HAMILTON COUNTY PUBLIC HEALTH

PREVENT. PROMOTE. PROTECT.

Region 8 HIV Quarterly Report

2024 4th Quarter

Hamilton County Public Health
Division of Epidemiology and Assessment

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HIV Surveillance Background

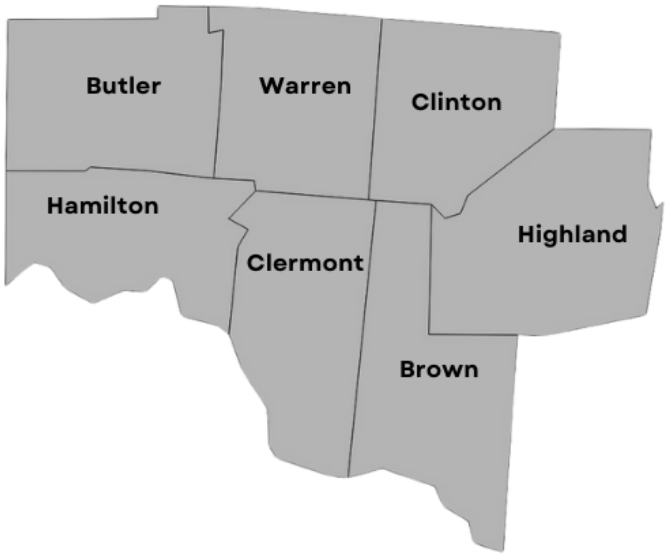
Hamilton County Public Health conducts HIV surveillance and mitigation in seven counties (Brown, Butler, Clermont, Clinton, Hamilton, Highland, and Warren) known as Region 8. This quarterly report was created as a surveillance effort to help track and prevent new cases of HIV within Region 8 counties and provide a basis for HIV prevention efforts. When an individual tests positive for HIV in Region 8, disease intervention specialists from Hamilton County Public Health attempt to contact that person and offer partner services (e.g., patient interviews, contact tracing, partner testing, and linkage to care). Only HIV cases where the resident was identified as a previously unknown new HIV infection were counted for analysis purposes in this report. Some HIV cases are unable to be located for an interview, which may impact data collection. The following report features total new HIV counts, demographic data and risk factor data for Region 8 counties from 2020 through the 4th quarter of 2024. The purpose of collecting and distributing demographic and risk factor data are to inform programming, community partners, and stakeholders so the best effort can be made to diagnose, prevent, and treat HIV infections in our community. These data can provide a snapshot of HIV surveillance in the region, but do not always tell the entire story. To fully understand the situation, community voices, stakeholders, and other sources should be considered.

These data are provisional and subject to change as there is lag time in reporting and cases may be added or removed. Ohio Department of Health specifically disclaims responsibility for analyses, interpretations or conclusions.

Data downloaded from Ohio Disease Reporting System (ODRS) on 02/14/2025.

Email HCPH.ID@HAMILTON-CO.ORG with any questions regarding this report.

Region 8 Map



For HIV or other STI testing information please call the HCPH Clinic at 513-946-7610

Overview of HIV in Region 8

Table 1. Region 8 HIV by Year				
2020	2021	2022	2023	2024
165	200	135	145	162

Table 1 shows total new HIV cases in Region 8 from 2020 through the 4th quarter of 2024. The most recent data are highlighted in light green.

Figure 1 is a line graph of HIV cases from 2020 through the 4th quarter of 2024.

Figure 1. **Region 8 HIV Counts**

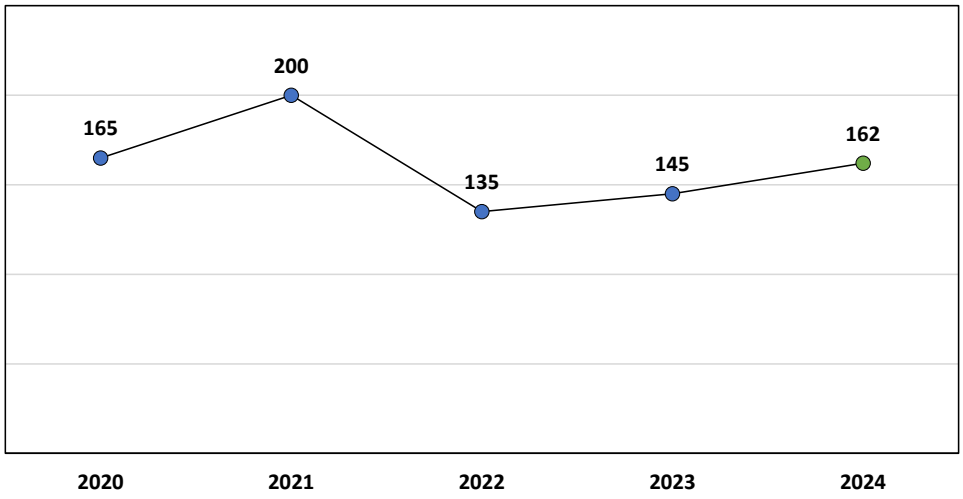


Table 2 is a comparison of the 1st through 4th quarters (Q1 - Q4) of 2023 and 2024. There were **11.7% more** new HIV cases in 2024 compared to 2023 during this time period.

Table 2. Region 8 Year Comparisons		
2023	2024	% Change
145	162	**11.7%↑**

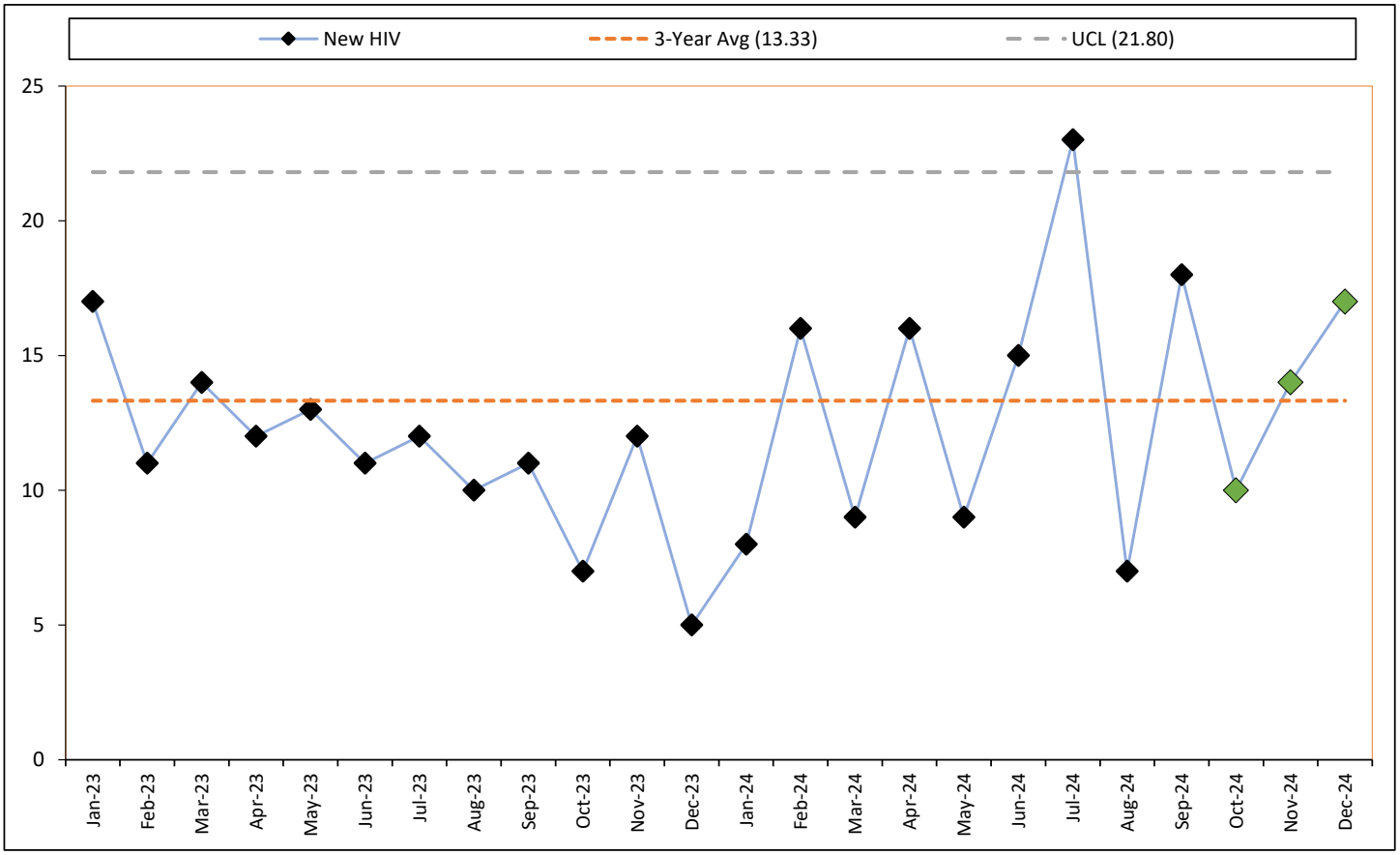
Table 3 displays the breakdown of new HIV cases for Region 8 from 2023 through the 4th quarter of 2024 by month. In 2023, the highest number of cases was seen in October (18 cases). In 2024, the highest number of new HIV cases was seen in July (23 cases).

Table 3. Region 8 HIV by Month		
Month	2023	2024
January	9	8
February	11	16
March	17	9
April	11	16
May	12	9
June	16	15
July	10	23
August	11	7
September	14	18
October	18	10
November	5	14
December	11	17
Total	**145**	**162**

Figure 2 shows a surveillance control chart. The dashed orange line shows the average number of new HIV cases per month for the past 3 years (2021, 2022, and 2023). The 3-year average is 13.33 new HIV infections per month. The dashed gray line is the upper control limit (UCL) with a value of 21.80. A single point above or near the UCL may signal anomalies that need to be investigated. The diamonds on the blue line graph show the actual number of new HIV infections by month. The green diamonds are the months from the most recent quarter.

Analysis: For Q1 - Q4 2024, February, April, June, July, September, November, and December were above the 3-year average. All other months in 2024 were below the average. July was above the UCL. Consecutive points above the average or a point above the UCL may signal anomalies that need to be investigated. When there are only a small number of cases it may be difficult to distinguish random fluctuations in disease incidence from true changes in the underlying risk for the disease.

Figure 2. Region 8 HIV Infection Control Chart



The average is found using HIV counts by month for the previous 3 years. A standard deviation is calculated using the same time frame. The upper control limit is determined by multiplying the standard deviation by 2 and adding the 3-year average.

Table 4 shows demographic and risk factor data for Region 8. The category showing the highest percentage of new HIV cases is highlighted in blue. For Q1 - Q4 2024, Male (69.8%), Black (53.7%), and 25-34 year old (37%) individuals were the demographics that made up the highest percentages of new HIV cases. For risk factors, men who have sex with men (MSM) had the highest percentage of new HIV cases (38.3%). The "Unknown" category for risk factors could be due to a disease intervention specialist not being able to determine the possible mode of HIV transmission. See the risk factor definitions below the table.

Table 4. Region 8 HIV Morbidity

	2023		2024	
	#	%	#	%
Gender				
Male	109	75.2%	113	69.8%
Female	36	24.8%	49	30.2%
Race				
Black	68	46.9%	87	53.7%
White	65	44.8%	64	39.5%
Multi	3	2.1%	3	1.9%
Other	8	5.5%	8	4.9%
Unknown	1	0.7%	0	0.0%
Age Group				
<14	1	0.7%	0	0.0%
15-24	33	22.8%	36	22.2%
25-34	59	40.7%	60	37.0%
35-44	34	23.4%	39	24.1%
45-54	10	6.9%	17	10.5%
55-64	6	4.1%	9	5.6%
65+	2	1.4%	1	0.6%
Risk Factor				
MSM	52	35.9%	62	38.3%
HRH	38	26.2%	44	27.2%
PWID	19	13.1%	11	6.8%
Unknown/Null	36	24.8%	45	27.8%

Percentages may not total to 100 due to rounding. Percentages are based on availability of data for all cases. MSM are men who have sex with men. High risk heterosexual (HRH) are determined by factors including but not limited to having a previous STI, sex while intoxicated, exchanging sex for drugs, or having anonymous sexual partners. PWID is a person who injects drugs.

Overview of HIV in Hamilton County

Table 5. Hamilton County HIV by Year				
2020	2021	2022	2023	2024
132	129	93	105	129

Table 5 shows total new HIV cases in Hamilton County from 2020 through the 4th quarter of 2024. The most recent data are highlighted in light green.

Figure 3 is a line graph of HIV cases from 2020 through the 4th quarter of 2024.

Figure 3. **Hamilton County HIV Counts**

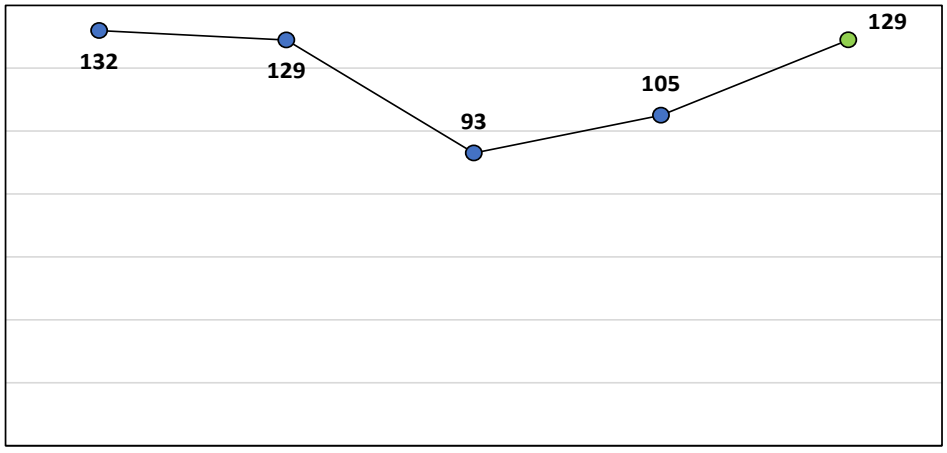


Table 6 is a comparison of the 1st through 4th quarters (Q1- Q4) of 2023 and 2024. There were **22.9% more** new HIV cases in 2024 compared to 2023 during this time frame.

Table. 6 Hamilton County Year Comparisons		
2023	2024	% Change
105	129	22.9%↑

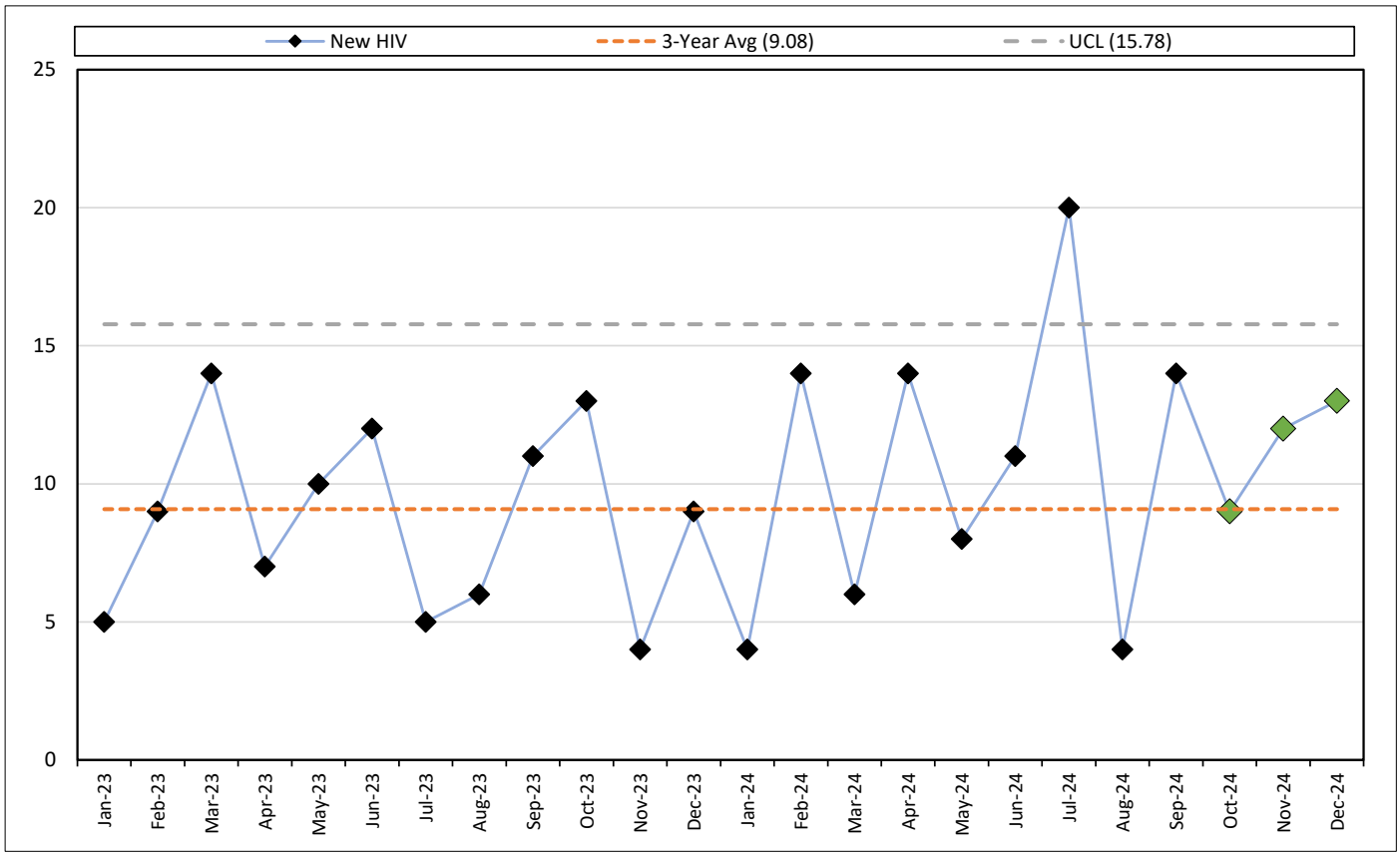
Table 7 displays the breakdown of new HIV cases for Hamilton County from 2023 through the 4th quarter of 2024 by month. In 2023, the highest number of cases was seen in March (14 cases). In 2024, the highest number of new HIV cases occurred in July (20 cases).

Table 7. Hamilton County HIV by Month		
Month	2023	2024
January	5	4
February	9	14
March	14	6
April	7	14
May	10	8
June	12	11
July	5	20
August	6	4
September	11	14
October	13	9
November	4	12
December	9	13
Total	**105**	**129**

Figure 4 shows a surveillance control chart. The dashed orange line shows the average number of new HIV cases per month for the past 3 years (2021, 2022, and 2023). The 3-year average is 9.08 new HIV cases per month. The dashed gray line is the upper control limit (UCL) with a value of 15.78. A single point above or near the UCL may signal anomalies that need to be investigated. The diamonds on the blue line graph show the actual number of new HIV infections by month. The green diamonds are the months from the most recent quarter.

Analysis: For Q1 - Q4 2024, February, April, June, July, September, November, and December were above the 3-year average. July was above the UCL. All other months in 2024 were below the average. Consecutive points above the average or a point above the UCL may signal anomalies that need to be investigated. When there are only a small number of cases it may be difficult to distinguish random fluctuations in disease incidence from true changes in the underlying risk for the disease.

Figure 4. **Hamilton County HIV Infection Control Chart**



The average is found using HIV counts by month for the previous 3 years. A standard deviation is calculated using the same time frame. The upper control limit is determined by multiplying the standard deviation by 2 and adding the 3-year average.

Table 8 shows demographic and risk factor data in Hamilton County. The category showing the highest percentage of new HIV cases is highlighted in blue. For Q1 - Q4 2024, Male (69%), Black (59.7%), and 25-34 year old (37.2%) individuals were the demographics that made up the highest percentages of new HIV cases. For risk factors, men who have sex with men (MSM) had the highest percentage of new HIV cases (38%). The "Unknown" category for risk factors could be due to a disease intervention specialist not being able to determine the possible mode of HIV transmission. See the risk factor definitions below the table.

Table 8. Hamilton County HIV Morbidity

	2023		2024	
	#	%	#	%
Gender				
Male	83	79.0%	89	69.0%
Female	22	21.0%	40	31.0%
Race				
Black	58	55.2%	77	59.7%
White	38	36.2%	41	31.8%
Multi	2	1.9%	3	2.3%
Other	6	5.7%	8	6.2%
Unknown	1	1.0%	0	0.0%
Age Group				
<14	1	1.0%	0	0.0%
15-24	25	23.8%	32	24.8%
25-34	46	43.8%	48	37.2%
35-44	25	23.8%	29	22.5%
45-54	5	4.8%	12	9.3%
55-64	1	1.0%	8	6.2%
65+	2	1.9%	0	0.0%
Risk Factor				
MSM	42	40.0%	49	38.0%
HRH	27	25.7%	38	29.5%
PWID	9	8.6%	7	5.4%
Unknown	27	25.7%	35	27.1%

Percentages may not total to 100 due to rounding. Percentages are based on availability of data for all cases. MSM are men who have sex with men. High risk heterosexuals (HRH) are determined by factors including but not limited to having a previous STI, sex while intoxicated, exchanging sex for drugs, or having anonymous sexual partners. PWID is a person who injects drugs.

Overview of HIV in Butler County

Table 9. Butler County HIV by Year				
2020	2021	2022	2023	2024
15	59	30	30	24

Table 9 shows total new HIV cases in Butler County from 2020 through the 4th quarter of 2024. The most recent data are highlighted in light green.

Figure 5 is a line graph of HIV cases from 2020 through the 4th quarter of 2024.

Figure 5. **Butler County HIV Counts**

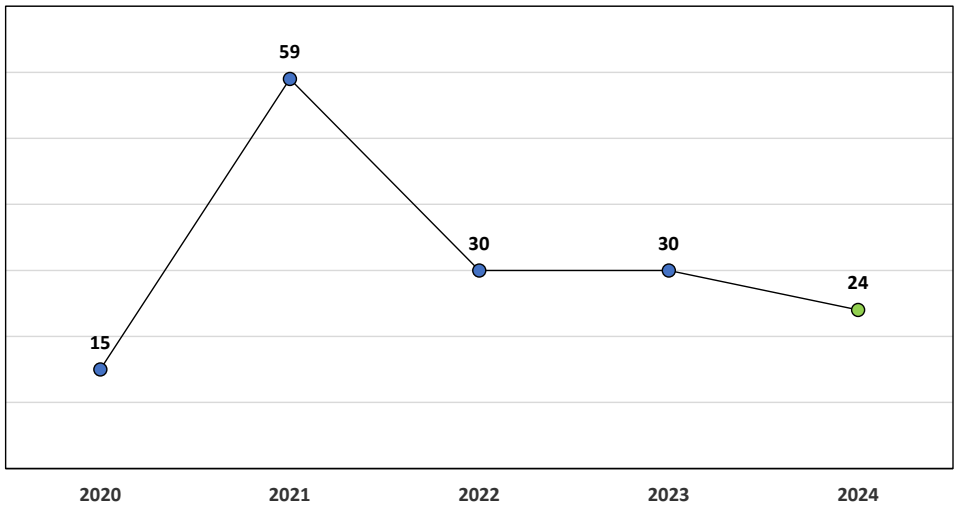


Table 10 is a comparison of the 1st through 4th quarters (Q1 - Q4) of 2023 and 2024. There were **20% fewer** new HIV cases in 2024 compared to 2023 during this time frame.

Table 10. Butler County Year Comparisons		
2023	2024	% Change
30	24	-20.0%↓

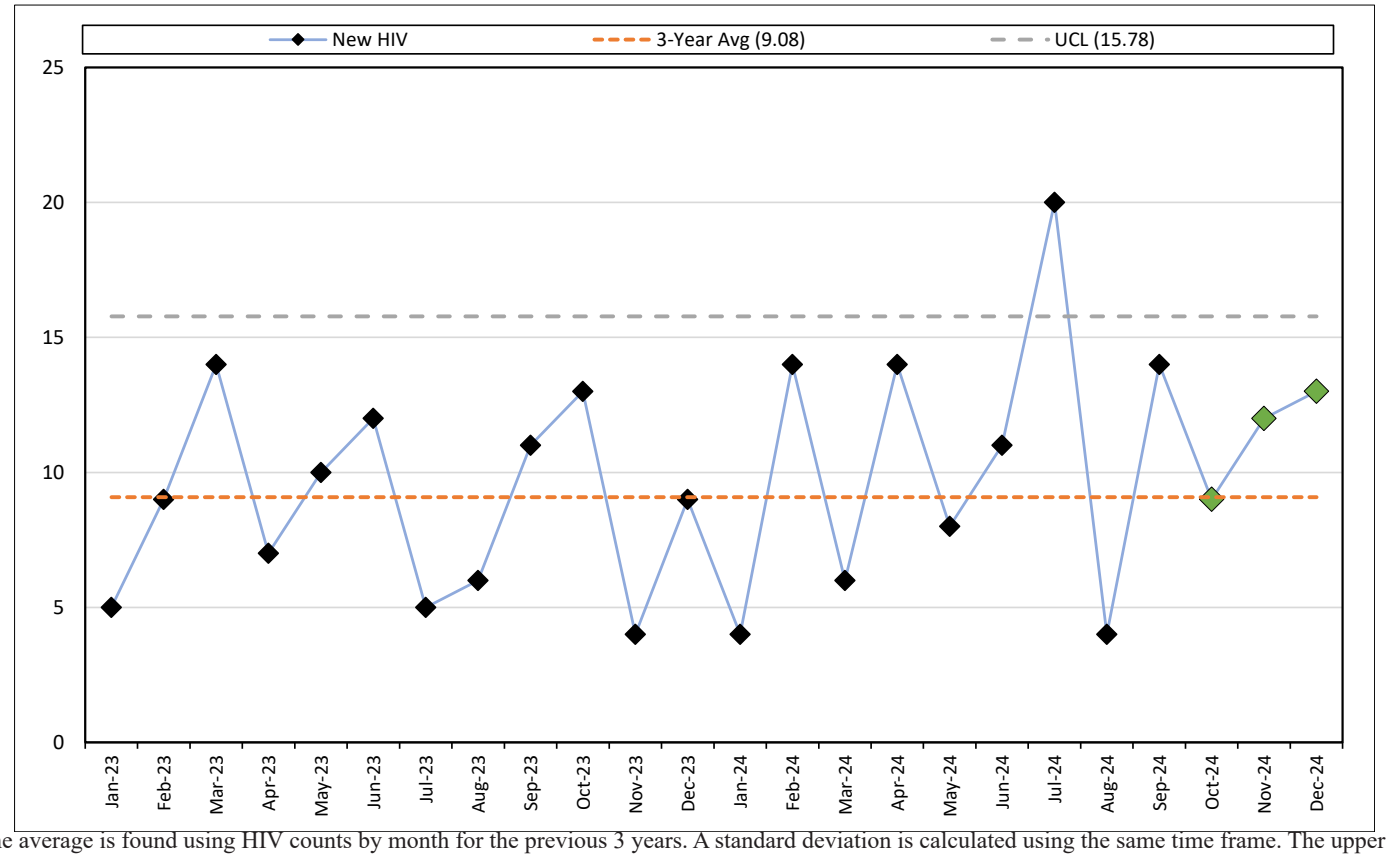
Table 11 displays the breakdown of HIV cases for Butler County from 2023 through the 4th quarter of 2024 by month. In 2023, the highest number of cases was seen in January, April, August, and October (4 cases each). In 2024, the highest number of cases occurred in December (4 cases).

Table 9. Butler County HIV by Month		
Month	2023	2024
January	4	1
February	2	1
March	2	3
April	4	2
May	1	1
June	2	3
July	3	3
August	4	0
September	2	3
October	4	1
November	0	2
December	2	4
Total	**30**	**24**

Figure 6 shows a surveillance control chart. The dashed orange line shows the average number of new HIV cases per month for the past 3 years (2021, 2022, and 2023). The 3-year average is 2.36 new HIV cases per month. The dashed gray line is the upper control limit (UCL) with a value of 7.09. A single point above or near the UCL may signal anomalies that need to be investigated. The diamonds on the blue line graph show the actual number of new HIV cases by month. The green diamonds are the months from the most recent quarter.

Analysis: For Q1- Q4 2024, March, June, July, September, and December were above the 3-year average. July was above the UCL. Consecutive points above the average or a point above the UCL may signal anomalies that need to be investigated. When there are only a small number of cases it may be difficult to distinguish random fluctuations in disease incidence from true changes in the underlying risk for the disease.

Figure 6. Butler County HIV Infection Control Chart



The average is found using HIV counts by month for the previous 3 years. A standard deviation is calculated using the same time frame. The upper control limit is determined by multiplying the standard deviation by 2 and adding the 3-year average.

Table 12 shows demographic and risk factor data in Butler County. The category showing the highest percentage of new HIV cases is highlighted in blue. For Q1 - Q4 2024, Male (66.7%), White (58.3%), and 25-34 year old (37.5%) individuals were the demographics that made up the highest percentages of new HIV cases. For risk factors, men who have sex with men (MSM) a had the highest percentage of new HIV cases (33.3%). The "Unknown" category for risk factors could be due to a disease intervention specialist not being able to determine the possible mode of HIV transmission. See the risk factor definitions below the table.

Table 12. Butler County HIV Morbidity

	2023		2024	
	#	%	#	%
Gender				
Male	18	60.0%	16	66.7%
Female	12	40.0%	8	33.3%
Race				
Black	9	30.0%	10	41.7%
White	18	60.0%	14	58.3%
Multi	1	3.3%	0	0.0%
Other	2	6.7%	0	0.0%
Age Group				
15-24	6	20.0%	3	12.5%
25-34	10	33.3%	9	37.5%
35-44	6	20.0%	8	33.3%
45-54	4	13.3%	3	12.5%
55-64	4	13.3%	1	4.2%
65+	0	0.0%	0	0.0%
Risk Factor				
MSM	7	23.3%	8	33.3%
HRH	7	23.3%	5	20.8%
PWID	8	26.7%	4	16.7%
Unknown	8	26.7%	7	29.2%

Percentages may not total to 100 due to rounding. Percentages are based on availability of data for all cases. MSM are men who have sex with men. High risk heterosexuals (HRH) are determined by factors including but not limited to having a previous STI, sex while intoxicated, exchanging sex for drugs, or having anonymous sexual partners. PWID is a person who injects drugs.

Overview of HIV in Brown, Clermont, Clinton, Highland, and Warren County

Table 13. Select Region 8 Counties HIV by Quarter					
	Brown	Clermont	Clinton	Highland	Warren
2023					
Q1	0	0	0	0	1
Q2	0	1	2	0	0
Q3	0	2	0	1	1
Q4	0	1	0	0	1
Total	**0**	**4**	**2**	**1**	**3**
2024					
Q1	0	1	1	0	2
Q2	0	0	1	0	0
Q3	0	4	0	0	0
Q4	0	0	0	0	0
Total	**0**	**5**	**2**	**0**	**2**

Table 13 shows total new HIV cases in select Region 8 counties by quarter for 2023 and 2024. For Q1 - Q4 2024, Clermont County had the highest number of HIV cases (5 cases).

Table 14. Select Region 8 Counties HIV Morbidity

	2023		2024	
	#	%	#	%
Gender				
Male	8	80.0%	8	88.9%
Female	2	20.0%	1	11.1%
Race				
Black	1	10.0%	0	0.0%
White	9	90.0%	9	100.0%
Multi	0	0.0%	0	0.0%
Other	0	0.0%	0	0.0%
Age Group				
15-24	2	20.0%	1	11.1%
25-34	3	30.0%	3	33.3%
35-44	3	30.0%	2	22.2%
45-54	1	10.0%	2	22.2%
55-64	1	10.0%	0	0.0%
65+	0	0.0%	1	11.1%
Risk Factor				
MSM	3	30.0%	5	55.6%
HRH	4	40.0%	1	11.1%
PWID	2	20.0%	0	0.0%
Unknown	1	10.0%	3	33.3%

Table 14 shows demographic and risk factor data for the aggregate of the select Region 8 counties. The category showing the highest percentage of new HIV cases is highlighted in blue. For Q1 - Q4 2024, Male (88.9%), White (100%), and 25-34 year old (33.3%) individuals made up the highest percentages of HIV cases. For Risk Factors, MSM (55.6%) had the highest percentage of new HIV cases. Risk factor definitions are on previous pages.