLIC HEALTH

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Region 8 HIV Quarterly Report

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HIV Quarterly Report: Region 8

New HIV Diagnoses by Month, Region 8,Ohio (January 2021 - June 2022)

Table 1. Region 8 New HIV Infections		
Month	**New Cases of HIV 2021**	**New Cases of HIV 2022**
January	10	17
February	20	11
March	14	13
April	14	12
May	15	12
June	20	13
July	15	0
August	22	0
September	22	0
October	17	0
November	16	0
December	12	0
Total	**197**	**78**

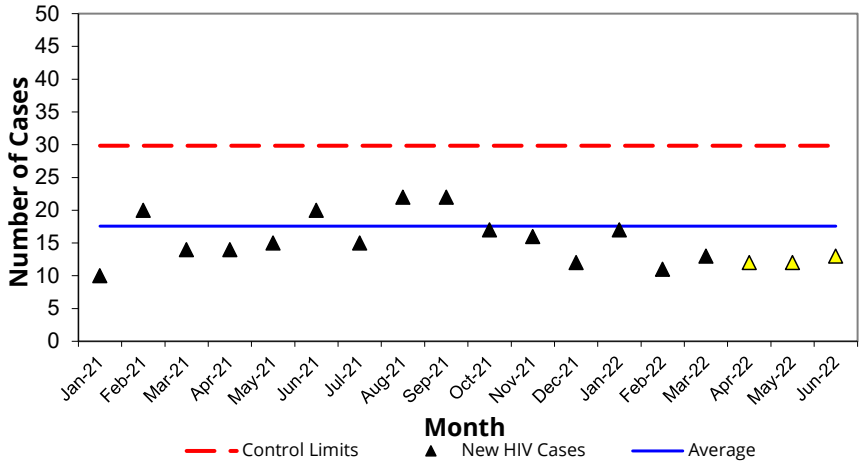
This report was created as a surveillance effort to help prevent new cases of HIV within Region 8 counties (Brown, Butler, Clermont, Clinton, Hamilton, Highland, Warren). Table 1 displays the breakdown of new HIV cases for Region 8 residents for January 2021 through June 2022 on a monthly basis. Only 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 2021, the highest number of cases were seen in August and Septemeber (22 cases). In 2022, the highest number of new HIV cases occurred in January (17 cases). The average number of new HIV cases per month was 16.4 and 13.0 for the years 2021 and 2022, respectively. The 2022 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 07/29/2022.

Surveillance of New HIV Cases Diagnosed in Region 8, Ohio (January 2021 - June 2022)

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 triangles), control limits (red dashed lines), and the average number of cases (solid blue line).Yellow triangles indicate data that is 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 January 2021 to June 2022. All of the monthly counts in this time frame fell below the control limits for number of new HIV infections.

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 07/29/2022.

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 2018 to 2022, 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 2021 through June 2022. The data reflects confirmed HIV cases designated as newly testing positive and residing in Region 8. A large disparity in the sex of cases was apparent in 2021 and 2022 as males constituted over 70% of cases in both years. As Table 2 illustrates, the men who have sex with men (MSM) population accounted for over 30% of new HIV cases in 2021 and 2022, respectively. Table 2 also illustrates, injection drug use (IDU) population accounted for over 20% of new cases in 2021. 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, 2018-2022

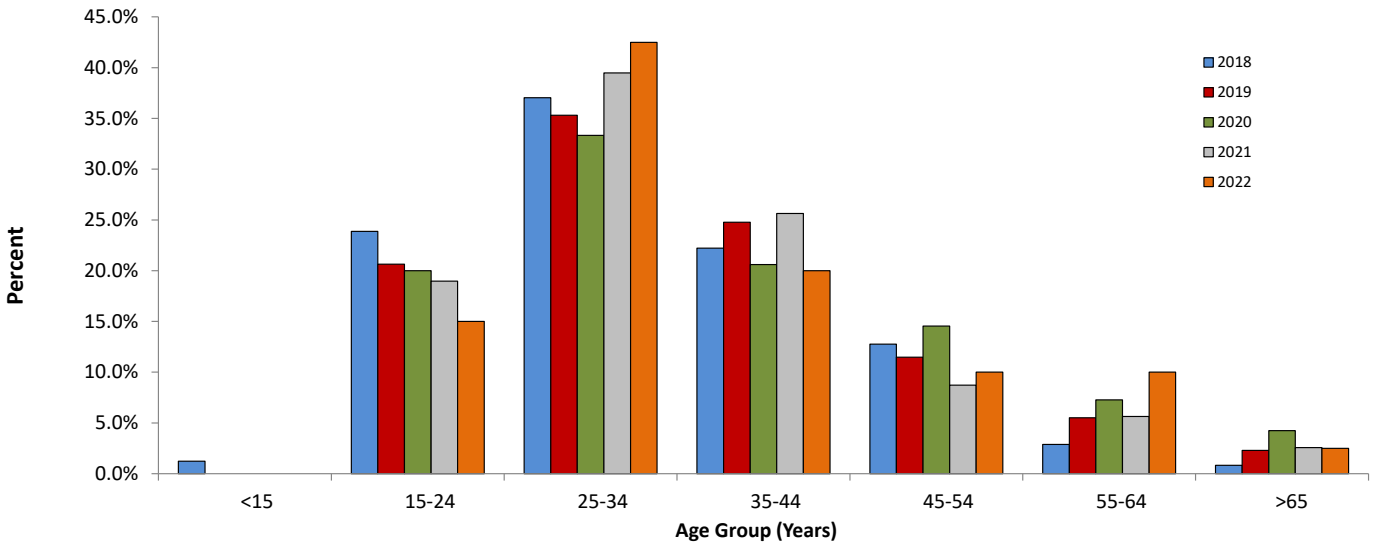


Table 2. Region 8 HIV Demographics

	Jan - Dec 2021		Jan - Jun 2022	
	#	%	#	%
Race				
Black	88	45.1%	40	51.9%
White	83	42.6%	32	41.6%
Other	24	12.3%	5	6.5%
Sex				
Male	140	71.8%	60	77.9%
Female	55	28.2%	17	22.1%
Risk Groups				
MSM	62	31.5%	27	34.6%
HRH	49	25.1%	19	24.4%
IDU	47	24.1%	11	14.1%

These data are provisional and subject to change when additional information is gained. New HIV positive cases between January 2021 and June 2022 were used for analysis. Cases were selected based on address at diagnosis. Source: ODH, ODRS. Data reported as of 7/29/2022. 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 2021 through June 2022 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 2018 to 2022, 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 2021 through June 2022. 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.

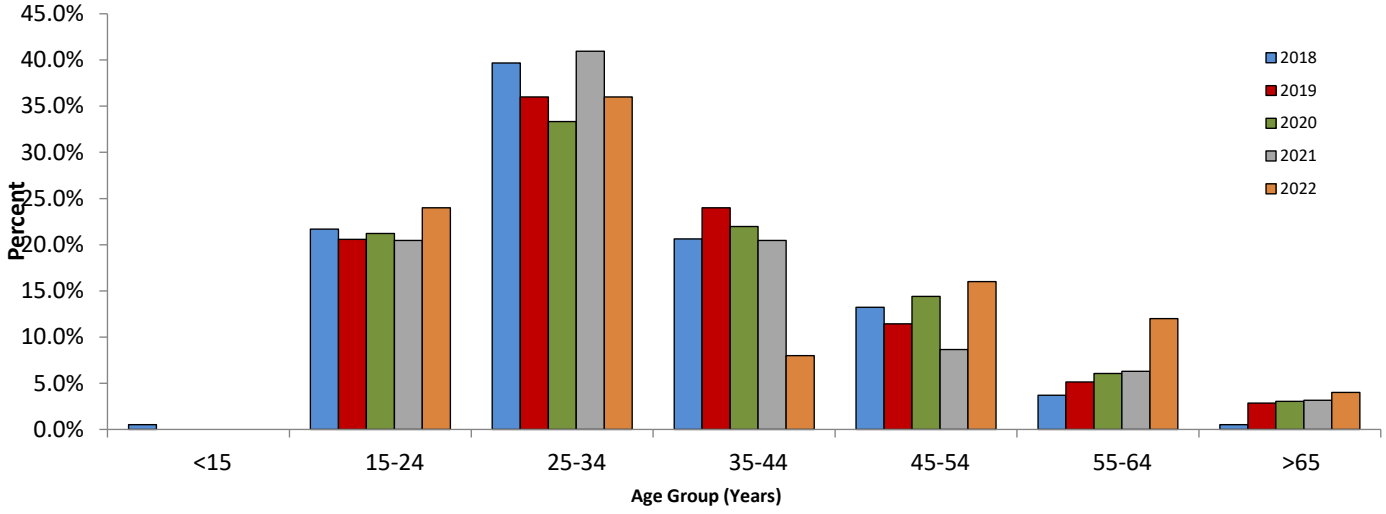
Table 3. Hamilton County New HIV Infections

Month	New Cases of HIV 2021	New Cases of HIV 2022
January	7	12
February	18	4
March	10	9
April	12	6
May	9	8
June	12	10
July	5	0
August	10	0
September	15	0
October	11	0
November	10	0
December	8	0
Total	**127**	**49**

Table 4. Hamilton County HIV Demographics

	Jan - Dec 2021		Jan - Jun 2022	
	#	%	#	%
Race				
Black	75	59.1%	37	75.5%
White	32	25.2%	11	22.4%
Other	20	15.7%	1	2.0%
Sex				
Male	95	74.8%	38	77.6%
Female	32	25.2%	11	22.4%
Risk Groups				
MSM	48	37.8%	20	40.8%
HRH	29	22.8%	12	24.5%
IDU	10	7.9%	1	2.0%

Figure 3. Percentage of New HIV Diagnoses by Age, Hamilton County, 2018-2022



Overview of HIV in Select Counties in Region 8

Table 5. Select Counties in Region 8 New HIV Infections by Quarters, 2021-2022						
	Brown	Butler	Clermont	Clinton	Highland	Warren
2021-Q1	0	7	0	1	0	1
2021-Q2	0	16	0	0	0	0
2021-Q3	1	24	4	0	0	0
2021-Q4	0	12	2	0	0	2
2022-Q1	1	11	2	0	0	2
2022-Q2	0	11	0	0	0	2
2022-Q3	0	0	0	0	0	0
2022-Q4	0	0	0	0	0	0

Table 6. Select Counties in Region 8 New HIV Demographics				
	Jan - Dec 2021		Jan - Jun 2022	
	#	%	#	%
Race				
Black	13	18.8%	3	10.7%
White	51	73.9%	21	75.0%
Other	5	7.2%	4	14.3%
Sex				
Male	46	66.7%	22	78.6%
Female	23	33.3%	6	100.0%
Risk Group				
MSM	14	20.0%	7	24.1%
HRH	20	28.6%	7	24.1%
IDU	37	52.9%	10	34.5%

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 7/29/2022.