



**HAMILTON COUNTY  
PUBLIC HEALTH**

PREVENT. PROMOTE. PROTECT.



# **Region 8 HIV Quarterly Report**

**Volume 7 Issue 4**

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## **Hamilton County Public Health Division of Epidemiology and Assessment**

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## HIV Surveillance Background

Hamilton County Public Health conducts HIV operations in 7 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. 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., interviews, contact tracing, partner testing and linkage to care). Only HIV cases where the resident was identified as a previously unknown new HIV infection by a disease intervention specialist 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. 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 does 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.

Email [Jacob.Henderson@Hamilton-Co.Org](mailto:Jacob.Henderson@Hamilton-Co.Org) with any questions regarding this report.

Data downloaded from Ohio Disease Reporting System (ODRS) on 2/14/2023.

## Overview of HIV in Region 8

Table 1 shows total new HIV infections in Region 8 from 2018-2022.

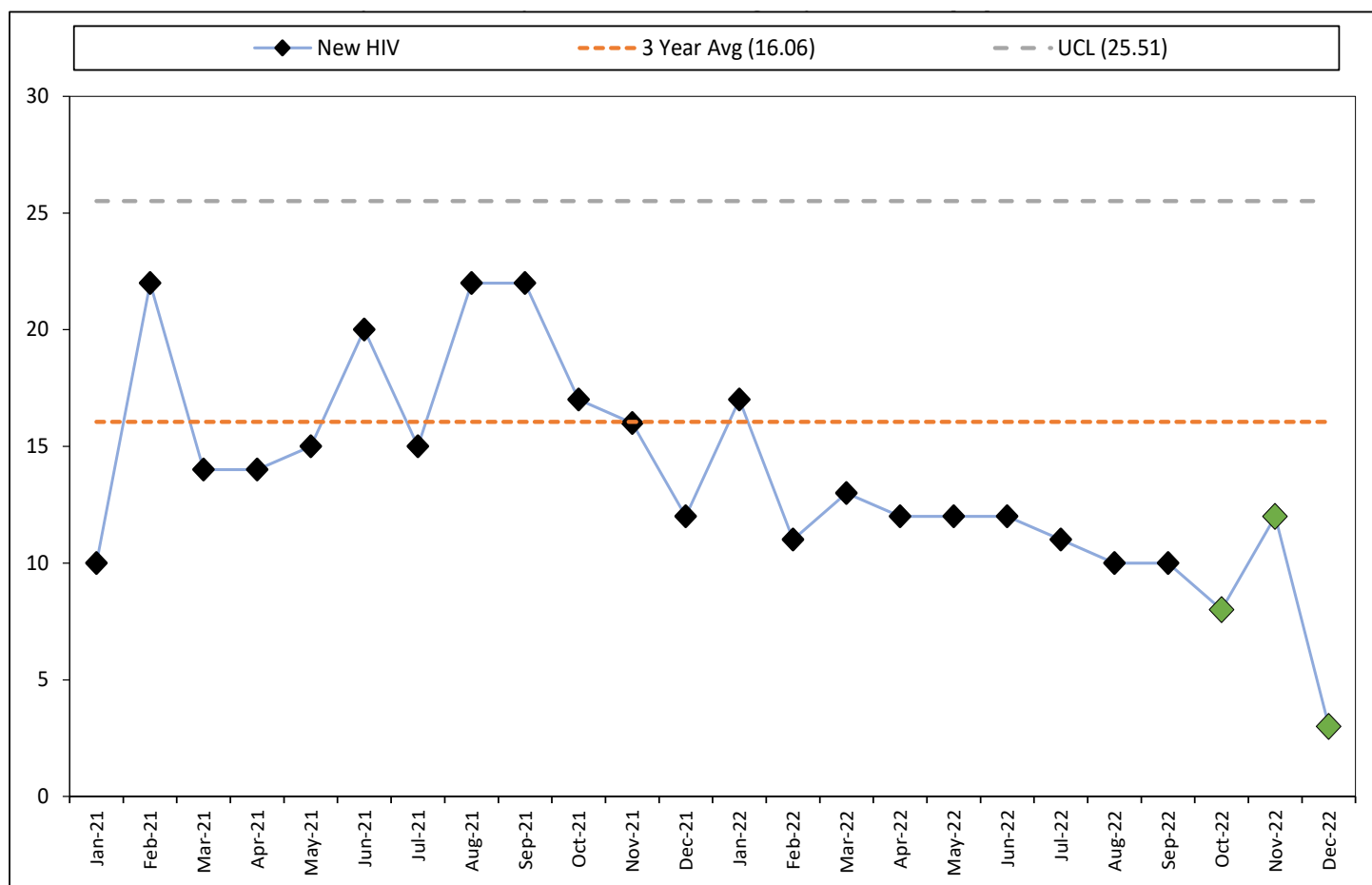
Table 1. Region 8 New HIV Infections by Year				
2018	2019	2020	2021	2022
245	218	165	199	131

Table 2 displays the breakdown of new HIV cases for Region 8 residents from January 2021 through December 2022 by month. In 2021, the highest number of cases were seen in August and September (22 cases). In 2022, the highest number of new HIV cases occurred in January (17 cases).

Table 2. Region 8 New HIV Infections by Month		
Month	New Cases of HIV 2021	New Cases of HIV 2022
January	10	17
February	22	11
March	14	13
April	14	12
May	15	12
June	20	12
July	15	11
August	22	10
September	22	10
October	17	8
November	16	12
December	12	3
<b>Total</b>	<b>199</b>	<b>131</b>

## HIV Quarterly Report: Region 8

Figure 1 shows a surveillance control chart. The dashed orange line is the previous 3 year average (2019, 2020, and 2021) for new HIV infections by month. The previous 3 year average is 16.06 new HIV infections per month. The dashed gray line is the upper control limit (UCL) with a value of 25.51. 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. A single point above or near the upper control limit or consecutive points above the average 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/injury incidence from true changes in the underlying risk for the disease/injury.



The average is found using HIV counts by month for the previous 3 years (2019, 2020, and 2021). 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. These data are provisional and subject to change.

Table 3 shows demographic and risk factor data for Region 8. For 2022, Black (53%), Male (74%), and 25-34 year olds (36%) were the demographics that made up the highest percentages of new HIV infections. For risk factors, MSM (37%) had the highest percentage of new HIV infections. The “Unknown” category for risk factors could be due to an individual not providing the disease interventionist with any information as to the possible mode of HIV transmission. See the risk factor definitions below the table.

<b>Table 3. Region 8 New HIV Morbidity</b>				
	<b>2021</b>		<b>2022</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Gender</b>				
Male	143	72%	96	74%
Female	56	28%	35	26%
<b>Race</b>				
Black	90	45%	71	53%
White	82	41%	52	40%
Multi	20	10%	7	5%
Other	5	3%	1	1%
Unknown/Null	2	1%	0	0%
<b>Age Group</b>				
15-24	37	19%	30	23%
25-34	77	39%	47	36%
35-44	52	26%	26	20%
45-54	17	9%	18	14%
55-64	11	6%	7	5%
65+	5	3%	3	2%
<b>Risk Factor</b>				
MSM	60	30%	48	37%
HRH	25	13%	23	18%
PWID	47	24%	18	15%
Unknown/Null	67	34%	42	31%

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 categorized by a person who injects drugs. These data are provisional and subject to change.

## Overview of HIV in Hamilton County

Table 4 shows total new HIV infections in Hamilton County from 2018-2022.

Table 5 displays the breakdown of new HIV cases for Hamilton County residents from January 2021 through December 2022 by month. In 2021, the highest number of cases were seen in February (19 cases). In 2022, the highest number of new HIV cases occurred in January (12 cases).

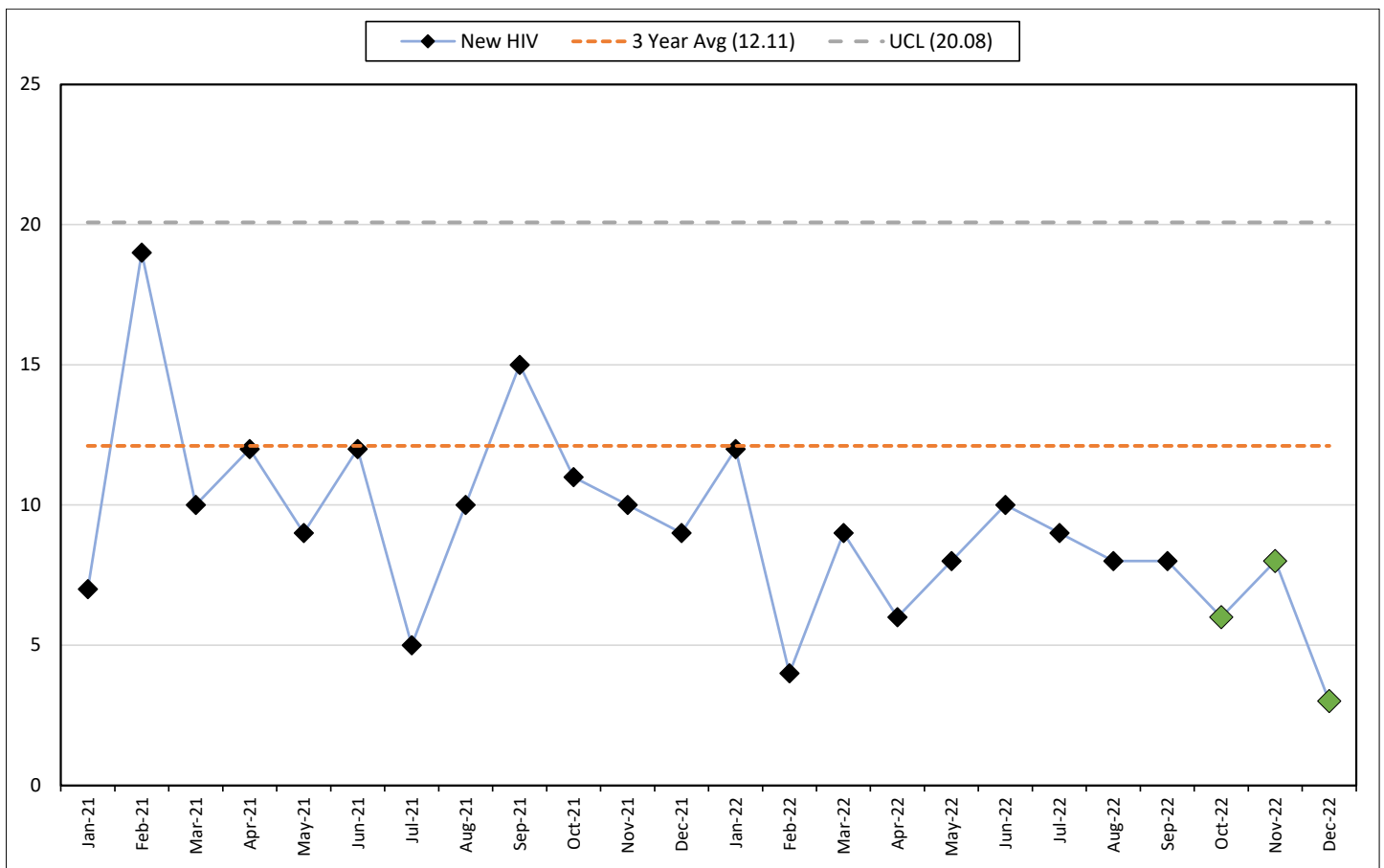
Table 4. Hamilton County New HIV Infections by Year				
2018	2019	2020	2021	2022
189	175	132	129	91

Table 5. Hamilton County New HIV Infections by Month		
Month	New Cases of HIV 2021	New Cases of HIV 2022
January	7	12
February	19	4
March	10	9
April	12	6
May	9	8
June	12	10
July	5	9
August	10	8
September	15	8
October	11	6
November	10	8
December	9	3
<b>Total</b>	<b>129</b>	<b>91</b>

These data are provisional and subject to change.

Figure 2 shows a surveillance control chart. The dashed orange line is the previous 3 year average (2019, 2020, and 2021) for new HIV infections by month. The previous 3 year average is 12.11 new HIV infections per month. The dashed gray line is the upper control limit (UCL) with a value of 20.08. 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. A single point above or near the upper control limit or consecutive points above the average 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/injury incidence from true changes in the underlying risk for the disease/injury.

**Figure 2. Hamilton County New HIV Infection Control Chart**



The average is found using HIV counts by month for the previous 3 years (2019, 2020, and 2021). 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. These data are provisional and subject to change.

## HIV Quarterly Report: Hamilton County

Table 6 shows demographic and risk factor data in Hamilton County. For 2022, Black (74%), Male (78%), and 25-34 year olds (33%) were the demographics that made up the highest percentages of new HIV infections. For risk factors, MSM (42%) had the highest percentage of new HIV infections. The “Unknown” risk factor category could be due to an individual not providing the disease interventionist with any information as to the possible mode of HIV transmission. See the risk factor definitions below the table.

<b>Table 6. Hamilton County New HIV Morbidity</b>				
	<b>2021</b>		<b>2022</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Gender</b>				
Male	97	75%	71	78%
Female	32	25%	20	22%
<b>Race</b>				
Black	76	59%	67	74%
White	33	26%	22	24%
Multi	15	12%	1	1%
Other	5	4%	1	1%
<b>Age Group</b>				
15-24	26	20%	27	30%
25-34	52	40%	30	33%
35-44	27	21%	12	13%
45-54	12	9%	14	15%
55-64	8	6%	5	5%
65+	4	3%	3	3%
<b>Risk Factor</b>				
MSM	47	36%	38	42%
HRH	22	17%	20	22%
PWID	11	9%	4	4%
Unknown/Null	49	38%	29	32%

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 categorized by a person who injects drugs. These data are provisional and subject to change.

## Overview of HIV in Butler County

Table 7 shows total new HIV infections in Butler County from 2018-2022.

Table 8 displays the breakdown of new HIV cases for Butler County residents from January 2021 through December 2022 by month. In 2021, the highest number of cases were seen in August (10 cases). In 2022, the highest number of new HIV cases occurred in February (7 cases).

Table 7. Butler County New HIV Infections by Year				
2018	2019	2020	2021	2022
32	21	15	59	30

Table 8. Butler County New HIV Infections by Month		
Month	New Cases of HIV 2021	New Cases of HIV 2022
January	1	1
February	3	7
March	4	3
April	2	5
May	6	4
June	8	2
July	8	1
August	10	1
September	6	1
October	4	2
November	5	3
December	2	0
<b>Total</b>	<b>59</b>	<b>30</b>

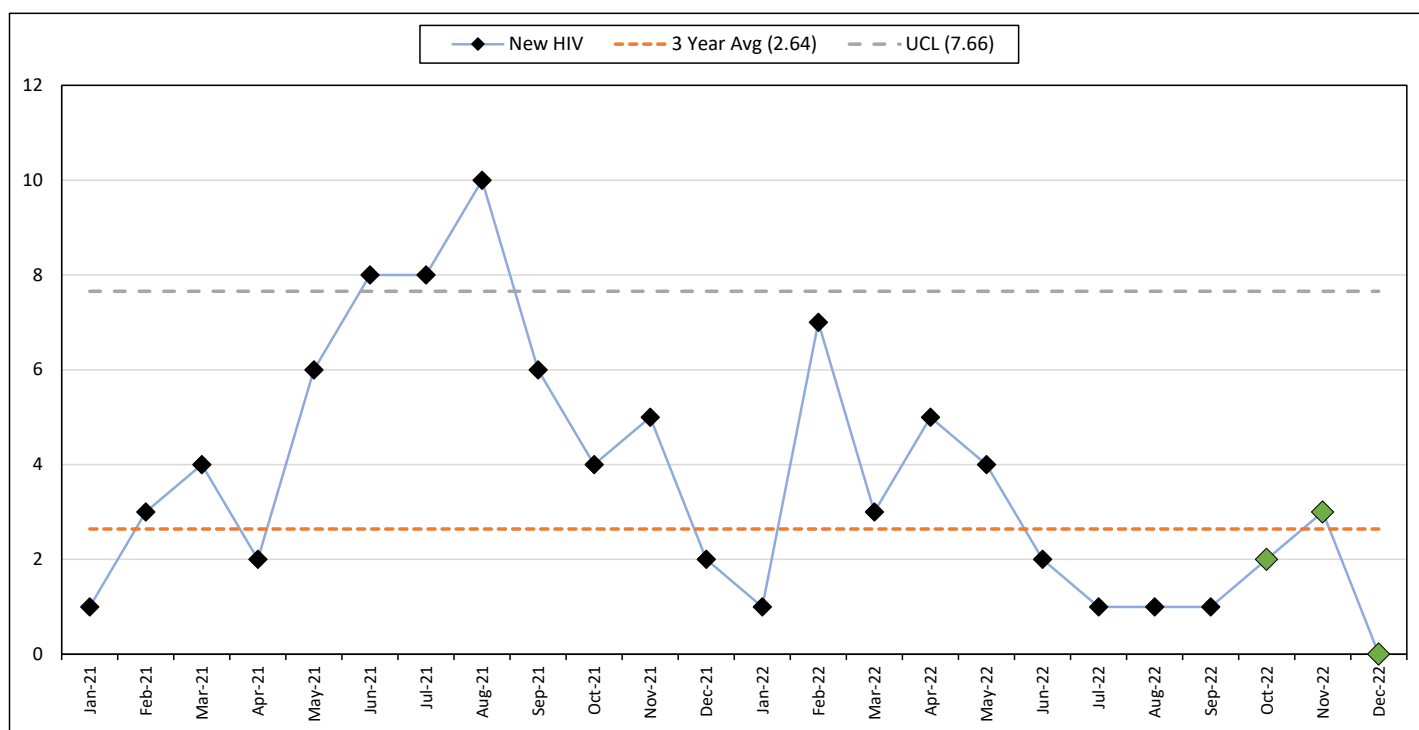
These data are provisional and subject to change.



## HIV Quarterly Report: Butler County

Figure 3 shows a surveillance control chart. The dashed orange line is the previous 3 year average (2019, 2020, and 2021) for new HIV infections by month. The previous 3 year average is 2.64 new HIV infections per month. The dashed gray line is the upper control limit (UCL) with a value of 7.66. 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. A single point above or near the upper control limit or consecutive points above the average 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/injury incidence from true changes in the underlying risk for the disease/injury.

**Figure 3. Butler County New HIV Infection Control Chart**



The average is found using HIV counts by month for the previous 3 years (2019, 2020, and 2021). 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. These data are provisional and subject to change.

Table 9 shows demographic and risk factor data in Butler County. For 2022, White (71%), Male (65%), and 25-34 year olds (45%) were the demographics that made up the highest percentages of new HIV infections. For risk factors, PWID (48%) had the highest percentage of new HIV infections. The “Unknown” risk factor category could be due to an individual not providing the disease interventionist with any information as to the possible mode of HIV transmission. See the risk factor definitions below the table.

<b>Table 9. Butler County New HIV Morbidity</b>				
	<b>2021</b>		<b>2022</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Gender</b>				
Male	38	64%	19	65%
Female	21	36%	11	35%
<b>Race</b>				
Black	12	20%	4	13%
White	43	73%	21	71%
Multi	3	5%	5	16%
Other	1	2%	0	0%
<b>Age Group</b>				
15-24	8	14%	2	6%
25-34	21	36%	13	45%
35-44	24	41%	13	42%
45-54	2	3%	2	6%
55-64	3	5%	0	0%
65+	1	2%	0	0%
<b>Risk Factor</b>				
MSM	9	15%	7	23%
HRH	3	5%	0	0%
PWID	34	58%	14	48%
Unknown/Null	13	22%	9	29%

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 categorized by a person who injects drugs. These data are provisional and subject to change.

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

Table 10: Select Region 8 Counties New HIV Infections by Quarter					
	Brown	Clermont	Clinton	Highland	Warren
<b>2021</b>					
Q1	0	0	1	0	1
Q2	0	0	0	0	0
Q3	1	4	0	0	0
Q4	0	2	0	0	2
<b>Total</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>3</b>
<b>2022</b>					
Q1	1	2	0	0	2
Q2	0	0	0	0	1
Q3	0	1	1	0	1
Q4	0	1	0	0	0
<b>Total</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>4</b>

Table 10 shows total new HIV infections in select Region 8 counties by quarter from 2021 and 2022. For 2022, Clermont and Warren County had the most new HIV infections (4 cases).

Table 11. Select Region 8 Counties HIV Morbidity				
	2021		2022	
	#	%	#	%
<b>Gender</b>				
Male	8	73%	6	60%
Female	3	27%	4	40%
<b>Race</b>				
Black	2	18%	0	0%
White	6	55%	9	90%
Multi	1	9%	0	0%
Other	2	18%	1	10%
<b>Age Group</b>				
15-24	3	27%	1	10%
25-34	4	36%	4	40%
35-44	1	9%	1	10%
45-54	3	27%	2	20%
55-64	0	0%	2	20%
65+	0	0%	0	0%
<b>Risk Factor</b>				
MSM	4	36%	3	30%
HRH	0	0%	3	30%
PWID	2	18%	0	0%
Unknown/Null	5	45%	4	40%

Table 11 shows demographic and risk factor data for the aggregate of the select Region 8 counties. In 2022, White (90%), Male (60%), and 25-34 year olds (40%) made up the largest percentage of total new HIV infections for select Region 8 counties. For risk factors, excluding “Unknown,” MSM (30%) and HRH (30%) made up the most prevalent risk factor. Risk factor definitions are on previous pages.

These data are provisional and subject to change.