HAMILTON COUNTY PUBLIC HEALTH

PREVENT. PROMOTE. PROTECT.

Region 8 HIV Quarterly Report

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Division of Epidemiology and Assessment

250 William Howard Taft Road
Cincinnati, Ohio 45219
513.946.7800

www.hamiltoncountyhealth.org

Bijal Patel, MPH, Infectious Disease Epidemiologist

HIV Quarterly Report: Region 8

New HIV Diagnoses by Month, Region 8,Ohio (January 2020 - December 2021)

Table 1. Region 8 New HIV Infections		
Month	**New Cases of HIV 2020**	**New Cases of HIV 2021**
January	16	10
February	14	20
March	13	14
April	8	14
May	7	15
June	18	20
July	17	15
August	16	22
September	18	20
October	15	17
November	8	16
December	15	12
Total	**165**	**195**

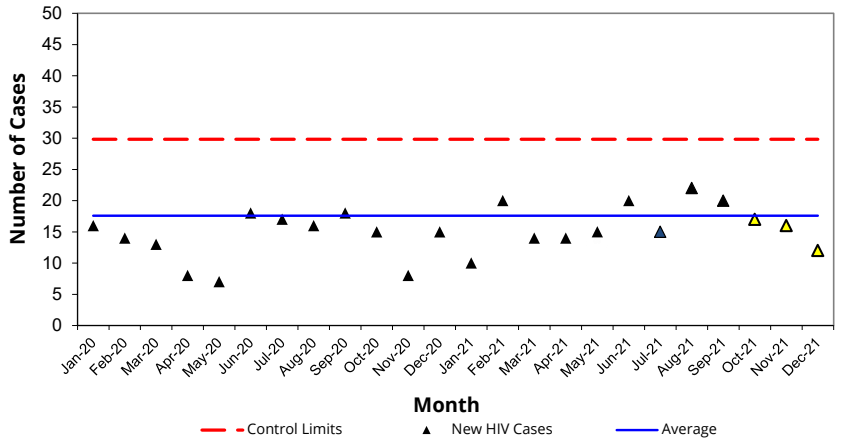
This report was created as a surveillance effort to help prevent new cases of HIV within Region 8 counties (Brown, Butler, Clermont, Clinton, Hamilton, Highland, Warren). Table 1 displays the breakdown of new HIV cases for Region 8 residents for January 2020 through December 2021 on a monthly basis. 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 2020, the highest number of cases were seen in June and Septemeber (18 cases). In 2021, the highest number of new HIV cases occurred in August (22 cases). The average number of new HIV cases per month was 13.8 and 16.2 for the years 2020 and 2021, respectively. The 2021 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 01/25/2022.

Surveillance of New HIV Cases Diagnosed in Region 8, Ohio (January 2020 - December 2021)

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 2020 to December 2021. 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 01/25/2022.

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 2017 to 2021, 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 2020 through December 2021. 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 2020 and 2021 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 percent of new HIV cases in 2020 and 2021, respectively. Table 2 also illustrates, injection drug use (IDU) population accounted for over 25% 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, 2017-2021

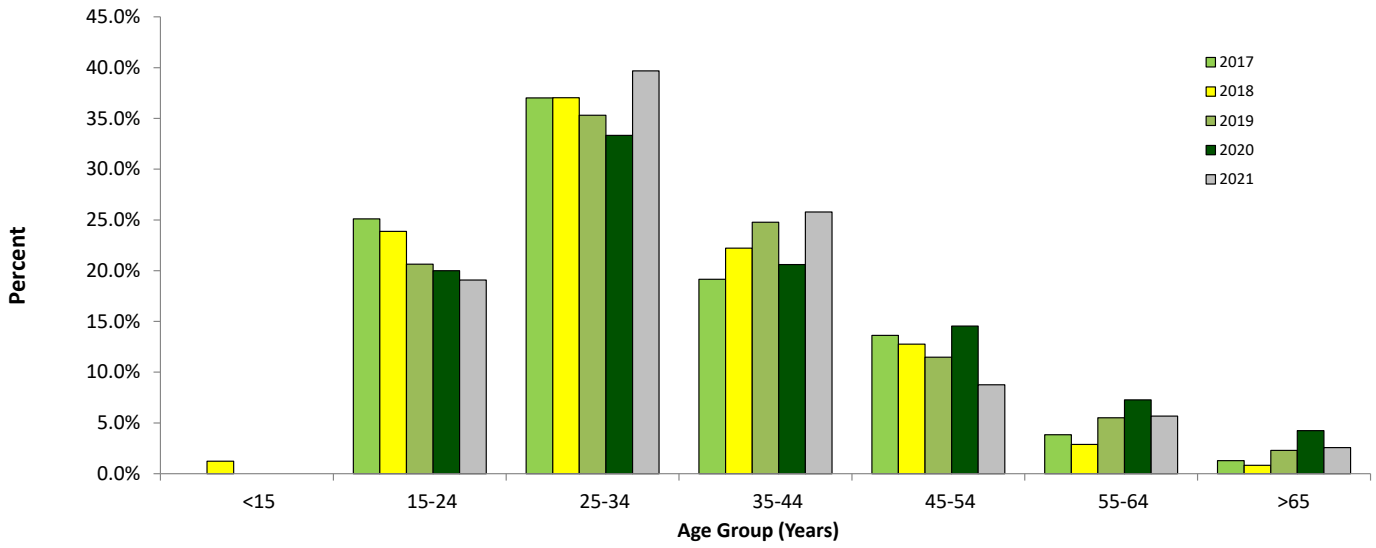


Table 2. Region 8 HIV Demographics				
	Jan - Dec 2020		Jan - Dec 2021	
	#	%	#	%
Race				
Black	79	47.9%	87	44.8%
White	66	40.0%	84	43.3%
Other	20	12.1%	23	11.9%
Sex				
Male	125	75.8%	139	71.6%
Female	40	24.2%	55	28.4%
Risk Groups				
MSM	64	38.8%	62	31.8%
HRH	45	27.3%	48	24.6%
IDU	19	11.5%	44	22.6%

These data are provisional and subject to change when additional information is gained. New HIV positive cases between January 2020 and December 2021 were used for analysis. Cases were selected based on address at diagnosis. Source: ODH, ODRS. Data reported as of 01/25/2022. 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 2020 through December 2021 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 2017 to 2021, 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 2020 through December 2021. 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.

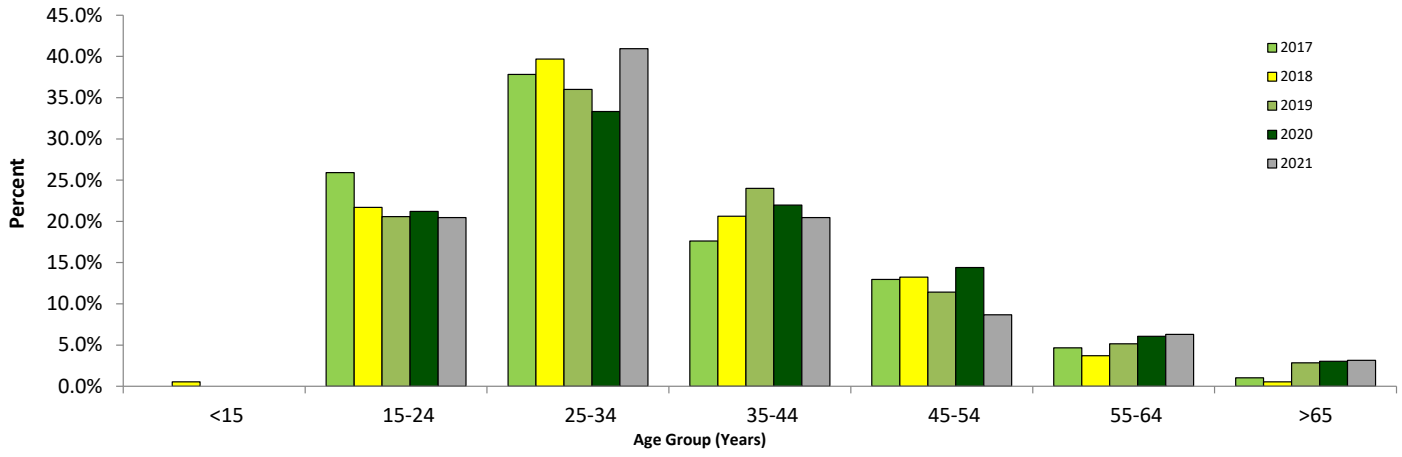
Table 3. Hamilton County New HIV Infections

Month	New Cases of HIV 2020	New Cases of HIV 2021
January	13	7
February	12	18
March	9	10
April	8	12
May	7	9
June	13	12
July	11	5
August	13	10
September	16	15
October	11	11
November	7	10
December	12	8
Total	**132**	**127**

Table 4. Hamilton County HIV Demographics

	Jan - Dec 2020		Jan - Dec 2021	
	#	%	#	%
Race				
Black	73	55.3%	75	59.1%
White	44	33.3%	33	26.0%
Other	15	11.4%	19	15.0%
Sex				
Male	101	76.5%	95	74.8%
Female	31	23.5%	32	25.2%
Risk Groups				
MSM	50	37.9%	48	37.8%
HRH	38	28.8%	29	22.8%
IDU	16	12.1%	10	7.9%

Figure 3. Percentage of New HIV Diagnoses by Age, Hamilton County, 2017-2021



Overview of HIV in Select Counties in Region 8

Table 5. Select Counties in Region 8 New HIV Infections by Quarters, 2020-2021						
	Brown	Butler	Clermont	Clinton	Highland	Warren
2020-Q1	0	5	2	0	0	2
2020-Q2	0	2	2	0	0	1
2020-Q3	0	5	1	0	1	4
2020-Q4	0	3	1	1	1	1
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

Table 6. Select Counties in Region 8 New HIV Demographics				
	Jan - Dec 2020		Jan - Dec 2021	
	#	%	#	%
Race				
Black	6	18.2%	12	17.9%
White	22	66.7%	51	76.1%
Other	5	15.2%	4	6.0%
Sex				
Male	24	72.7%	44	65.7%
Female	9	27.3%	23	34.3%
Risk Group				
MSM	14	42.4%	14	20.0%
HRH	7	21.2%	19	27.1%
IDU	3	9.1%	34	48.6%

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 01/25/2022.