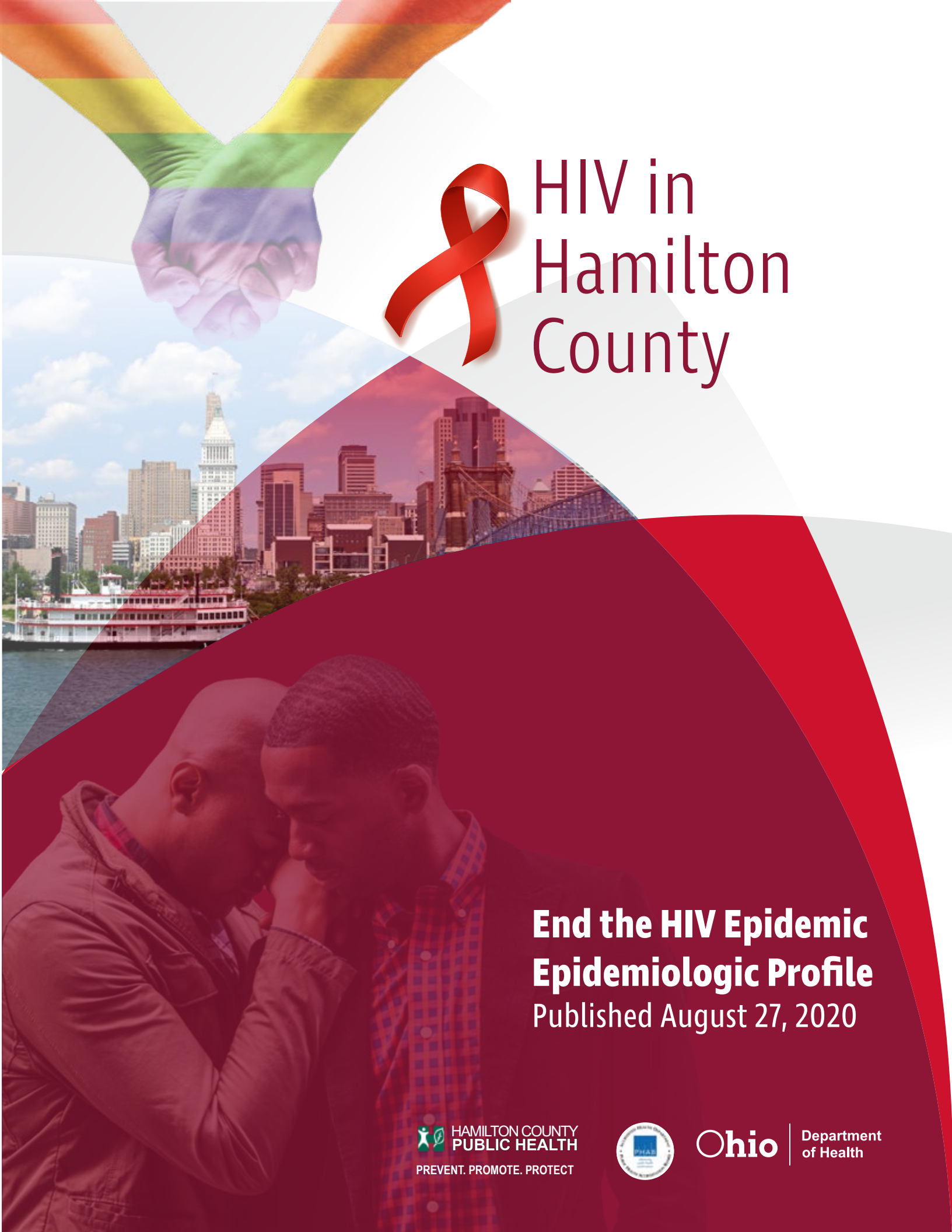




HIV in Hamilton County



End the HIV Epidemic
Epidemiologic Profile
Published August 27, 2020



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Executive Summary

Ending the HIV Epidemic: The Ohio Department of Health (ODH) will use funds awarded from CDC-RFA-PS19-1906 to strategically partner with local public health departments, community service agencies, and HIV healthcare providers in the three Ohio counties identified by the Centers for Disease Control and Prevention (CDC) — Cuyahoga, Franklin, and Hamilton — to plan and implement localized activities to support an End the HIV Epidemic (EtHE) Plan. The ODH Surveillance Program led the development of Epidemiologic Profiles for these counties by convening a workgroup of internal and external stakeholders. These Epidemiologic Profiles will serve as a key focal point to guide state and local HIV planning, implementation, and evaluation of the EtHE Plan. Epidemiologic Profiles will be shared with local prevention and care planning bodies and community partners to increase their understanding of data in the three counties and to guide local planning activities. The goal of the EtHE plan is to reduce new HIV infections by 90% in the next 10 years by implementing strategies related to the four pillars of the EtHE initiative: Diagnose, Treat, Prevent, and Respond.

Table 1: Baseline and projected new reported diagnoses of HIV infection, Hamilton County

Hamilton County Baseline (2018)	75% Reduction (by 2025)	90% Reduction (by 2030)
185 new reported diagnoses	46 projected new reported diagnoses	18 projected new reported diagnoses

Diagnose all people with HIV as early as possible

Population: In 2018, according to the U.S. Census Bureau, Hamilton County had a population of 816,684, 52% of which was female, and 48% of which was male.

Reported new diagnoses of HIV infection: In 2018, there were 185 new reported diagnoses of HIV infection in Hamilton County. Seventy-six percent of the new reported diagnoses of HIV in Hamilton County in 2018 were among males, and more than half were among persons aged 20 to 34 years. Forty-seven percent were among Blacks/African Americans, while 46% were among whites. Among males, the leading mode of transmission was male-to-male sexual contact; among females, the leading mode of transmission was heterosexual contact. However, in recent years, the percentage of diagnoses in Hamilton County attributable to injection drug use (IDU) has increased.

Coinfection: Four percent (n=8) of the 185 persons residing in Hamilton County who were diagnosed with HIV in 2018 were also diagnosed with chlamydia, 7% (n=13) were diagnosed with gonorrhea, and 6% (n=12) with syphilis. From 2014 to 2018, four persons residing in Hamilton County were diagnosed with both HIV and hepatitis A. From 2015 to 2018, 19 persons residing in Hamilton County were diagnosed with both HIV and hepatitis B. From 2014 to 2018, 91 persons residing in Hamilton County were diagnosed with both HIV and hepatitis C.

HIV testing: The ODH HIV Prevention program utilizes a risk assessment that prioritizes testing among men who have sex with men (MSM), young Black/African American men who have sex with men (YBMSM), people who inject drugs (PWID), transgender/non-binary persons, individuals who were diagnosed with syphilis in the past 12 months, persons who have recently moved from the South, and partners of MSM, PWID, or persons living with diagnosed HIV or AIDS (PLWHA). From January to September 2019, there were 3,154 HIV tests conducted by HIV Prevention-funded sites in Hamilton County, finding 35 new diagnoses.



Social determinants of health: Nine and a half percent of Hamilton County's population aged 25 years and older does not have a high school diploma, compared with 10.2% for all of Ohio. Almost 6% of Hamilton County's population in the labor force with no disability is unemployed, compared with 5.4% for all of Ohio. Seventeen percent of Hamilton County's population with income in the past 12 months was below federal poverty level (FPL), compared with 14.9% for all of Ohio. A little over 7% of Hamilton County's civilian non-institutionalized population has no health insurance, compared with 7.4% for all of Ohio. Nineteen and a half percent of Hamilton County's population has Medicaid coverage (alone or in combination), compared with 19.7% for all of Ohio. Almost 17% of Hamilton County's population has Medicare coverage (alone or in combination), compared with 17.8% for all of Ohio.

Treat people with HIV rapidly and effectively to reach sustained viral suppression

Prevalence: Persons living with diagnosed HIV infection: As of the end of 2018, there were 3,213 persons living with diagnosed HIV infection in Hamilton County. Similar to new diagnoses, 78% of persons living with diagnosed HIV infection are males. Those who are in the 50-to-54 and 55-to-64 age brackets have the highest number of persons living with diagnosed HIV in Hamilton County, compared with other age groups. Blacks/African Americans make up about 59% and whites make up 34% of persons living with diagnosed HIV infection. The rate for Blacks/African Americans was more than four times as high as that for whites.

Ryan White Program: The Ryan White Part B Program administers funds for states and territories to improve the quality, availability, and organization of HIV healthcare and support services. Recipients include all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the six U.S. Pacific territories/associated jurisdictions. ODH is the recipient of Ryan White Part B funds. In addition, Part B includes grants for the AIDS Drug Assistance Program (ADAP), which enrolled 737 people in Hamilton County in 2018. The Community Linkage Coordination program (CLC) referred 62 clients to a Ryan White Part B-funded agency in Hamilton County prior to their release from incarceration in a state prison. Caracole, a Ryan White-funded agency, is the primary provider of HIV case management services in Hamilton County.

Linkage to care and continuum of care: Eighty percent of adults/adolescents diagnosed with HIV infection in Hamilton County in 2017 were linked to care within 30 days of diagnosis, compared with 70% in 2016. Of the persons living with diagnosed HIV in Hamilton County at the end of 2017, 66% were in receipt of care, 38% were retained in care, and 41% were virally suppressed. This shows an improvement when compared with 2016, when 51% received care, 27% were retained in care, and 37% were virally suppressed.

Prevent new HIV transmissions by using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs)

Pre-Exposure Prophylaxis: In 2018, the PrEP utilization rate in Ohio was 50 per 100,000 population, while the PrEP utilization rate in Hamilton County in 2016 was 30 per 100,000 population. Nationally, the PrEP utilization rate was 47.9 per 100,000 population in 2018.

Syringe Services Programs and other substance use-related data: Hamilton County Public Health operates a syringe services program (SSP) with multiple locations, and an additional health department program is operated by Caracole. In 2019, Hamilton County Public Health exchanged 281,068 syringes.



Respond quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them.

Hamilton County cluster response: In response to the increase in diagnoses of HIV in PWID in Hamilton County and the Northern Kentucky region, a request was made to CDC for an Epi-Aid, which is an investigation of an urgent public health problem. For several weeks in 2018, CDC was on-site in Hamilton County to provide technical assistance to Hamilton County Public Health, Northern Kentucky Health Department, ODH, and the Kentucky Department for Public Health.

Time-space analysis: Time-space analyses are conducted to monitor potential outbreaks of HIV. The number of new diagnoses is closely monitored to detect any potential increases in Hamilton County and in special populations within Hamilton County.

Questions or comments: Questions and/or comments about this report should be directed to the ODH HIV Surveillance Program. Additional HIV surveillance data and reports are available on the ODH website: <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/hiv-aids-surveillance-program>.

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Explanation of Terms

New diagnoses of HIV infection: The term *diagnosis of human immunodeficiency virus (HIV) infection* is defined as a diagnosis of HIV infection, regardless of the stage of disease (stage 0, 1, 2, 3 [acquired immunodeficiency syndrome (AIDS)], or unknown) at the time of initial diagnosis, and refers to all persons diagnosed with HIV infection in Hamilton County, in a given year. New diagnoses of HIV infection do not necessarily represent all new infections (i.e., incidence or stage 0) as some individuals were infected recently, while others were infected at some time in the past but were unaware of their HIV status.

Coinfection: A match was performed with HIV and Sexually Transmitted Infections (STI) data to determine the number of persons residing in Hamilton County who were diagnosed with HIV and STIs in 2018, where coinfection was defined as having a STI diagnosis +/- 30 days from the HIV diagnosis. A match was performed with HIV and hepatitis data to determine the number of persons residing in Hamilton County who were diagnosed with both diseases from 2014 to 2018, where coinfection was defined as having a hepatitis diagnosis and HIV diagnosis between 2014 and 2018.

Persons living with diagnosed HIV infection: The term *persons living with diagnosed HIV infection* (i.e., prevalence) represents all persons ever reported with an HIV infection in Ohio, regardless of stage of infection, who are not known to have died by the end of a calendar year. Some persons currently living with diagnosed HIV infection in Ohio received their HIV infection diagnosis while living outside of or prior to moving to Ohio.

Rates: Throughout this report, rates are presented to provide different measures of HIV disease burden. Disease rates account for differences in population size across demographic groups and geographic areas. All rates are presented per 100,000 population and are calculated using U.S. Census estimates. Rates are not calculated for case counts fewer than five due to unstable rates.

Sex at birth and gender: Sex refers to the biological sex the person was assigned at birth (male or female). Transgender is a term used to describe persons whose current gender identity is different than their sex (male or female) assigned at birth. Gender identity is used to describe a person's internal experience of their own gender.

Age: Age in years at time of diagnosis is used when displaying new reported diagnoses of HIV infection by age group. Age in years at the end of the calendar year (current age) is used when displaying persons living with diagnosed HIV infection by age group.

Race/ethnicity: Except where noted, race/ethnicity is presented using the following categories: American Indian/Alaska native; Asian/Pacific Islander; Black/African American; Hispanic/Latinx; white; and multi-race. Hispanic/Latinx is a gender-neutral term and Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

Transmission category: Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. Transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth, and risk factor history indicates sex with males. *Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.*









Introduction





Organization of this Report

The EtHE Epidemiologic Profile is organized into four sections:



1) Diagnose all people with HIV as early as possible.

-  **Description of Hamilton County's population:** includes tables, figures, and narrative about the general population of Hamilton County.
-  **Reported new diagnoses:** includes tables, figures, and narrative about diagnoses of HIV infection in Hamilton County.
-  **Sexually Transmitted Infections (STI) and HIV coinfection:** includes tables, figures, and narrative about coinfections of HIV and chlamydia, gonorrhea, and syphilis in Hamilton County.
-  **Hepatitis and HIV coinfection:** includes tables and narrative about coinfections of HIV and hepatitis in Hamilton County.
-  **HIV testing:** includes tables, figures, and narrative about persons tested for HIV at HIV Prevention-funded testing sites.
-  **Social determinants of health:** includes tables, figures, and narrative about the social determinants of health among the general population and persons diagnosed with HIV infection in Hamilton County.


2) Treat people with HIV rapidly and effectively to reach sustained viral suppression.

-  **Prevalence:** includes tables, figures, and narrative about persons living with diagnosed HIV infection in Hamilton County.
-  **Ohio AIDS Drug Assistance Program (ADAP) utilization:** includes tables, figures, and narrative about persons receiving assistance for HIV treatment through the Ryan White Part B program in Hamilton County.
-  **Community Linkage Coordination:** includes narrative about persons released from state correctional facilities and referrals to the Ryan White Part B program in Hamilton County.
-  **Linkage to care and continuum of care:** includes tables, figures, and narrative describing the continuum of HIV care in Hamilton County.

3) Prevent new HIV transmissions by using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs).

-  **PrEP:** includes tables and narrative about PrEP utilization in Hamilton County.
-  **SSPs and other substance use-related data:** includes figures and narrative about SSPs and other substance use-related data in Hamilton County.

4) Respond quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them.

-  **Time-space analysis:** includes tables, figures, and narrative about time-space analyses conducted to detect and monitor potential outbreaks of HIV.



DIAGNOSE: Diagnose all people with HIV as early as possible

Description of Hamilton County's Population

In 2018, Hamilton County had a population of 816,684. The proportion of females (52%) is slightly higher than the proportion of males (48%). The age distribution for males and females in Hamilton County are similar. Thirty-two percent of Hamilton County's population is younger than 25 years of age, while 39% is between the ages of 25 and 54 years. Sixty-five percent of Hamilton County's residents are white, 26% are Black/African American, 3% are Hispanic/Latinx, 3% are Asian/Pacific Islanders, and 2% are multi-racial. American Indian/Alaska natives comprise less than 1% of Hamilton County's population. It is estimated that a little more than 7% of Hamilton County's adult male population are men who have sex with men.¹

Table 2: Distribution of Hamilton County's population, by sex and age

Age	Males		Females		Total	
	No.	%	No.	%	No.	%
<15	79,745	20%	76,366	18%	156,111	19%
15-19	26,605	7%	27,086	6%	53,691	7%
20-24	26,986	7%	26,337	6%	53,323	7%
25-29	32,740	8%	32,951	8%	65,691	8%
30-34	29,126	7%	30,287	7%	59,413	7%
35-39	25,590	6%	27,153	6%	52,743	6%
40-44	21,044	5%	22,925	5%	43,969	5%
45-49	22,797	6%	24,507	6%	47,304	6%
50-54	24,701	6%	26,137	6%	50,838	6%
55-64	51,743	13%	56,841	13%	108,584	13%
65 or older	53,129	13%	71,888	17%	125,017	15%
Total	394,206		422,478		816,684	

Note: Because of different program methodologies, survey sample, etc., estimates are different between American Community Survey (ACS) and Population Division estimates.

Source: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates.



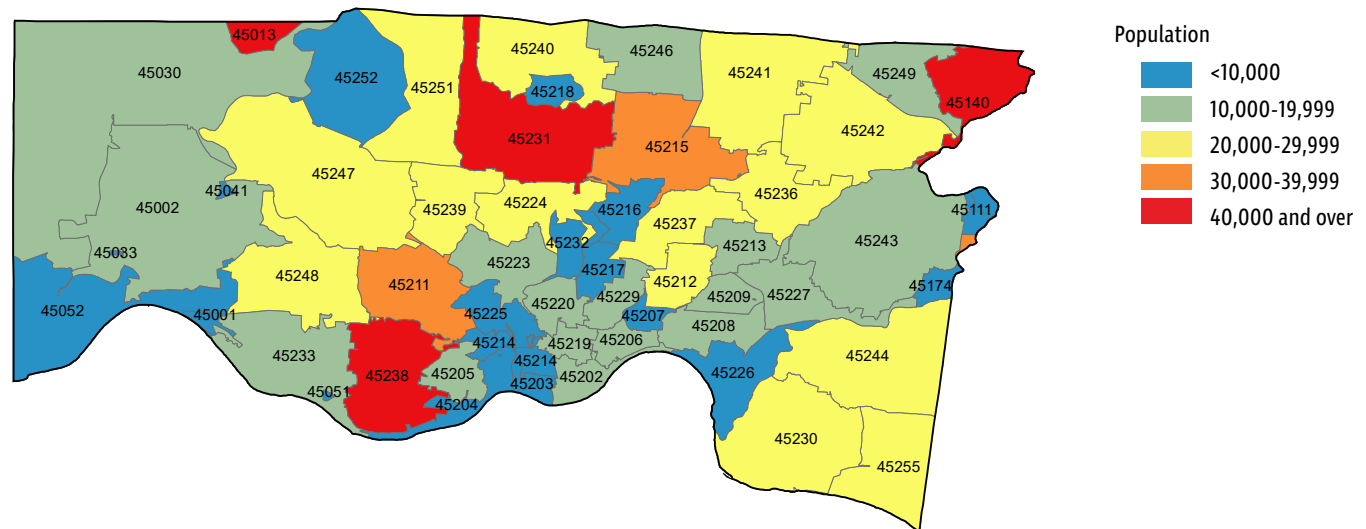
Table 3: Distribution of Hamilton County's population, by sex and race

Race/Ethnicity	Males		Females		Total	
	No.	%	No.	%	No.	%
American Indian/Alaska native	559	<1%	580	<1%	1,139	<1%
Asian/Pacific Islander	11,731	3%	12,070	3%	23,801	3%
Black/African American	98,839	25%	115,232	27%	214,071	26%
Hispanic/Latinx	14,459	4%	13,718	3%	28,177	3%
White	259,806	66%	270,912	64%	530,718	65%
Multi-race	9,112	2%	9,666	2%	18,778	2%
Total	394,506		422,178		816,684	

Note: Because of different program methodologies, survey sample, etc., estimates are different between ACS and Population Division estimates.

Source: U.S. Census Bureau, Population Division, July 1, 2018, County Characteristics Resident Population Estimates.

Figure 1: Population by ZIP code, Hamilton County, 2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

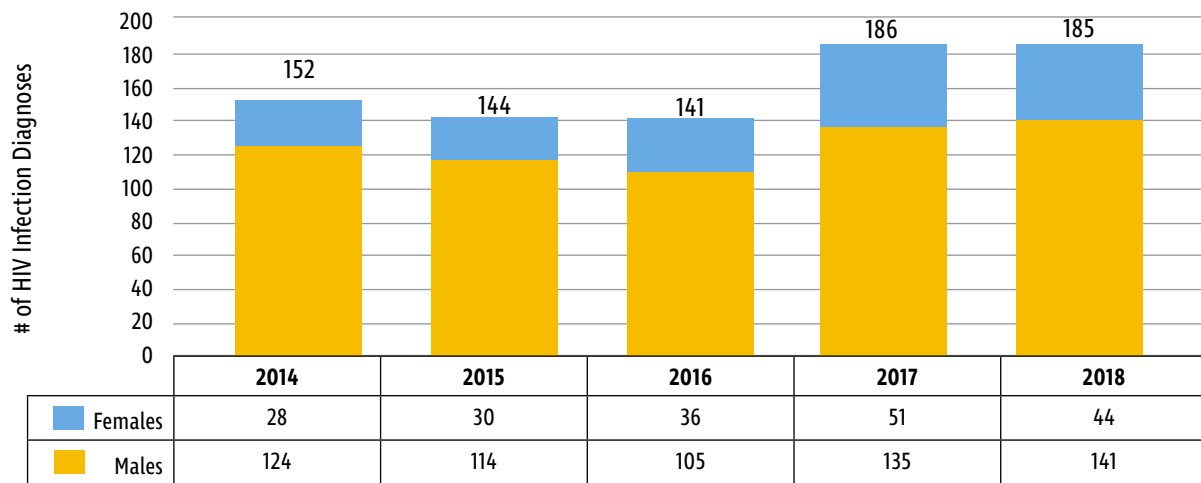
Reported New Diagnoses of HIV Infection

There were 185 reported new diagnoses of HIV infection in Hamilton County in 2018, which equates to a rate of 22.7. This is a marked increase since 2014, when there were 152 new reported diagnoses of HIV infection in Hamilton County. From 2014 to 2018, there was one case diagnosed in a state or federal correctional facility in Hamilton County. However, this case is not reflected in the total number of reported new diagnoses of HIV infection in Hamilton County. Rather, this case is assigned 'No County' and included in the total number for Ohio. From 2014 to 2018, 30 of the new reported diagnoses of HIV in Hamilton County were diagnosed in a county jail setting, and these 30 cases are reflected in the total for Hamilton County.

Sex at birth: The majority of diagnoses of HIV infection were and continue to be among males. In each of the past five years, males accounted for 79% to 89% of diagnoses. In 2018, the rate for males (35.7) was more than three times as high as that for females (10.4).



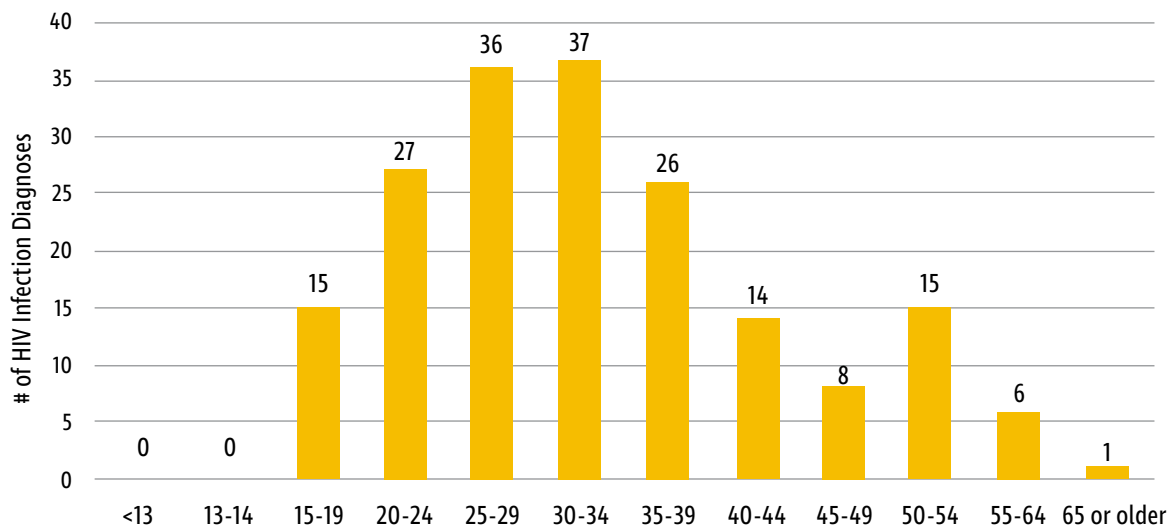
Figure 2: Reported new diagnoses of HIV infection by sex at birth, Hamilton County, 2014-2018



Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Age at diagnosis: More than half (54%) of all diagnosed HIV infections reported in Hamilton County in 2018 occurred among persons 20 to 34 years of age (n=100). The rate of diagnosed HIV infections was highest among persons 30 to 34 years of age (62.4), followed by those 25 to 29 years of age (54.9).

Figure 3: Reported new diagnoses of HIV infection by age at diagnosis, Hamilton County, 2018

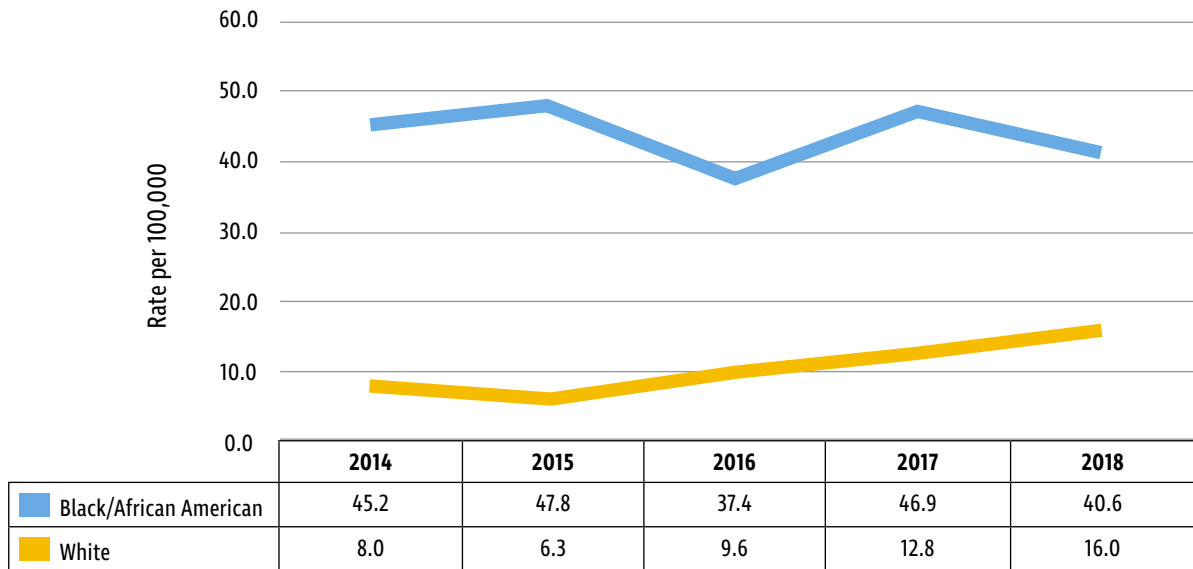


Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Race/ethnicity: In 2018, Blacks/African Americans accounted for 47% of all reported new diagnoses of HIV infections in Hamilton County. This was followed very closely by whites (46%), persons of multiple races (4%), and Hispanics/Latinx (3%). Hamilton County's Black/African American population continues to be disproportionately impacted by HIV compared with whites. The rate of diagnoses among Blacks/African Americans was 2.5 times higher than that for whites.



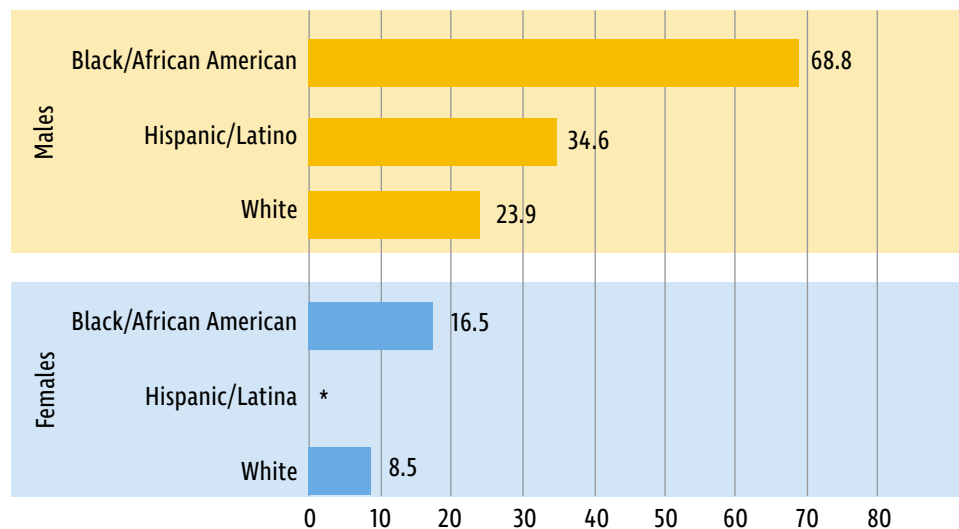
Figure 4: Rates of reported new diagnoses of HIV infection by selected race/ethnicity, Hamilton County, 2014-2018



Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Race/ethnicity by sex at birth: Black/African American males had the highest number (n=68), percentage (37%) and rate (68.8) of HIV diagnoses reported in Hamilton County in 2018 compared with all other race/ethnicity groups by sex at birth.

Figure 5: Rates of reported new diagnoses of HIV infection by selected race/ethnicity and sex at birth, Hamilton County, 2018



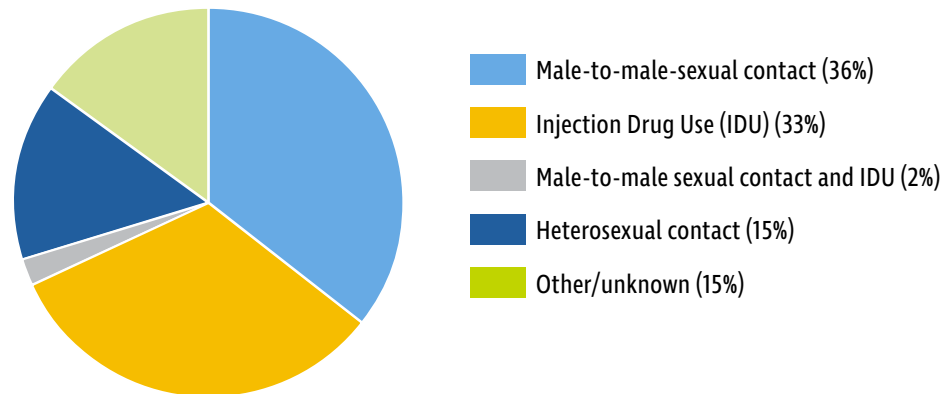
Note: Asterisk (*) indicates rate not calculated for case count <5 due to unstable rates.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



Transmission and exposure categories: A transmission category is assigned to a hierarchy based on risks, with the highest category being the most likely route of HIV transmission. Male-to-male sexual contact (36%) was the leading mode of transmission reported among all persons diagnosed with an HIV infection in Hamilton County in 2018. IDU accounted for 33%, male-to-male sexual contact/IDU accounted for 2%, heterosexual contact accounted for 15%, and the transmission category was unknown for 15% of persons diagnosed with HIV infection in 2018.

Figure 6: Percentage of reported new diagnoses of HIV infection by transmission category, Hamilton County, 2018



Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Special populations: In Hamilton County, Black/African American men who have sex with men (MSM) accounted for 23% to 44% of the total new reported diagnoses of HIV from 2014 to 2018. Here, the term MSM is defined as persons who were assigned male at birth, and who have a transmission category of 'male-to-male sexual contact' or 'male-to-male sexual contact/IDU.'

Table 4: Trends in reported new diagnoses of HIV infection by age among Black/African American MSM, Hamilton County, 2014-2018

Age at diagnosis (yr.)	2014		2015		2016		2017		2018	
	No.	%	No.	%	No.	%	No.	%	No.	%
15-19	5	7%	8	15%	8	13%	3	7%	5	8%
20-24	22	33%	13	25%	18	30%	7	16%	14	24%
25-29	19	28%	15	28%	19	32%	18	42%	22	37%
30-34	10	15%	5	9%	4	7%	6	14%	9	15%
35-39	3	4%	5	9%	2	3%	2	5%	5	8%
40-44	1	1%	4	8%	4	7%	3	7%	1	2%
45-49	5	7%	3	6%	1	2%	1	2%	1	2%
50-54	1	1%	-	-	2	3%	2	5%	1	2%
55-64	1	1%	-	-	2	3%	1	2%	-	-
65 or older	-	-	-	-	-	-	-	-	1	2%
Total	67		53		60		43		59	

Note:

Dash (-) indicates no cases were reported for the given category.

Includes HIV transmission categories male-to-male sexual contact and male-to-male sexual contact/injection drug use.

Source: Ohio Department of Health, HIV Surveillance Program. Date reported as of June 30, 2019.



In Hamilton County, the percentage of reported new diagnoses among persons aged 13-24 years at time of diagnosis decreased from 37% in 2014 to 23% in 2018.

Table 5: Trends in reported new diagnoses of HIV infection among persons aged 13-24 years at time of diagnosis, Hamilton County, 2014-2018

	2014		2015		2016		2017		2018	
Characteristic	No.	%	No.	%	No.	%	No.	%	No.	%
Sex at Birth										
Males	47	84%	44	81%	45	85%	38	81%	38	88%
Females	9	16%	10	19%	8	15%	9	19%	5	12%
Race/Ethnicity^a										
American Indian/Alaska native	-	-	-	-	-	-	1	2%	-	-
Asian/Pacific Islander	-	-	3	6%	3	6%	2	4%	1	2%
Black/African American	36	64%	30	56%	31	58%	23	49%	27	63%
Hispanic/Latinx	3	5%	4	7%	3	6%	2	4%	4	9%
White	13	23%	14	26%	11	21%	17	36%	10	23%
Multi-race	4	7%	3	6%	5	9%	2	4%	1	2%
Transmission Category^b										
Male adult or adolescent										
Male-to-male sexual contact	41	87%	35	80%	37	82%	25	66%	30	79%
Injection drug use (IDU)	-	-	-	-	1	2%	-	-	-	-
Male-to-male sexual contact and IDU	2	4%	1	2%	3	7%	2	5%	2	5%
Heterosexual contact	-	-	-	-	-	-	-	-	-	-
Other/unknown	4	9%	8	18%	4	9%	11	29%	6	16%
Subtotal	47	100%	44	100%	45	100%	38	100%	38	100%
Female adult or adolescent										
Injection drug use	1	11%	3	30%	1	13%	2	22%	-	-
Heterosexual contact	8	89%	5	50%	6	75%	7	78%	5	100%
Other/unknown	-	-	2	20%	1	13%	-	-	-	-
Subtotal	9	100%	10	100%	8	100%	9	100%	5	100%
Total	56		54		53		47		43	

Notes:

Dash (-) indicates no cases were reported for the given category.

^a Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

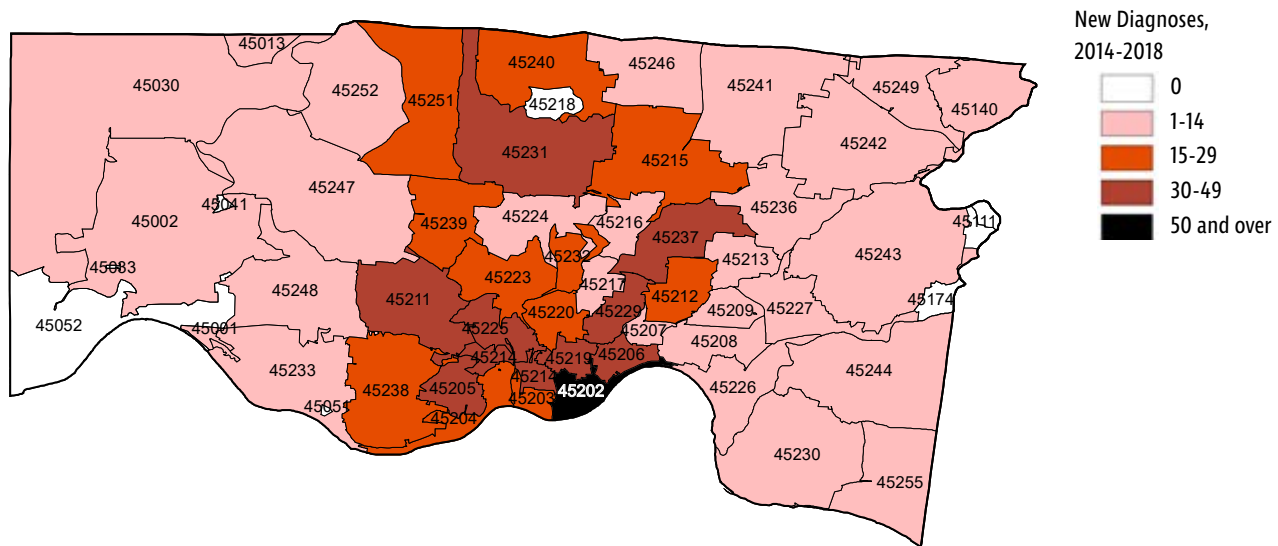
^b Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



ZIP code: More than half of all new reported diagnoses of HIV in Hamilton County from 2014 to 2018 were among persons residing in the following ZIP codes: 45202, 45229, 45219, 45211, 45214, 45205, 45237, 45225, 45206, and 45231.

Figure 7: Reported new diagnoses of HIV infection by ZIP code, Hamilton County, 2014-2018



Notes:

ZIP code reflects ZIP code of residence at time of initial diagnosis. Cases diagnosed while in a state or federal correctional facility or whose residence at time of diagnosis is unknown are not included.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through Dec. 26, 2019.



Table 6: Reported new diagnoses of HIV infection by disease status and selected characteristics, Hamilton County, 2018

Characteristic	2018 diagnosis of HIV infection			Disease Status					
				HIV (not AIDS)		HIV and later AIDS		AIDS	
	Rate ^a	No.	%	No.	%	No.	%	No.	%
Sex at birth									
Males	35.7	141	76%	108	73%	28	90%	5	83%
Females	10.4	44	24%	40	27%	3	10%	1	17%
Age at diagnosis (yr.)									
<13	*	-	-	-	-	-	-	-	-
13-14	*	-	-	-	-	-	-	-	-
15-19	28.1	15	8%	15	10%	-	-	-	-
20-24	51.1	27	15%	23	16%	4	13%	-	-
25-29	54.9	36	19%	31	21%	4	13%	1	17%
30-34	62.4	37	20%	28	19%	7	23%	2	33%
35-39	49.4	26	14%	18	12%	6	19%	2	33%
40-44	31.4	14	8%	10	7%	4	13%	-	-
45-49	16.9	8	4%	7	5%	1	3%	-	-
50-54	29.9	15	8%	13	9%	1	3%	1	17%
55-64	5.5	6	3%	2	1%	4	13%	-	-
65 or older	*	1	1%	1	1%	-	-	-	-
Race/Ethnicity^b									
American Indian/Alaska native	*	-	-	-	-	-	-	-	-
Asian/Pacific Islander	*	1	1%	1	1%	-	-	-	-
Black/African American	40.6	87	47%	68	46%	15	48%	4	67%
Hispanic/Latinx	17.7	5	3%	4	3%	1	3%	-	-
White	16.0	85	46%	69	47%	14	45%	2	33%
Multi-race	37.3	7	4%	6	4%	1	3%	-	-
Race/Ethnicity^b and sex at birth									
American Indian/Alaska native males	*	-	-	-	-	-	-	-	-
American Indian/Alaska native females	*	-	-	-	-	-	-	-	-
Asian/Pacific Islander males	*	1	1%	1	1%	-	-	-	-
Asian/Pacific Islander females	*	-	-	-	-	-	-	-	-
Black/African American males	68.8	68	37%	52	35%	13	42%	3	50%
Black/African American females	16.5	19	10%	16	11%	2	6%	1	17%
Hispanic/Latino males	34.6	5	3%	4	3%	1	3%	-	-
Hispanic/Latina females	*	-	-	-	-	-	-	-	-
White males	23.9	62	34%	47	32%	13	42%	2	33%
White females	8.5	23	12%	22	15%	1	3%	-	-
Multi-race males	54.9	5	3%	4	3%	1	3%	-	-
Multi-race females	*	2	1%	2	1%	-	-	-	-
Total	22.7	185		148		31		6	

Notes:

Reported new diagnoses of HIV infection include persons with a diagnosis of HIV (not AIDS), a diagnosis of HIV and an AIDS diagnosis within 12 months (HIV and later AIDS), and concurrent diagnoses of HIV and AIDS (AIDS) who were residents of Ohio at time of initial diagnosis.

Asterisk (*) indicates rate not calculated for case count <5 due to unstable rates. Dash (-) indicates no cases were reported for the given category.

^a The rate is the number of persons with a reported diagnosis of HIV infection per 100,000 population calculated using 2018 U.S. Census estimates.

^b Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



Table 7: Reported new diagnoses of HIV infection by disease status and transmission category, Hamilton County, 2018

Transmission Category ^a	2018 Diagnosis of HIV Infection		Disease Status					
	No.	%	HIV (Not AIDS)		HIV and later AIDS		AIDS	
	No.	%	No.	%	No.	%	No.	%
Male adult or adolescent								
Male-to-male sexual contact	66	47%	53	49%	10	36%	3	60%
Injection drug use (IDU)	42	30%	36	33%	6	21%	-	-
Male-to-male sexual contact and IDU	4	3%	3	3%	1	4%	-	-
Heterosexual contact	4	3%	1	1%	3	11%	-	-
Other/unknown	25	18%	15	14%	8	29%	2	40%
Subtotal	141	100%	108	100%	28	100%	5	100%
Female adult or adolescent								
Injection drug use	19	43%	18	45%	1	33%	-	-
Heterosexual contact	23	52%	20	50%	2	67%	1	100%
Other/unknown	2	5%	2	5%	-	-	-	-
Subtotal	44	100%	40	100%	3	100%	1	100%
Children (<13 yrs. at diagnosis)								
Perinatal	-	-	-	-	-	-	-	-
Other/unknown	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-
Total	185		148		31		6	

Notes:

Reported new diagnoses of HIV infection include persons with a diagnosis of HIV (not AIDS), a diagnosis of HIV and an AIDS diagnosis within 12 months (HIV and later AIDS), and concurrent diagnoses of HIV and AIDS (AIDS) who were residents of Ohio at time of initial diagnosis.

Dash (-) indicates no cases were reported for the given category.

^a Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



Table 8: Reported new diagnoses of HIV infection by disease status and exposure category, Hamilton County, 2018

Exposure Category ^a	2018 Diagnosis of HIV Infection		Disease Status					
			HIV (Not AIDS)		HIV and later AIDS		AIDS	
	No.	%	No.	%	No.	%	No.	%
Male-to-male sexual contact only	65	35%	52	35%	10	32%	3	50%
Injection drug use (IDU) only	32	17%	27	18%	5	16%	-	-
Heterosexual contact only	27	15%	21	14%	5	16%	1	17%
Male-to-male sexual contact and IDU	3	2%	2	1%	1	3%	-	-
IDU and heterosexual contact	29	16%	27	18%	2	6%	-	-
Male-to-male sexual contact and heterosexual contact	1	1%	1	1%	-	-	-	-
Male-to-male sexual contact and IDU and heterosexual contact	1	1%	1	1%	-	-	-	-
Perinatal exposure	-	-	-	-	-	-	-	-
Other/unknown	27	15%	17	11%	8	26%	2	33%
Total	185		148		31		6	

Notes:

Reported new diagnoses of HIV infection include persons with a diagnosis of HIV (not AIDS), a diagnosis of HIV and an AIDS diagnosis within 12 months (HIV and later AIDS), and concurrent diagnoses of HIV and AIDS (AIDS) who were residents of Ohio at time of initial diagnosis.

Dash (-) indicates no cases were reported for the given category.

^a Exposure categories are mutually exclusive risk categories. All possible combinations of risks are represented among exposure categories. A person with multiple risks is represented in the exposure category identifying all the reported ways in which that person may have been exposed to HIV.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



Table 9: Reported new diagnoses of HIV infection by race/ethnicity and transmission category, Hamilton County, 2018

	American Indian/Alaska Native		Asian/Pacific Islander		Black/African American		Hispanic/Latinx ^a		White		Multi-race	
Transmission Category ^b	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male adult or adolescent												
Male-to-male sexual contact	-	-	1	100%	41	60%	3	60%	20	32%	1	20%
Injection drug use (IDU)	-	-	-	-	5	7%	1	20%	33	53%	3	60%
Male-to-male sexual contact and IDU	-	-	-	-	1	1%	-	-	3	5%	-	-
Heterosexual contact	-	-	-	-	3	4%	1	20%	-	-	-	-
Other/unknown	-	-	-	-	18	26%	-	-	6	10%	1	20%
Subtotal	-	-	1	100%	68	100%	5	100%	62	100%	5	100%
Female adult or adolescent												
Injection drug use	-	-	-	-	1	5%	-	-	18	78%	-	-
Heterosexual contact	-	-	-	-	16	84%	-	-	5	22%	2	100%
Other/unknown	-	-	-	-	2	11%	-	-	-	-	-	-
Subtotal	-	-	-	-	19	100%	-	-	23	100%	2	100%
Children (<13 yrs. at diagnosis)												
Perinatal	-	-	-	-	-	-	-	-	-	-	-	-
Other/unknown	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	1	-	87	-	5	-	85	-	7	-

Notes:

Dash (-) indicates no cases were reported for the given category.

^a Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

^b Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Sexually Transmitted Infections (STI) and HIV Coinfection

A match was performed with HIV and STI data to determine the number of persons residing in Hamilton County who were diagnosed with HIV and STIs in 2018.

Chlamydia: Four percent (n=8) of the 185 persons residing in Hamilton County who were diagnosed with HIV in 2018 were also diagnosed with chlamydia. Most of these cases were among Blacks/African Americans and whites, and all were between the ages of 20 and 34 years.

Gonorrhea: Seven percent (n=13) of the 185 persons residing in Hamilton County who were diagnosed with HIV in 2018 were also diagnosed with gonorrhea. Most of these cases were among Blacks/African Americans and all were between the ages of 15 and 39 years.

Syphilis: Six percent (n=12) of the 185 persons residing in Hamilton County who were diagnosed with HIV in 2018 were also diagnosed with syphilis. Most of these cases were among Blacks/African Americans, most were between the ages of 15 and 39 years, and 92% of the cases had male-to-male sexual contact as the category of HIV transmission.



Table 10: Reported new diagnoses of HIV infection coinfecting with STIs by selected characteristics, Hamilton County, 2018

Characteristic	Chlamydia Coinfection		Gonorrhea Coinfection		Syphilis Coinfection	
	No.	%	No.	%	No.	%
Age at diagnosis (yr.)						
<13	-	-	-	-	-	-
13-14	-	-	-	-	-	-
15-19	-	-	1	8%	1	8%
20-24	3	38%	5	38%	4	33%
25-29	3	38%	2	15%	2	17%
30-34	2	25%	2	15%	2	17%
35-39	-	-	3	23%	1	8%
40-44	-	-	-	-	-	-
45-49	-	-	-	-	-	-
50-54	-	-	-	-	2	17%
55-64	-	-	-	-	-	-
65 or older	-	-	-	-	-	-
Race/Ethnicity ^a						
American Indian/Alaska native	-	-	-	-	-	-
Asian/Pacific Islander	-	-	-	-	-	-
Black/African American	3	38%	9	69%	9	75%
Hispanic/Latinx	1	13%	-	-	-	-
White	3	38%	3	23%	2	17%
Multi-race	1	13%	1	8%	1	8%
Transmission Category ^b						
Male adult or adolescent						
Male-to-male sexual contact	5	71%	3	38%	11	92%
Injection drug use (IDU)	1	14%	1	13%	-	-
Male-to-male sexual contact and IDU	-	-	1	13%	-	-
Heterosexual contact	-	-	-	-	-	-
Other/unknown	1	14%	3	38%	1	8%
Subtotal	7	100%	8	100%	12	100%
Female adult or adolescent						
Injection drug use	-	-	3	60%	-	-
Heterosexual contact	1	100%	2	40%	-	-
Other/unknown	-	-	-	-	-	-
Subtotal	1	100%	5	-	-	-
Total	8		13		12	

Notes:

Reported new diagnoses of HIV infection include persons with a diagnosis of HIV (not AIDS), a diagnosis of HIV and an AIDS diagnosis within 12 months (HIV and later AIDS), and concurrent diagnoses of HIV and AIDS (AIDS) who were residents of Ohio at time of initial diagnosis.

Coinfection is defined as having a STI diagnosis +/- 30 days from the HIV diagnosis.

Small numbers are unstable and should be interpreted with caution. Provisional data. Numbers subject to change when additional information is gained.

Dash (-) indicates no cases were reported for the given category.

^a Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska Native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

^b Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Source: Ohio Department of Health, STI Surveillance Program. Data reported through Nov. 24, 2019.



Table 11: Reported new diagnoses of HIV infection coinfecting with chlamydia by race/ethnicity and transmission category, Hamilton County, 2018

Transmission Category ^b	American Indian/Alaska Native		Asian/Pacific Islander		Black/African American		Hispanic/Latinx ^a		White		Multi-race	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male adult or adolescent												
Male-to-male sexual contact	-	-	-	-	2	100%	1	100%	2	67%	-	-
Injection drug use (IDU)	-	-	-	-	-	-	-	-	1	33%	-	-
Male-to-male sexual contact and IDU	-	-	-	-	-	-	-	-	-	-	-	-
Heterosexual contact	-	-	-	-	-	-	-	-	-	-	-	-
Other/unknown	-	-	-	-	-	-	-	-	-	-	1	100%
Subtotal	-	-	-	-	2	100%	1	100%	3	100%	1	100%
Female adult or adolescent												
Injection drug use	-	-	-	-	-	-	-	-	-	-	-	-
Heterosexual contact	-	-	-	-	1	100%	-	-	-	-	-	-
Other/unknown	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	1	100%	-	-	-	-	-	-
Total	-		-		3		1		3		-	

Notes:

Reported new diagnoses of HIV infection include persons with a diagnosis of HIV (not AIDS), a diagnosis of HIV and an AIDS diagnosis within 12 months (HIV and later AIDS), and concurrent diagnoses of HIV and AIDS (AIDS) who were residents of Ohio at time of initial diagnosis.

Coinfection is defined as having a STI diagnosis +/- 30 days from the HIV diagnosis.

Small numbers are unstable and should be interpreted with caution. Provisional data. Numbers subject to change when additional information is gained.

Dash (-) indicates no cases were reported for the given category.

^a Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

^b Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Source: Ohio Department of STI, Surveillance Program. Data reported through Oct. 31, 2019.



Table 12: Reported new diagnoses of HIV infection coinfectd with gonorrhea by race/ethnicity and transmission category, Hamilton County, 2018

Transmission Category ^b	American Indian/Alaska Native		Asian/Pacific Islander		Black/African American		Hispanic/Latinx ^a		White		Multi-race	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male adult or adolescent												
Male-to-male sexual contact	-	-	-	-	3	43%	-	-	-	-	-	-
Injection drug use (IDU)	-	-	-	-	1	14%	-	-	-	-	-	-
Male-to-male sexual contact and IDU	-	-	-	-	1	14%	-	-	-	-	-	-
Heterosexual contact	-	-	-	-	-	-	-	-	-	-	-	-
Other/unknown	-	-	-	-	2	29%	-	-	-	-	-	-
Subtotal	-	-	-	-	7	100%	-	-	-	-	-	-
Female adult or adolescent												
Injection drug use	-	-	-	-	-	-	-	-	3	100%	-	-
Heterosexual contact	-	-	-	-	2	100%	-	-	-	-	-	-
Other/unknown	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	2	100%	-	-	3	100%	-	-
Total	-	-	-	-	9	-	-	-	3	-	-	-

Notes:

Reported new diagnoses of HIV infection include persons with a diagnosis of HIV (not AIDS), a diagnosis of HIV and an AIDS diagnosis within 12 months (HIV and later AIDS), and concurrent diagnoses of HIV and AIDS (AIDS) who were residents of Ohio at time of initial diagnosis.

Coinfection is defined as having a STI diagnosis +/- 30 days from the HIV diagnosis.

Small numbers are unstable and should be interpreted with caution. Provisional data. Numbers subject to change when additional information is gained.

Dash (-) indicates no cases were reported for the given category.

^a Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

^b Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Source: Ohio Department of STI, Surveillance Program. Data reported through Oct. 31, 2019.



Table 13: Reported new diagnoses of HIV infection coinfecting with syphilis by race/ethnicity and transmission category, Hamilton County, 2018

Transmission Category ^b	American Indian/Alaska Native		Asian/Pacific Islander		Black/African American		Hispanic/Latinx ^a		White		Multi-race	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male adult or adolescent												
Male-to-male sexual contact	-	-	-	-	8	89%	-	-	2	100%	1	100%
Injection drug use (IDU)	-	-	-	-	-	-	-	-	-	-	-	-
Male-to-male sexual contact and IDU	-	-	-	-	-	-	-	-	-	-	-	-
Heterosexual contact	-	-	-	-	-	-	-	-	-	-	-	-
Other/unknown	-	-	-	-	1	11%	-	-	-	-	-	-
Subtotal	-	-	-	-	9	100%	-	-	2	100%	1	100%
Female adult or adolescent												
Injection drug use	-	-	-	-	-	-	-	-	-	-	-	-
Heterosexual contact	-	-	-	-	-	-	-	-	-	-	-	-
Other/unknown	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	9	-	-	-	2	-	1	-

Notes:

Reported new diagnoses of HIV infection include persons with a diagnosis of HIV (not AIDS), a diagnosis of HIV and an AIDS diagnosis within 12 months (HIV and later AIDS), and concurrent diagnoses of HIV and AIDS (AIDS) who were residents of Ohio at time of initial diagnosis.

Coinfection is defined as having a STI diagnosis +/- 30 days from the HIV diagnosis.

Small numbers are unstable and should be interpreted with caution. Provisional data. Numbers subject to change when additional information is gained.

Dash (-) indicates no cases were reported for the given category.

^a Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

^b Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Source: Ohio Department of Health, STI Surveillance Program. Data reported through Oct. 31, 2019.

Special Populations: In Hamilton County, Black/African American MSM accounted for a quarter of the total number of persons diagnosed with both HIV and chlamydia in 2018, 30% of those diagnosed with both HIV and gonorrhea in 2018, and two-thirds of those diagnosed with both HIV and syphilis in 2018. Here, the term MSM is defined as persons who were assigned male at birth, and who have a transmission category of 'male-to-male sexual contact' or 'male-to-male sexual contact/IDU.'



Table 14: Reported new diagnoses of HIV infection among Black/African American MSM coinfecting with STIs by selected characteristics, Hamilton County, 2018

Age at diagnosis (yr.)	Chlamydia Coinfection		Gonorrhea Coinfection		Syphilis Coinfection	
	No.	%	No.	%	No.	%
<13	-	-	-	-	-	-
13-14	-	-	-	-	-	-
15-19	-	-	-	-	1	13%
20-24	1	50%	3	75%	4	50%
25-29	1	50%	1	25%	1	13%
30-34	-	-	-	-	1	13%
35-39	-	-	-	-	1	13%
40-44	-	-	-	-	-	-
45-49	-	-	-	-	-	-
50-54	-	-	-	-	-	-
55-64	-	-	-	-	-	-
65 or older	-	-	-	-	-	-
Total	2		4		8	

Notes:

Reported new diagnoses of HIV infection include persons with a diagnosis of HIV (not AIDS), a diagnosis of HIV and an AIDS diagnosis within 12 months (HIV and later AIDS), and concurrent diagnoses of HIV and AIDS (AIDS) who were residents of Ohio at time of initial diagnosis.

Coinfection is defined as having a STI diagnosis +/- 30 days from the HIV diagnosis.

Small numbers are unstable and should be interpreted with caution. Provisional data. Numbers subject to change when additional information is gained.

Dash (-) indicates no cases were reported for the given category.

Includes HIV transmission categories male-to-male sexual contact and male-to-male sexual contact/injection drug use.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Source: Ohio Department of Health, STI Surveillance Program. Data reported through Oct. 31, 2019.

Hepatitis and HIV Coinfection

A match was performed with HIV and hepatitis data to determine the number of persons residing in Hamilton County who were diagnosed with both diseases from 2014 to 2018. (Due to gaps in 2014 reporting, 2015 to 2018 was used for hepatitis B.) Persons may have had more than one type of hepatitis diagnosis, and some persons may be diagnosed with acute and chronic hepatitis, counted as two separate hepatitis diagnoses. There was a total of 808 new reported diagnoses of HIV infection in Hamilton County from 2014 to 2018.

Hepatitis A: Four persons residing in Hamilton County were diagnosed with both HIV and hepatitis A from 2014 to 2018.

Hepatitis B: One person residing in Hamilton County was diagnosed with both HIV and hepatitis B (acute) from 2015 to 2018. There were 19 cases among persons residing in Hamilton County who were found to be diagnosed with both HIV and hepatitis B (chronic) from 2015 to 2018. Nearly half of these cases were among Black/African Americans, and a little more than 40% were among whites. About a third of the cases were between the ages of 20 and 29 years, and the rest of the cases were mostly evenly spread out across age groups from age 20 to 65 and older. More than half of the cases were among males with male-to-male sexual contact as the category of HIV transmission.

Hepatitis C: There was one case among persons residing in Hamilton County who was found to be diagnosed with both HIV and hepatitis C (acute) from 2014 to 2018. There were 91 cases among persons residing in Hamilton County who were found to be diagnosed with both HIV and hepatitis C (chronic) from 2014 to 2018. Two-thirds of the cases were between the ages of 25 and 39 years. Three-quarters were among whites. Eighty-four percent of the cases were among PWID.



Table 15: Reported new diagnoses of HIV infection coinfecting with hepatitis by selected characteristics, Hamilton County, 2014-2018

Characteristic	Diagnosis of HIV/ hepatitis A infection		Diagnosis of HIV/hepatitis B chronic infection		Diagnosis of HIV/hepatitis C chronic infection	
	No.	%	No.	%	No.	%
Age at diagnosis (yr.)						
<13	-	-	-	-	-	-
13-14	-	-	-	-	-	-
15-19	-	-	-	-	1	1%
20-24	-	-	2	11%	9	10%
25-29	-	-	4	21%	16	18%
30-34	1	25%	3	16%	25	27%
35-39	1	25%	4	21%	16	18%
40-44	1	25%	2	11%	6	7%
45-49	-	-	1	5%	8	9%
50-54	1	25%	2	11%	4	4%
55-64	-	-	-	-	5	5%
65 or older	-	-	1	5%	1	1%
Race/Ethnicity^a						
American Indian/Alaska native	-	-	-	-	-	-
Asian/Pacific Islander	-	-	-	-	-	-
Black/African American	4	100%	9	47%	18	20%
Hispanic/Latinx	-	-	-	-	-	-
White	-	-	8	42%	69	76%
Multi-race	-	-	2	11%	4	4%
Transmission Category^b						
Male adult or adolescent						
Male-to-male sexual contact	-	-	10	67%	5	9%
Injection drug use (IDU)	-	-	3	20%	45	78%
Male-to-male sexual contact and IDU	-	-	1	7%	3	5%
Heterosexual contact	-	-	-	-	1	2%
Other/unknown	-	-	1	7%	4	7%
Subtotal	-	-	15	100%	58	100%
Female adult or adolescent						
Injection drug use	4	100%	2	50%	28	85%
Heterosexual contact	-	-	2	50%	5	15%
Other/unknown	-	-	-	-	-	-
Subtotal	4	100%	4	100%	33	100%
Total	4		19		91	

Notes:

Reported new diagnoses of HIV infection include persons with a diagnosis of HIV (not AIDS), a diagnosis of HIV and an AIDS diagnosis within 12 months (HIV and later AIDS), and concurrent diagnoses of HIV and AIDS (AIDS) who were residents of Ohio at time of initial diagnosis.

Coinfection is defined as having a hepatitis diagnosis and HIV diagnosis between 2014 and 2018.

Small numbers are unstable and should be interpreted with caution. Provisional data. Numbers subject to change when additional information is gained.

Dash (-) indicates no cases were reported for the given category.

^a Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

^b Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Source: Ohio Department of Health, Hepatitis Surveillance Program. Data reported through Oct. 31, 2019.



Table 16: Reported new diagnoses of HIV infection coinfectd with hepatitis B (chronic) by race/ethnicity and transmission category, Hamilton County, 2015-2018

	American Indian/Alaska Native		Asian/Pacific Islander		Black/African American		Hispanic/Latinx ^a		White		Multi-race	
Transmission Category ^b	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male adult or adolescent												
Male-to-male sexual contact	-	-	-	-	8	100%	-	-	2	40%	-	-
Injection drug use (IDU)	-	-	-	-	-	-	-	-	2	40%	1	50%
Male-to-male sexual contact and IDU	-	-	-	-	-	-	-	-	1	20%	-	-
Heterosexual contact	-	-	-	-	-	-	-	-	-	-	-	-
Other/unknown	-	-	1	100%	-	-	-	-	-	-	1	50%
Subtotal	-	-	1	100%	8	100%	-	-	5	100%	2	100%
Female adult or adolescent												
Injection drug use	-	-	-	-	-	-	-	-	2	67%	-	-
Heterosexual contact	-	-	-	-	1	100%	-	-	1	33%	-	-
Other/unknown	-	-	1	100%	-	-	-	-	-	-	-	-
Subtotal	-	-	1	100%	1	100%	-	-	3	100%	-	-
Total	-	-	2	-	9	-	-	-	8	-	2	-

Notes:

Reported new diagnoses of HIV infection include persons with a diagnosis of HIV (not AIDS), a diagnosis of HIV and an AIDS diagnosis within 12 months (HIV and later AIDS), and concurrent diagnoses of HIV and AIDS (AIDS) who were residents of Ohio at time of initial diagnosis.

Coinfection is defined as having a hepatitis diagnosis and HIV diagnosis between 2014 and 2018.

Small numbers are unstable and should be interpreted with caution. Provisional data. Numbers subject to change when additional information is gained.

Dash (-) indicates no cases were reported for the given category.

^a Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

^b Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Source: Ohio Department of Health, Hepatitis Surveillance Program. Data reported through Oct. 31, 2019.



Table 17: Reported new diagnoses of HIV infection coinfectd with hepatitis C (chronic) by race/ethnicity and transmission category, Hamilton County, 2014-2018

	American Indian/Alaska Native		Asian/Pacific Islander		Black/African American		Hispanic/Latinx ^a		White		Multi-race	
Transmission Category ^b	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male adult or adolescent												
Male-to-male sexual contact	-	-	-	-	3	21%	-	-	2	40%	-	-
Injection drug use (IDU)	-	-	-	-	7	50%	-	-	2	40%	1	50%
Male-to-male sexual contact and IDU	-	-	-	-	-	-	-	-	1	20%	-	-
Heterosexual contact	-	-	-	-	1	7%	-	-	-	-	-	-
Other/unknown	-	-	-	-	3	21%	-	-	-	-	1	50%
Subtotal	-	-	-	-	14	100%	-	-	5	100%	2	100%
Female adult or adolescent												
Injection drug use	-	-	-	-	1	25%	-	-	2	67%	-	-
Heterosexual contact	-	-	-	-	3	75%	-	-	1	33%	-	-
Other/unknown	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	4	100%	-	-	3	100%	-	-
Total	-	-	-	-	18		-	-	8		2	

Notes:

Reported new diagnoses of HIV infection include persons with a diagnosis of HIV (not AIDS), a diagnosis of HIV and an AIDS diagnosis within 12 months (HIV and later AIDS), and concurrent diagnoses of HIV and AIDS (AIDS) who were residents of Ohio at time of initial diagnosis.

Coinfection is defined as having a hepatitis diagnosis and HIV diagnosis between 2014 and 2018.

Small numbers are unstable and should be interpreted with caution. Provisional data. Numbers subject to change when additional information is gained.

Dash (-) indicates no cases were reported for the given category.

^a Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

^b Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Source: Ohio Department of Health, Hepatitis Surveillance Program. Data reported through Oct. 31, 2019.



HIV Testing

HIV Testing: Data from January through September of 2019 indicates that the Hamilton HIV Prevention region conducted far fewer HIV tests (n=3,154) than in 2018 (n=11,188). If testing in 2019 remained steady, then the Hamilton County region will have conducted approximately 38% (n=4,205) of the number of tests conducted in 2018. This difference is largely due to the implementation of a risk assessment tool designed to increase priority-based testing among populations at highest risk for HIV. The risk assessment prioritizes HIV testing among men who have sex with men (MSM), young Black men who have sex with men (YBMSM), people who inject drugs (PWID), transgender/non-binary persons, individuals who have had a syphilis diagnosis in the last 12 months, persons who have recently moved from the South and have not been tested, and partners of PWID, MSM, or a person living with HIV/AIDS (PLWHA).

Hamilton County identified a large cluster of newly diagnosed HIV cases among PWID during the second half of 2018. Consequently, testing was increased in this population due to partner services testing as well as increased outreach, which continued in 2019. The proportion of HIV Prevention funded testing among PWID increased from 17% of all tests in 2018 to 25% of all 2019 testing through September. Percentage of tests within each risk category is calculated among those clients who had a risk profile reported. Through September in 2019, the proportion of testing among MSM in the Hamilton County region increased to 21%, compared with 13% during 2018; however, testing among YBMSM had increased only slightly from January to September 2019 (4%), compared with 2018 (3%). Along with the situational increased emphasis on testing among PWID, the added effect of the implementation of the risk assessment has been a decrease in testing among populations at low risk for HIV. However, the number of HIV positive persons identified within populations at high risk had not increased in 2019. If the identification of HIV positive individuals remained proportionate in the Hamilton County region during the past quarter of 2019, then the total number of HIV positive cases found in 2019 (n=46) would be 52% of the number of cases identified in 2018 (n=88). The significant drop in the number of HIV positive PWID during the first three quarters of 2019 (n=12) compared with 2018 (n=37) is largely due to the effectiveness of the coordinated outbreak response in Hamilton County, which has included collaboration with the CDC and the Kentucky Department for Public Health. However, the decrease in the number of MSM (n=13) and YBMSM (n=4) identified through September in 2019 as compared with 2018 (n=21 and n=12, respectively) is less clear and additional outreach to these populations is needed.

The proportion of males tested during the first three quarters of 2019 remained nearly the same as in 2018 at approximately 60%. The proportion of newly diagnosed HIV positive males in 2019 (77%) and 2018 (75%) also remained stable. From 2018 to 2019, the proportion of testing among Blacks/African Americans decreased from 52% to 40%, while testing among whites increased from 41% to 52%. The proportion of HIV positive cases decreased among Blacks/African Americans from 43% in 2018 to 34% in 2019 and increased among whites from 53% in 2018 to 57% in 2019; during this same time period, HIV positive cases increased from 1% to 9% among persons reporting more than one race. This change in the racial demographics of testing patterns and newly identified HIV positive cases may partly reflect the demographics of the PWID population, which is more highly concentrated among whites. The proportion of testing among Latinx individuals did not change between 2018 (4%) and 2019 (3%) and the proportion of HIV positive cases among the Latinx population also remained relatively unchanged from 2018 (2%) to 2019 (3%).

Testing among the various age groups shifted significantly from 2018 to 2019. The 20 to 29 age group accounted for 31% of testing in 2018 and increased to 37% in 2019, while testing among the 30 to 44 age group increased from 32% in 2018 to 40% in 2019. The proportion of newly identified HIV positive individuals changed in each age group as well, although the proportion of new cases in the 20 to 29 age group decreased sharply from 41% in 2018 to 23% in 2019, while the proportion of new cases in the 30 to 44 age group increased significantly from



47% in 2018 to 60% in 2019. These differences are not easily interpreted and are likely due to an interaction of factors, including the differences in age and race demographics among those at highest risk in the PWID and MSM populations as well as the epidemiological dynamics of the cluster investigation and outbreak response among the PWID population during 2018 and 2019. Please note data for 2019 is provisional through September. Data cleaning and reconciliation are ongoing and data may be incomplete.

Table 18: Total and positive HIV tests administered at HIV Prevention-funded testing sites, Hamilton County, 2018, and January-September 2019

All Tests

Risk Category*	2018		Jan.-Sept. 2019	
	Count	%	Count	%
MSM	741	13.3%	623	21.5%
YBMSM (age 13-29)	154	2.8%	110	3.8%
MSM/PWID	40	0.7%	51	1.8%
People who inject drugs	936	16.8%	739	25.5%
Trans/Nonbinary persons	21	0.4%	23	0.8%
Heterosexual male	2,324	41.7%	808	27.8%
Heterosexual female	1,550	27.8%	710	24.5%
Total	5,572	100.0%	2,903	100.0%

* Risk categories are mutually exclusive except for the MSM category, which includes YBMSM and MSM/PWID. Percentages are based on the denominator of all tests for which a risk category could be calculated.

Newly Diagnosed Positives

Risk Category*	2018		Jan.-Sept. 2019	
	Count	%	Count	%
MSM	21	30.4%	13	40.6%
YBMSM (age 13-29)	12	17.4%	4	12.5%
MSM/PWID	2	2.9%	1	3.1%
People who inject drugs	35	50.7%	11	34.4%
Trans/Nonbinary persons	2	2.9%	-	-
Heterosexual male	7	10.1%	7	21.9%
Heterosexual female	4	5.8%	1	3.1%
Total	69	100.0%	32	100.0%

* Risk categories are mutually exclusive except for the MSM category, which includes YBMSM and MSM/PWID. Percentages are based on the denominator of all newly diagnosed positive tests for which a risk category could be calculated.

All Tests

Sex at Birth	2018		Jan.-Sept. 2019	
	Count	%	Count	%
Male	6,641	59.4%	1,946	61.7%
Female	4,539	40.6%	1,169	37.1%
Declined to answer	7	0.1%	-	-
Not asked	1	0.0%	39	1.2%
Total	11,188	100.0%	3,154	100.0%

Newly Diagnosed Positives

Sex at Birth	2018		Jan.-Sept. 2019	
	Count	%	Count	%
Male	66	75.0%	27	77.1%
Female	21	23.9%	8	22.9%
Declined to answer	-	-	-	-
Not asked	1	1.1%	-	-
Total	88	100.0%	35	100.0%

All Tests

Age Group	2018		Jan.-Sept. 2019	
	Count	%	Count	%
12 years and younger	29	0.3%	9	0.3%
13 to 19	1,183	10.6%	93	3.0%
20 to 24	1,680	15.0%	536	17.0%
25 to 29	1,776	15.9%	622	19.7%
30 to 34	1,576	14.1%	530	16.8%
35 to 44	2,020	18.1%	728	23.1%
45 to 54	1,347	12.0%	319	10.1%
55 to 64	1,243	11.1%	161	5.1%
65 or older	311	2.8%	156	5.0%
Missing	23	0.2%	-	-
Total	11,188	100.0%	3,154	100.0%

Newly Diagnosed Positives

Age Group	2018		Jan.-Sept. 2019	
	Count	%	Count	%
12 years and younger	-	-	-	-
13 to 19	1	1.1%	1	2.9%
20 to 24	19	21.6%	4	11.4%
25 to 29	17	19.3%	4	11.4%
30 to 34	21	23.9%	11	31.4%
35 to 44	20	22.7%	10	28.6%
45 to 54	7	8.0%	3	8.6%
55 to 64	2	2.3%	1	2.9%
65 or older	1	1.1%	1	2.9%
Missing	-	-	-	-
Total	88	100.0%	35	100.0%



Table 18: Total and positive HIV tests administered at HIV Prevention-funded testing sites, Hamilton County, 2018, and January-September 2019, cont'd

All Tests

Race	2018		Jan.-Sept. 2019	
	Count	%	Count	%
American Indian or Alaska Native	20	0.2%	14	0.4%
Asian	120	1.1%	45	1.4%
Black/African American	5,857	52.4%	1,273	40.4%
Native Hawaiian or other Pacific Islander	12	0.1%	6	0.2%
White	4,592	41.0%	1,625	51.5%
More than one race	183	1.6%	66	2.1%
Not specified	-	-	31	1.0%
Declined to answer	303	2.7%	18	0.6%
Don't know	42	0.4%	1	0.0%
Not asked	59	0.5%	75	2.4%
Total	11,188	100.0%	3,154	100.0%

Newly Diagnosed Positives

Race	2018		Jan.-Sept. 2019	
	Count	%	Count	%
American Indian or Alaska Native	-	-	-	-
Asian	-	-	-	-
Black/African American	38	43.2%	12	34.3%
Native Hawaiian or other Pacific Islander	-	-	-	-
White	47	53.4%	20	57.1%
More than one race	1	1.1%	3	8.6%
Not specified	-	-	-	-
Declined to answer	2	2.3%	-	-
Don't know	-	-	-	-
Not asked	-	-	-	-
Total	88	100.0%	35	100.0%

All Tests

Ethnicity	2018		Jan.-Sept. 2019	
	Count	%	Count	%
Not Hispanic or Latinx	10,699	95.6%	2,875	91.2%
Hispanic or Latinx	415	3.7%	98	3.1%
Declined to answer	71	0.6%	145	4.6%
Don't know	1	0.0%	-	-
Not asked	2	0.0%	36	1.1%
Total	11,188	100.0%	3,154	100.0%

Newly Diagnosed Positives

Ethnicity	2018		Jan.-Sept. 2019	
	Count	%	Count	%
Not Hispanic or Latinx	86	97.7%	34	97.1%
Hispanic or Latinx	2	2.3%	1	2.9%
Declined to answer	-	-	-	-
Don't know	-	-	-	-
Not asked	-	-	-	-
Total	88	100.0%	35	100.0%

Source: Ohio Department of Health, HIV Monitoring and Evaluation Program. Data reported through Nov. 30, 2019.

**Table 19: HIV tests administered at HIV Prevention-funded testing sites by testing site, Hamilton County, 2018**

Site Name	All Tests	Newly Diagnosed		Previously Diagnosed	Unable to Determine Prior Status	Positivity Rate
		Preliminary	Confirmed			
ADAPT (women)	4	-	-	-	-	-
Caracole	930	-	17	7	-	1.8%
Cincinnati Exchange Project	51	-	-	-	-	-
Court Clinic	17	-	-	-	-	-
Hamilton County Public Health	126	-	6	2	-	4.8%
Hamilton County DIP	25	-	-	-	-	-
Hamilton County Justice Center	1,240	-	19	2	-	1.5%
Hamilton County Juvenile Court	810	-	-	1	-	-
Hamilton County Tuberculosis Clinic	81	-	1	-	-	1.2%
Job and Family Services	22	-	-	-	-	-
Main Library	117	1	2	-	-	1.7%
Our Daily Bread	6	-	-	-	-	-
Prospect House	27	-	-	-	-	-
River City Correctional	151	-	-	-	-	-
Shelter House	88	-	-	-	-	-
Special Event Testing	170	-	-	1	-	-
Special Events (Caracole)	167	-	-	-	-	-
Talbert House General	20	-	-	-	-	-
University Emergency Medicine	2,517	-	13	2	-	0.5%
University of Cincinnati	93	-	-	-	-	-
University of Cincinnati/ED	4,487	-	28	18	10	0.6%
Villages at Roll Hill	10	-	-	-	-	-
Warsaw Ave	14	-	1	-	-	7.1%
Women Helping Women	15	-	-	-	-	-
Total	11,188	1	87	33	10	0.8%

Source: Ohio Department of Health, HIV Monitoring and Evaluation Program. Data reported through Nov. 30, 2019.



Table 20: HIV tests administered at HIV Prevention-funded testing sites by testing site, Hamilton County, January-September 2019

Site Name	All Tests	Newly Diagnosed		Previously Diagnosed	Unable to Determine Prior Status	Positivity Rate
		Preliminary	Confirmed			
ADAPT (women)	3	-	-	-	-	-
Calhoun St.	4	-	-	-	-	-
Caracole	667	1	10	2	-	1.6%
Cincinnati Exchange Project	60	-	-	-	-	-
Cincinnati Health Department	5	-	-	-	-	-
Court Clinic	8	-	-	-	-	-
Gilbert Ave/Walnut Hills	1	-	-	-	-	-
Hamilton County Public Health	145	1	5	-	-	4.1%
Hamilton County DIP	13	-	-	-	-	-
Hamilton County Justice Center	649	1	5	-	-	0.9%
Hamilton County Public Health-DIS Field Testing	9	-	2	-	-	22.2%
Job and Family Services	5	-	-	-	-	-
Josephine Clinic/Caracole Inc.	13	-	-	-	-	-
Main Library	88	-	2	-	-	2.3%
Our Daily Bread	11	-	-	-	-	-
Prospect House	19	-	-	-	-	-
Reading Rd. (Avondale)	1	-	-	-	-	-
River City Correctional	52	-	-	-	-	-
Shelter House	11	-	-	-	-	-
Special Event Testing	349	-	-	-	-	-
Talbert House General	5	-	-	-	-	-
University Emergency Medicine	963	2	6	-	-	0.8%
University of Cincinnati	49	-	-	-	-	-
University of Cincinnati/ED	1	-	-	1	-	-
Villages at Roll Hill	10	-	-	-	-	-
Warsaw Ave	8	-	-	-	-	-
Xavier University	5	-	-	-	-	-
Total	3,154	5	30	3	-	1.1%

Source: Ohio Department of Health, HIV Monitoring and Evaluation Program. Data reported through Nov. 30, 2019.



Social Determinants of Health

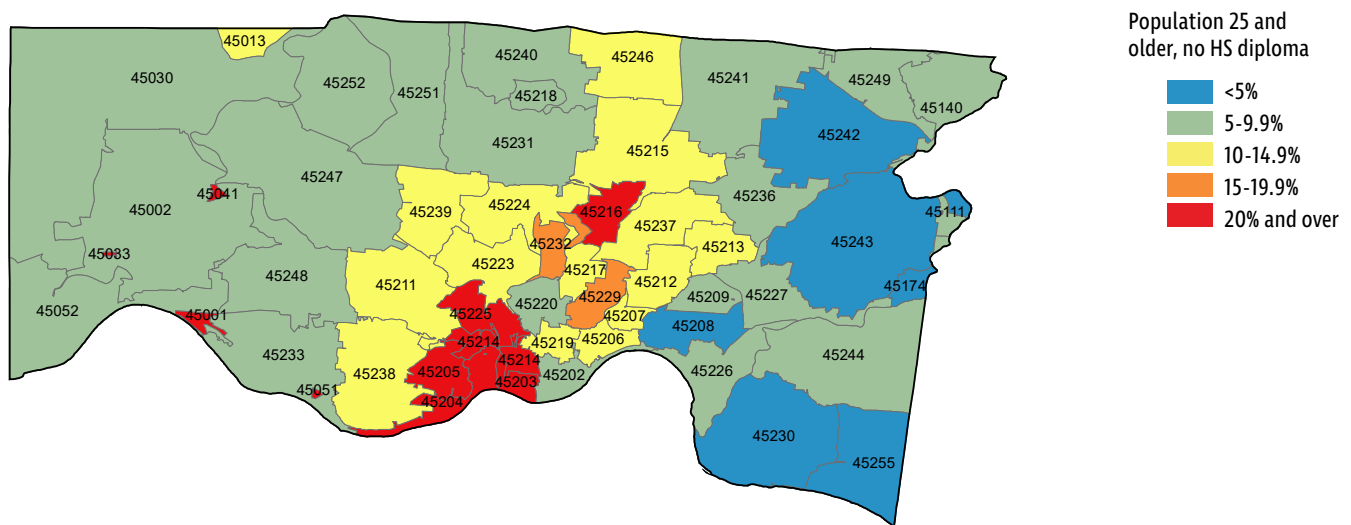
There are many factors, including place and type of residence, income, educational level, employment status, and access to healthcare, that contribute to a person's health status. It is critical to understand how social determinants may affect the health of individuals and populations. Several key indicators regarding social determinants of health (SDH), including educational attainment, unemployment, poverty level, and health insurance coverage, are displayed to help facilitate an understanding of the intersection of these factors and HIV infection. Each indicator includes a map displaying ZIP codes for the general population of Hamilton County, and the corresponding 'level' of the indicator based on the ZIP code. Analysis revealed that two particular ZIP codes had the poorest outcomes across every SDH indicator: 45203 and 45214.

Additionally, each indicator includes area-based information for the population diagnosed with HIV infection in Hamilton County in 2018. That is, data among persons diagnosed with HIV are joined to the corresponding 'level' of the indicator based on the ZIP code of residence.

Information regarding transportation is also provided, as well as information regarding housing status for Ryan White clients.

Educational attainment: Nine and a half percent of Hamilton County's population aged 25 years and older does not have a high school diploma, compared with 10.2% for all of Ohio. The map below depicts each ZIP code in Hamilton County and what percentage of the population over age 25 has no high school diploma.

Figure 8: Percentage of population aged 25 years and older with no high school diploma by ZIP code, Hamilton County, 2013-2017

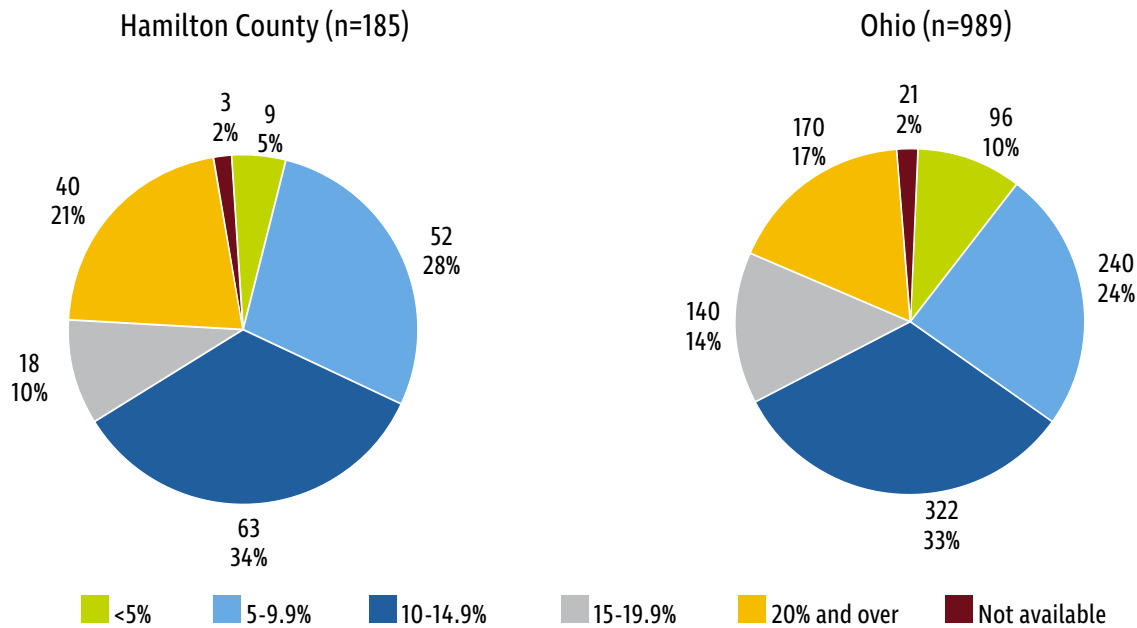


Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.



Figure 9 depicts the number of new diagnoses of HIV infection in Hamilton County and in Ohio in 2018, by area-based educational attainment. Nine of the 185 new diagnoses of HIV in Hamilton County in 2018 were among persons who resided in ZIP codes where less than 5% of the population over age 25 years did not have a high school diploma. There were 52 new diagnoses of HIV in Hamilton County in 2018 among persons who resided in ZIP codes where 5% to 9.9% of the population over age 25 years did not have a high school diploma, 63 among persons residing in ZIP codes where 10% to 14.9% did not have a high school diploma, 18 among persons residing in ZIP codes where 15% to 19.9% did not have a high school diploma, and 40 among persons residing in ZIP codes where more than 20% did not have a high school diploma.

Figure 9: Number of new diagnoses of HIV infection in 2018 by area-based percentage of population aged 25 years and older with no high school diploma

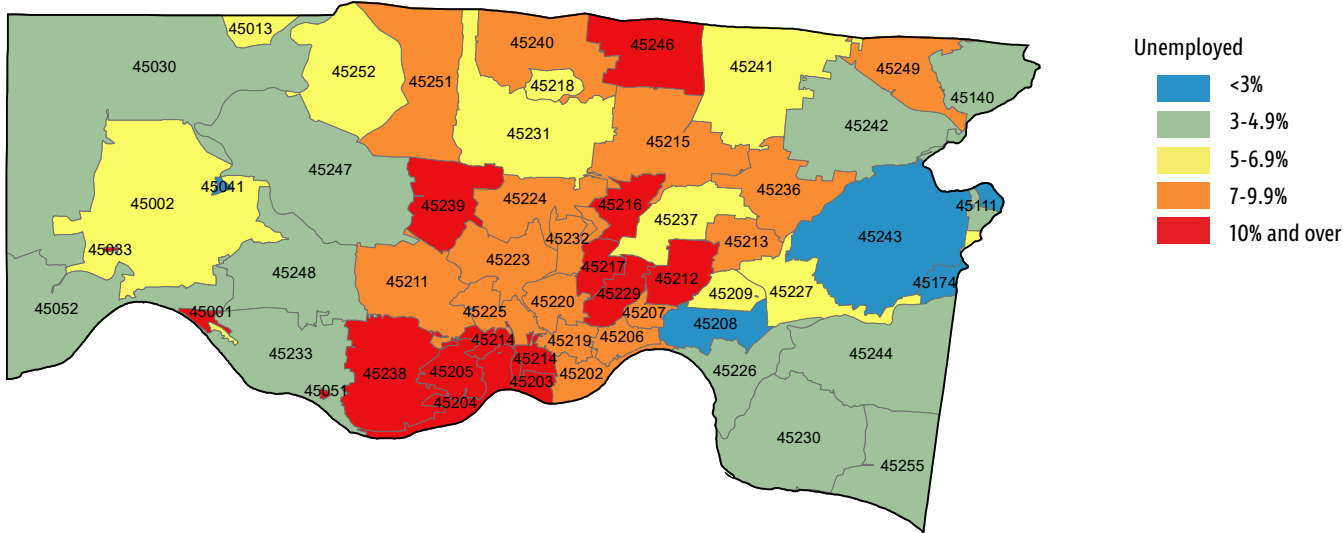


Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.



Unemployment: Almost 6% of Hamilton County's population in the labor force with no disability is unemployed, compared with 5.4% for all of Ohio. The map below depicts each ZIP code in Hamilton County and what percentage of the population is unemployed.

Figure 10: Percentage of population unemployed (in labor force with no disability) by ZIP code, Hamilton County, 2013-2017

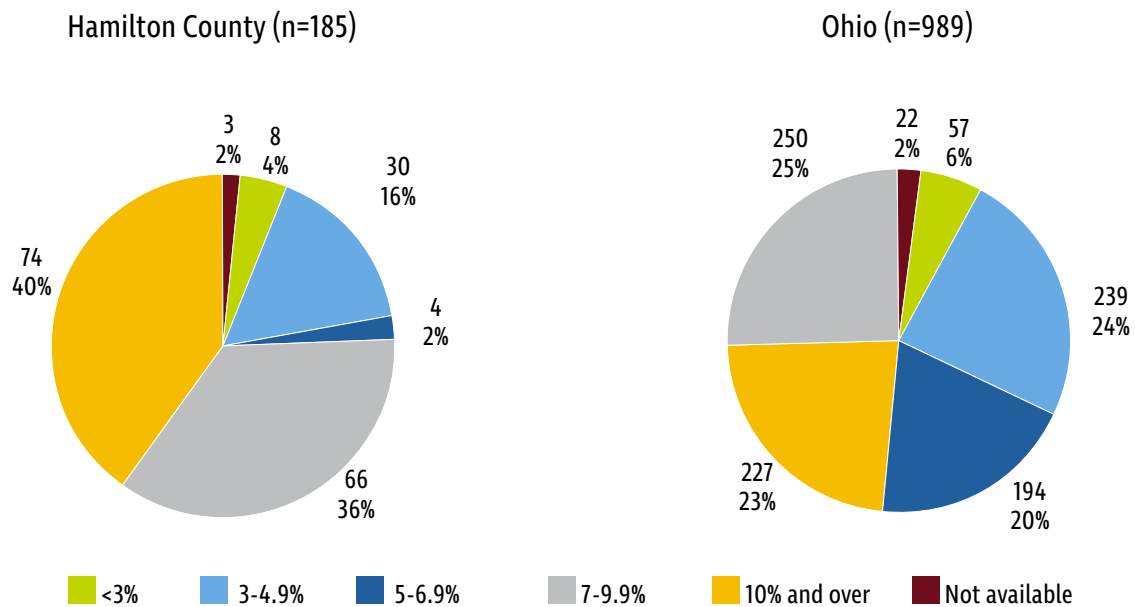


Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.



Figure 11 depicts the number of new diagnoses of HIV infection in Hamilton County and in Ohio in 2018, by area-based unemployment. Eight of the 185 new diagnoses of HIV in Hamilton County in 2018 were among persons who resided in ZIP codes where less than 3% of the population in the labor force with no disability was unemployed. There were 30 new diagnoses of HIV in Hamilton County in 2018 among persons who resided in ZIP codes where 3% to 4.9% of the population in the labor force with no disability was unemployed, four among persons residing in ZIP codes where 5% to 6.9% was unemployed, 66 among persons residing in ZIP codes where 7% to 9.9% was unemployed, and 74 among persons residing in ZIP codes where more than 10% was unemployed.

Figure 11: Number of new diagnoses of HIV infection in 2018 by area-based percentage of the population unemployed (in labor force with no disability)



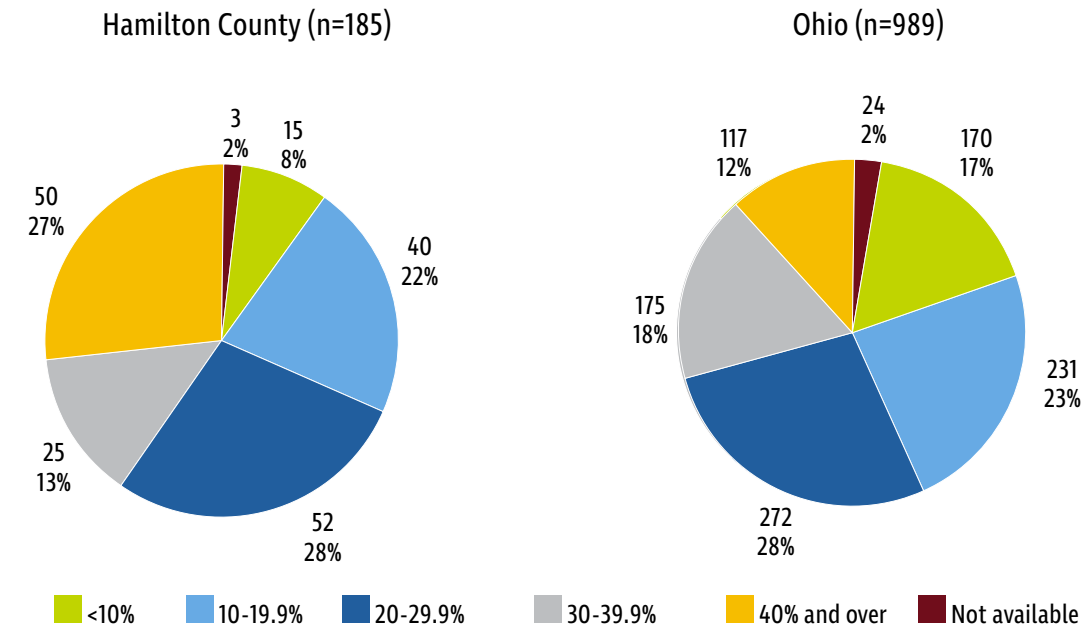
Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

Sixty-one percent of Ryan White Part B clients in Hamilton County were employed in 2018, while 39% were unemployed.



Figure 13 depicts the number of new diagnoses of HIV infection in Hamilton County and in Ohio in 2018, by area-based poverty level. Fifteen of the 185 new diagnoses of HIV in Hamilton County in 2018 were among persons who resided in ZIP codes where less than 10% of the population had income in the past 12 months below FPL. There were 40 new diagnoses of HIV in Hamilton County in 2018 among persons who resided in ZIP codes where 10% to 19.9% of the population had income in the past 12 months below FPL, 52 among persons residing in ZIP codes where 20% to 29.9% were below FPL, 25 among persons residing in ZIP codes where 30% to 39.9% were below FPL, and 50 among persons residing in ZIP codes where 40% or more were below FPL.

Figure 13: Number of new diagnoses of HIV infection in 2018 by area-based percentage of population with income in the past 12 months below federal poverty level



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

In 2018, the federal poverty level for a single person was \$12,140 and increased by \$4,320 for each additional member of the household. Income data is collected to determine eligibility for all clients enrolled in the Ryan White Part B program.

Table 21: Number and percentage of Ryan White Part B clients by percentage of FPL, Hamilton County, 2018

	Percentage of Federal Poverty Level					Total
	<100%	100-138%	139-200%	201-250%	251-300%	
Hamilton County Part B	520 (51%)	114 (12%)	152 (15%)	104 (11%)	95 (9%)	986

Note: Clients enrolled in the Ryan White Part B Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).
Source: Ryan White Application Database. Data reported through Nov. 14, 2019.



Table 22: Number and percentage of Ryan White Part C (Cincinnati Health Network) clients by percentage of FPL, Hamilton County, 2018

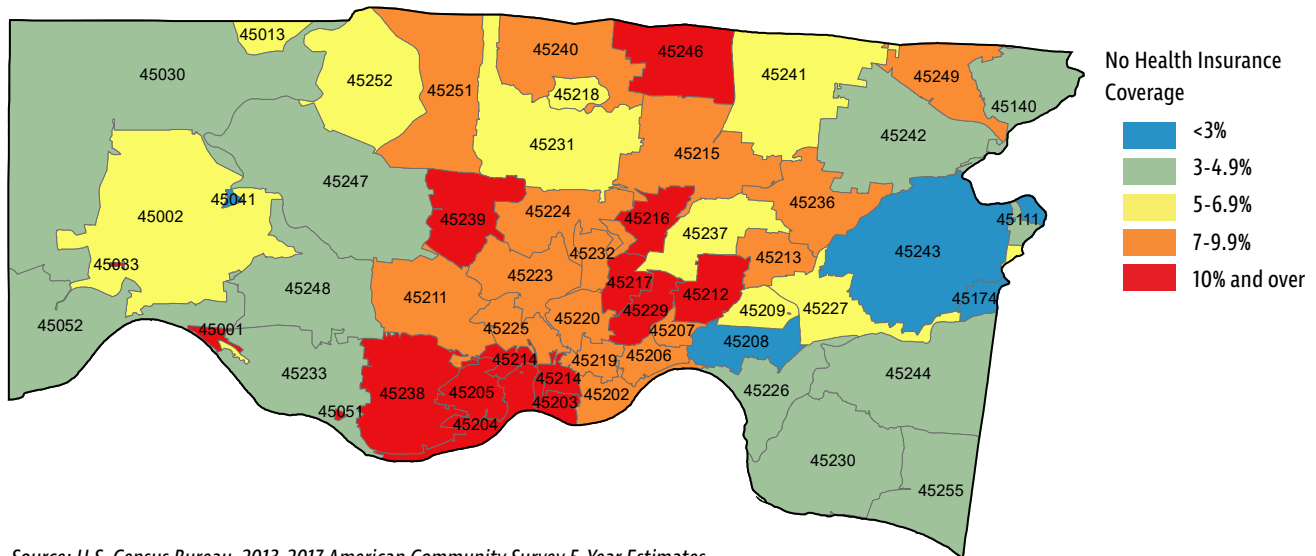
	Percentage of Federal Poverty Level							Total
	<100%	100-138%	139-200%	201-250%	251-300%	301-500%	<500%	
Hamilton County Part C	455 (63%)	62 (9%)	60 (8%)	48 (7%)	30 (4%)	33 (5%)	39 (5%)	727

Note: Clients enrolled in the Ryan White Part C Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).

Source: Ryan White Application Database. Data reported through Nov. 14, 2019.

Uninsured: A little more than 7% of Hamilton County's civilian non-institutionalized population has no health insurance, compared with 7.4% for all of Ohio. The map below depicts each ZIP code in Hamilton County and what percentage of the population is uninsured.

Figure 14: Percentage of the civilian non-institutionalized population with no health insurance coverage by ZIP code, Hamilton County, 2013-2017

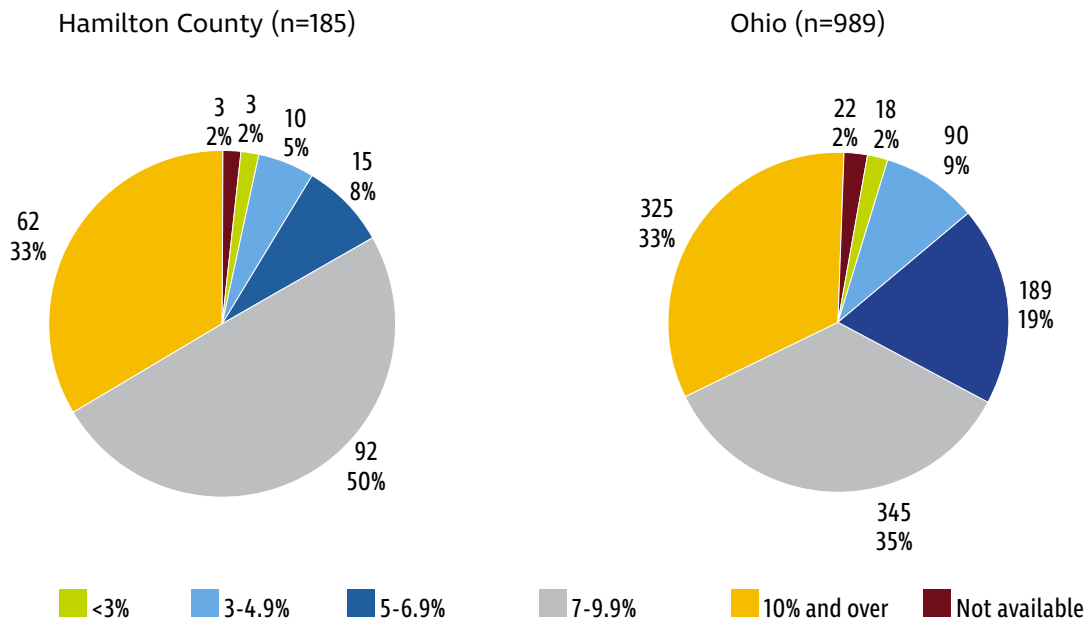


Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.



Figure 15 depicts the number of new diagnoses of HIV infection in Hamilton County and in Ohio in 2018 by area-based percentage uninsured. Three of the 185 new diagnoses of HIV in Hamilton County in 2018 were among persons who resided in ZIP codes where less than 3% of the civilian non-institutionalized population had no health insurance. There were 10 new diagnoses of HIV in Hamilton County in 2018 among persons who resided in ZIP codes where 3% to 4.9% of the civilian non-institutionalized population had no health insurance, 15 among persons residing in ZIP codes where 5% to 6.9% had no health insurance, 92 among persons residing in ZIP codes where 7% to 9.9% had no health insurance, and 62 among persons residing in ZIP codes where 10% or more had no health insurance.

Figure 15: Number of new diagnoses of HIV infection in 2018 by area-based percentage of the civilian non-institutionalized population with no health insurance

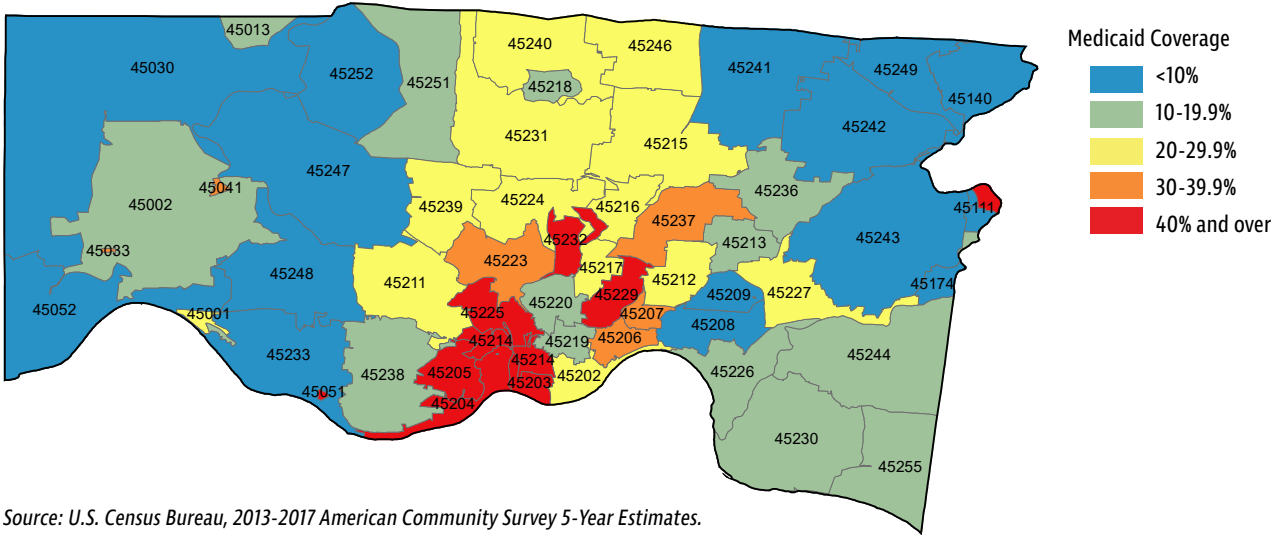


Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimate.



Medicaid coverage: Nineteen and a half percent of Hamilton County's population has Medicaid coverage (alone or in combination), compared with 19.7% for all of Ohio. The map below depicts each ZIP code in Hamilton County and what percentage of the population has Medicaid coverage.

Figure 16: Percentage of population with Medicaid coverage (alone or in combination) by ZIP code, Hamilton County, 2013-2017

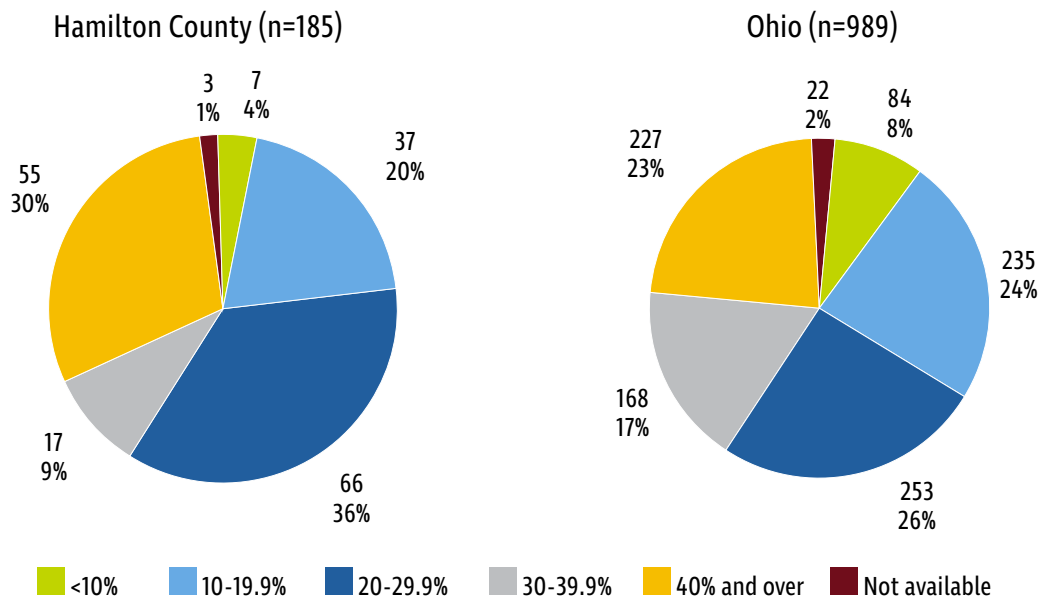


Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.



Figure 17 depicts the number of new diagnoses of HIV infection in Hamilton County and in Ohio in 2018 by area-based percentage of Medicaid coverage. Seven of the 185 new diagnoses of HIV in Hamilton County in 2018 were among persons who resided in ZIP codes where less than 10% of the population had Medicaid coverage. There were 37 new diagnoses of HIV in Hamilton County in 2018 among persons who resided in ZIP codes where 10% to 19.9% of the population had Medicaid coverage, 66 among persons residing in ZIP codes where 20% to 29.9% had Medicaid coverage, 17 among persons residing in ZIP codes where 30% to 39.9% had Medicaid coverage, and 55 among persons residing in ZIP codes where 40% or more had Medicaid coverage.

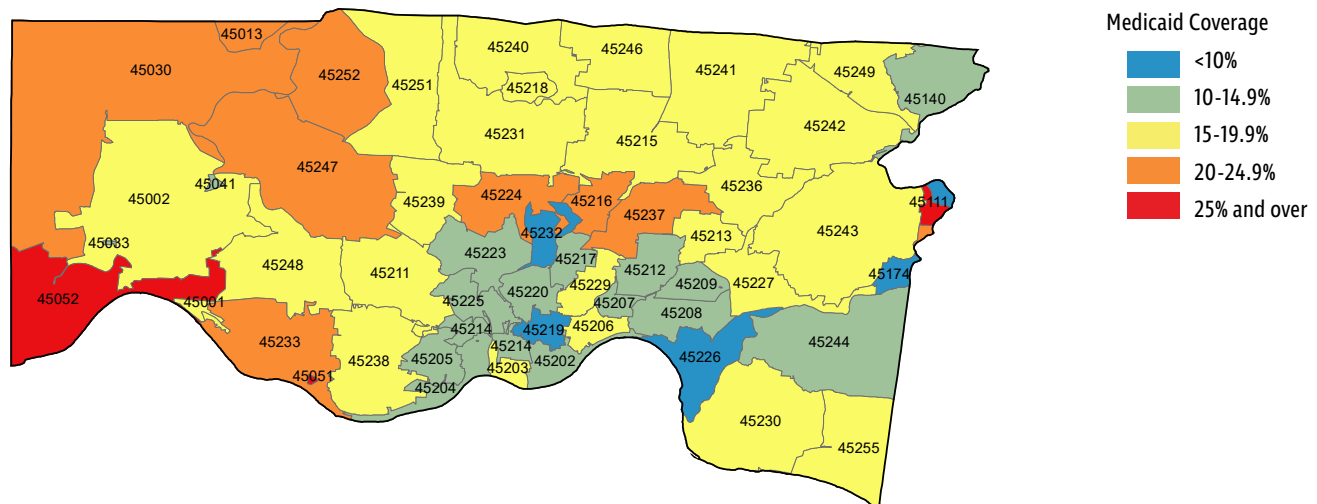
Figure 17: Number of new diagnoses of HIV infection in 2018 by area-based percentage of population with Medicaid coverage



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

Medicare coverage: Almost 17% of Hamilton County's population has Medicare coverage (alone or in combination), compared with 17.8% for all of Ohio. The map below depicts each ZIP code in Hamilton County and what percentage of the population has Medicare coverage.

Figure 18: Percentage of population with Medicare coverage (alone or in combination) by ZIP code, Hamilton County, 2013 to 2017

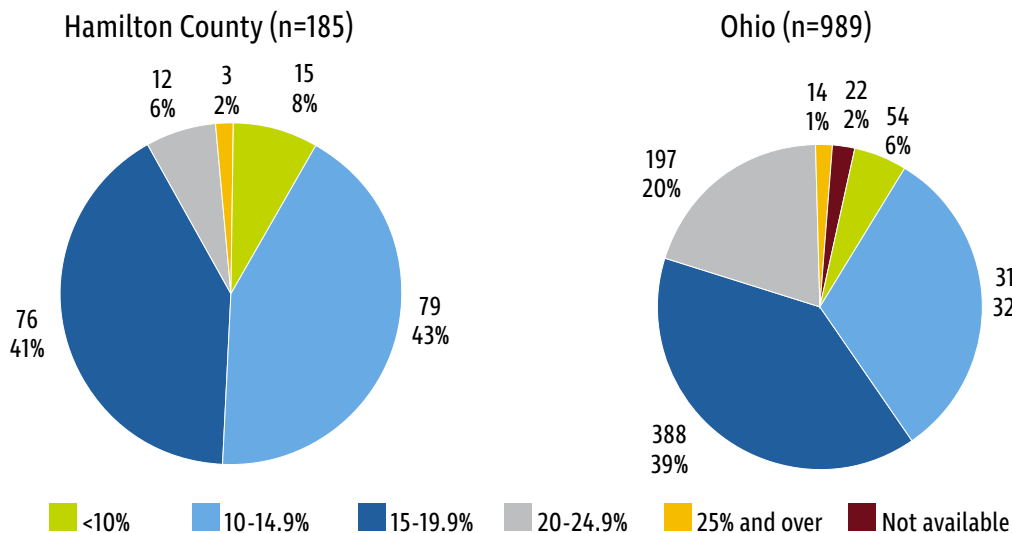


Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.



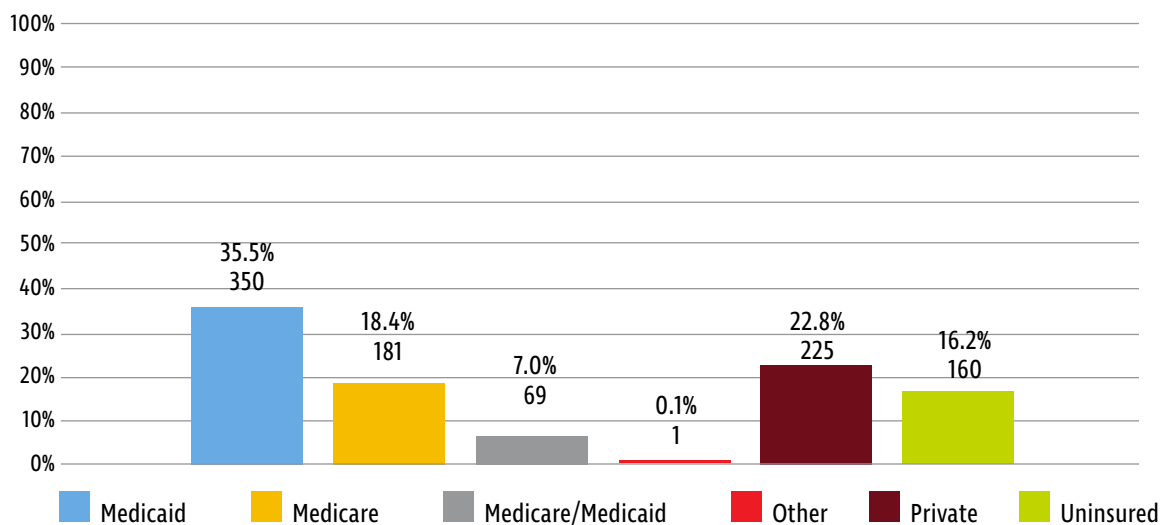
Figure 19 depicts the number of new diagnoses of HIV infection in Hamilton County and in Ohio in 2018 by area-based percentage of Medicare coverage. Fifteen of the 185 new diagnoses of HIV in Hamilton County in 2018 were among persons who resided in ZIP codes where less than 10% of the population had Medicare coverage. There were 79 new diagnoses of HIV in Hamilton County in 2018 among persons who resided in ZIP codes where 10% to 14.9% of the population had Medicare coverage, 76 among persons residing in ZIP codes where 15% to 19.9% had Medicare coverage, 12 among persons residing in ZIP codes where 20% to 24.9% had Medicare coverage, and three among persons residing in ZIP codes where 25% or over had Medicare coverage.

Figure 19: Number of new diagnoses of HIV infection in 2018 by area-based percentage of population with Medicare coverage



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

Figure 20: Percentage of Part B clients by health insurance coverage, Hamilton County, 2018

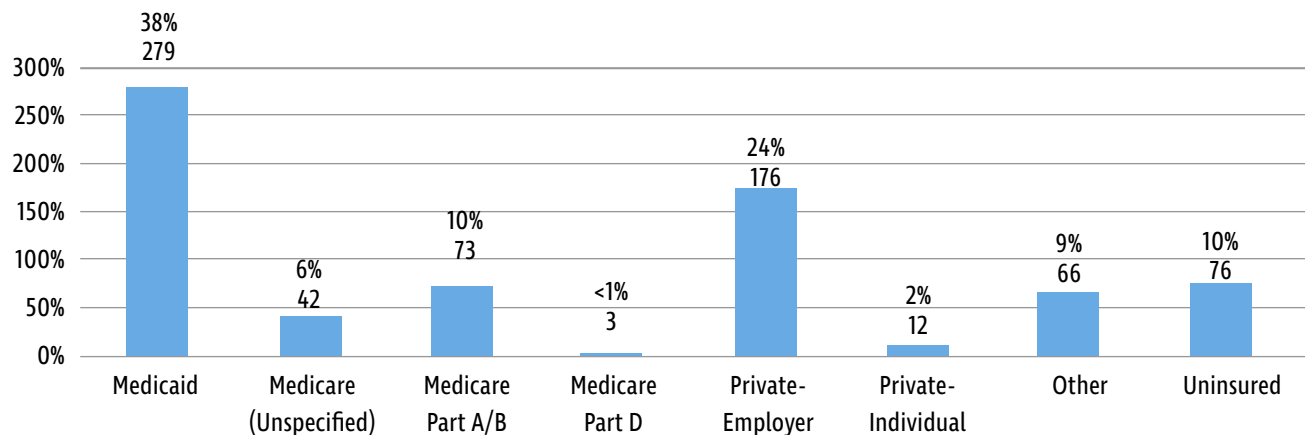


Note: Clients enrolled in the Ryan White Part B Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).

Source: Ryan White Application Database. Data reported through Nov. 14, 2019



Figure 21: Percentage of Part C (Cincinnati Health Network) clients by health insurance coverage, Hamilton County, 2018



Note: Clients enrolled in the Ryan White Part B Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).

Source: Ryan White Application Database. Data reported through Nov. 14, 2019.

Transportation: In Hamilton County, there were 338,267 occupied housing units. Of these, 12% had no vehicle available. There were 17,171 workers 16 years of age and older with no vehicle available for transportation to work. Forty-three percent of these workers used public transportation (excluding taxicabs) to commute to work.

Housing status: In 2018, 83% of Ryan White Part B clients in Hamilton County had stable housing. Ten percent had temporary housing, and 7% were homeless. In 2018, 70% of Ryan White Part C (Cincinnati Health Network) clients in Hamilton County had stable housing. Twenty percent had temporary housing, and 10% were homeless.



Table 23: Percentage of Ryan White Part B clients by selected characteristics and housing status, Hamilton County, 2018

Client Demographics, N=978	Percentage and Number of Total Clients, 2018		
	Stable Housing	Temporary Housing	Homeless
Gender			
Male	76% (611)	77% (79)	84% (57)
Female	23% (187)	18% (18)	15% (10)
Transgender	1% (10)	5% (5)	1% (1)
Race/Ethnicity			
Black or African American	61% (492)	74% (76)	60% (41)
More than one race	2% (15)	5% (5)	4% (3)
Other	1% (8)	-	-
White	34% (274)	19% (19)	34% (23)
Hispanic/Latinx	2% (19)	2% (2)	1% (1)
Federal Poverty Level			
<100	46% (374)	79% (81)	94% (64)
100-138	13% (102)	11% (10)	1% (1)
139-200	17% (142)	5% (5)	3% (2)
201-250	12% (99)	5% (5)	-
251-300	11% (90)	<1% (1)	1% (1)
>300	1% (1)	-	-
Age			
0-12 Years	-	-	-
13-24 Years	5% (42)	12% (12)	10% (7)
25-44 Years	38% (305)	55% (56)	56% (38)
45-64 Years	50% (401)	32% (33)	29% (20)
65 and older	7% (60)	1% (1)	4% (3)
Viral Suppression			
Yes	81% (658)	67% (68)	71% (48)
No	10% (80)	24% (25)	23% (16)
Missing	9% (70)	9% (9)	6% (4)
Total % of Clients	83% (808)	10% (102)	7% (68)

Note: Clients enrolled in the Ryan White Part B Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).

Source: Ryan White Application Database. Data reported through Nov. 14, 2019.



Table 24: Percentage of Ryan White Part C (Cincinnati Health Network) clients by selected characteristics and housing status, Hamilton County, 2018

Client Demographics, N=727	Percentage and Number of Total Clients, 2018		
	Stable Housing	Temporary Housing	Homeless
Gender			
Male	75% (381)	75% (107)	79% (59)
Female	23% (120)	22% (31)	20% (15)
Transgender	2% (9)	3% (4)	1% (1)
Race			
Black or African American	58% (297)	70% (100)	61% (46)
More than one race	1% (2)	-	-
Other	1% (5)	3% (4)	3% (2)
White	40% (206)	27% (38)	36% (27)
Race/Ethnicity			
Hispanic/Latinx	3% (17)	3% (4)	1% (1)
Non-Hispanic	97% (493)	97% (138)	99% (74)
Federal Poverty Level			
<100	52% (265)	82% (117)	98% (73)
100-138	11% (56)	4% (6)	-
139-200	9% (48)	8% (11)	1% (1)
201-250	9% (44)	3% (4)	-
251-300	5% (28)	1% (2)	-
301-500	6% (32)	<1% (1)	-
>500	7% (37)	<1% (1)	1% (1)
Age			
0-12 years	-	-	-
13-24 years	4% (20)	9% (13)	16% (12)
25-44 years	46% (234)	58% (82)	55% (41)
45-64 years	44% (226)	30% (43)	28% (21)
65 and older	6% (30)	3% (4)	<1% (1)
Viral Suppression			
Yes	84% (426)	67% (95)	51% (38)
No	13% (67)	25% (35)	44% (33)
Missing	3% (17)	8% (12)	5% (4)
Total % of Clients	70% (510)	20% (142)	10% (75)

Note: Clients enrolled in the Ryan White Part C Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).

Source: CAREWare. Data reported through Nov. 14, 2019.



TREAT: Treat people with HIV rapidly and effectively to reach sustained viral suppression

Prevalence: Persons Living With Diagnosed HIV Infection

As of Dec. 31, 2018, there were 3,213 persons living with diagnosed HIV infection in Hamilton County. Of these, 52% were living with an HIV (not AIDS) diagnosis, and 48% were living with a stage 3 (AIDS) diagnosis. The rate of persons living with diagnosed HIV infection in Hamilton County in 2018 was 393.4. Three persons living with diagnosed HIV infection are currently incarcerated in a state or federal correctional facility in Hamilton County as of Dec. 31, 2018. However, these three cases are not reflected in the total number of persons living with diagnosed HIV infection in Hamilton County. Rather, these three cases are assigned 'No County,' and included in the total number for Ohio. There are nine persons living with diagnosed HIV incarcerated in a jail in Hamilton County as of Dec. 31, 2018, and these nine cases are reflected in the total for Hamilton County.

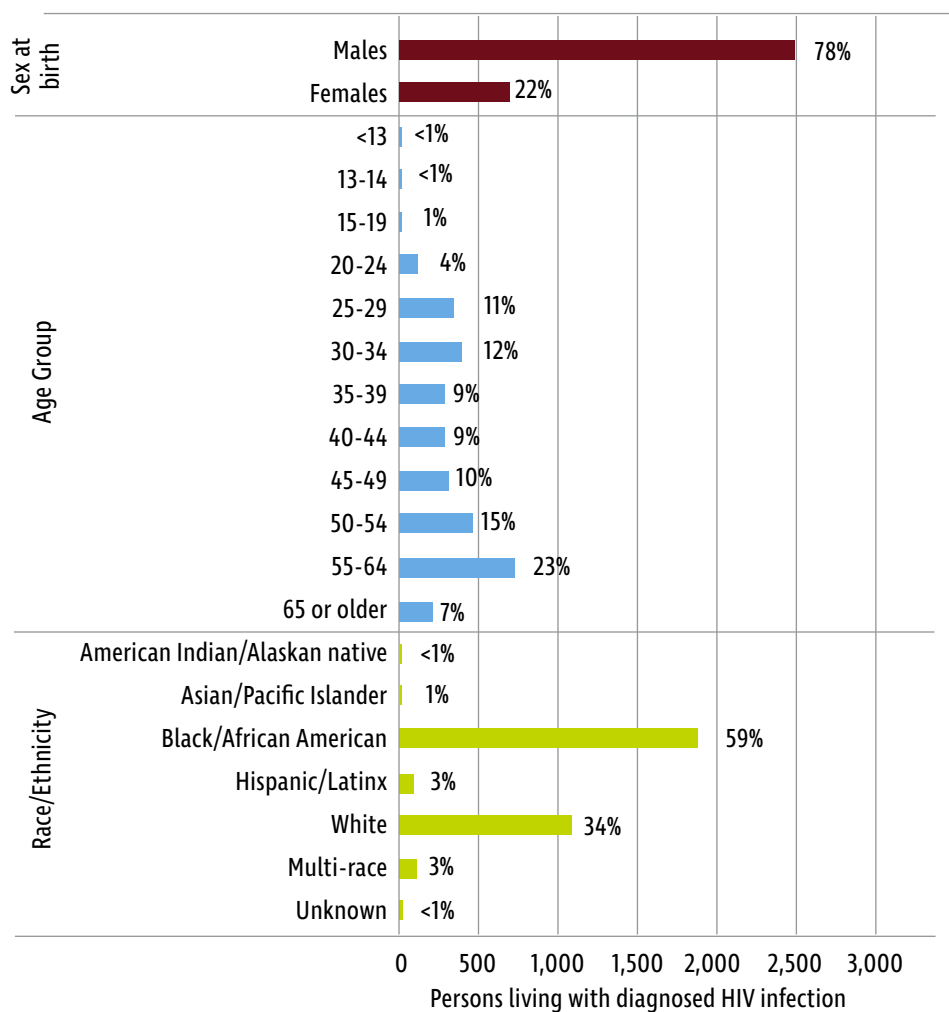
Sex at birth: Males accounted for 78% of persons living with diagnosed HIV infection in Hamilton County at the end of 2018, while females accounted for 22%. The rate of males living with diagnosed HIV infection was nearly four times higher in 2018 than that of females.

Current age: At the end of 2018, 54% of all persons living with diagnosed HIV infection in Hamilton County were 45 years of age and older. Rates of persons living with diagnosed HIV infection were highest in age groups 50-to-54, 55-to-64, and 45-to-49, (934.9, 681.1, and 675.3, respectively). These age group-specific rates will continue to rise as persons age and live longer as a result of treatment adherence and related retention in care intervention successes.

Race/ethnicity: Blacks/African Americans make up 59% of persons living with diagnosed HIV infection in Hamilton County, while whites make up 34%. The rate for Blacks/African Americans (879.1) was more than four times as high as that for whites (205.6).



Figure 22: Persons living with diagnosed HIV infection, Hamilton County, 2018



Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



Special Populations: In Hamilton County, Black/African American MSM accounted for 33% of the total number of persons living with diagnosed HIV in Hamilton County in 2018. Here, the term MSM is defined as persons who were assigned male at birth, and who have a transmission category of 'male-to-male sexual contact' or 'male-to-male sexual contact/IDU.'

Table 25: Black/African American MSM living with diagnosed HIV infection, Hamilton County, 2018

Age at end of year	Living with diagnosed HIV infection in 2018	
	No.	%
15-19	9	1%
20-24	66	6%
25-29	201	19%
30-34	212	20%
35-39	137	13%
40-44	99	9%
45-49	73	7%
50-54	104	10%
55-64	133	13%
65 or older	22	2%
Total	1,056	

Note: Includes HIV transmission categories male-to-male sexual contact and male-to-male sexual contact/injection drug use.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



In Hamilton County, persons aged 13 to 24 made up 6% of the total number of persons living with diagnosed HIV infection in 2018.

Table 26: Persons aged 13-24 living with HIV infection, Hamilton County, 2018

Characteristic	Living with diagnosed HIV infection in 2018	
	No.	%
Sex at Birth		
Males	157	80%
Females	39	20%
Race/Ethnicity^a		
American Indian/Alaska native	1	1%
Asian/Pacific Islander	7	4%
Black/African American	122	62%
Hispanic/Latinx	18	9%
White	40	20%
Multi-race	8	4%
Transmission Category^b		
Male adult or adolescent		
Male-to-male sexual contact	115	78%
Injection drug use (IDU)	-	-
Male-to-male sexual contact and IDU	8	5%
Heterosexual contact	1	1%
Other/unknown	24	16%
Subtotal	148	100%
Female adult or adolescent		
Injection drug use	1	4%
Heterosexual contact	25	93%
Other/unknown	1	4%
Subtotal	27	100%
Child (<13 yrs. at diagnosis)		
Perinatal	19	90%
Other/unknown	2	10%
Subtotal	21	100%
Total	196	

Notes:

Dash (-) indicates no cases were reported for the given category.

^a Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

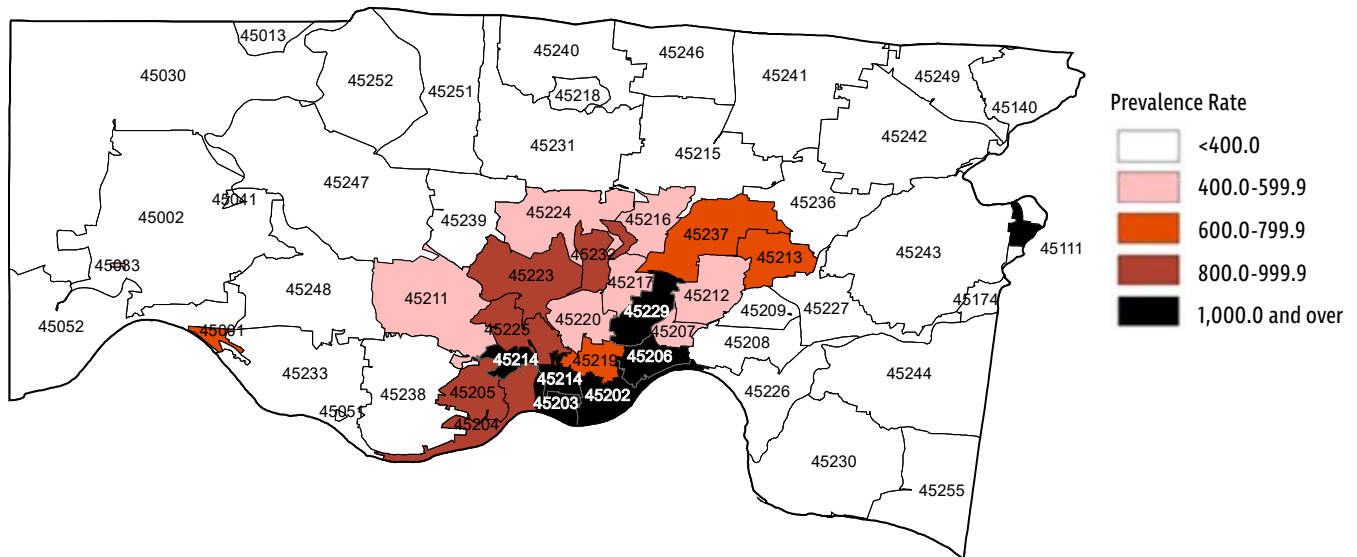
^b Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



Zip Code: The ZIP codes with the highest rates of persons living with diagnosed HIV infection in Hamilton County at the end of 2018 are: 45214, 45203, 45202, 45206, and 45229.

Figure 23: Reported persons living with diagnosed HIV infection by ZIP code, Hamilton County, 2018



Notes:

Living with diagnosed HIV infection represents all persons ever diagnosed and reported with HIV and/or AIDS who have not been reported as having died as of Dec. 31, 2018. Persons living with diagnosed HIV infection represent persons living in Ohio as of Dec. 31, 2018, regardless of whether the person was a resident of Ohio at time of initial HIV and/or AIDS diagnosis.

ZIP code reflects current ZIP code of residence. Cases currently residing in a state of federal correctional facility or whose current ZIP code of residence is unknown are not included.

The rate is the number of persons living with diagnosed HIV infection per 100,000 population calculated using 2017 U.S. Census estimates.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



Table 27: Reported persons living with diagnosed HIV infection by current disease status and selected characteristics, Hamilton County, 2018

Characteristic	Living with diagnosed HIV infection in 2018			Current Disease Status			
	Rate ^a	No.	%	HIV (not AIDS)		AIDS	
				No.	%	No.	%
Sex at birth							
Males	636.0	2,509	78%	1,262	76%	1,247	81%
Females	166.8	704	22%	408	24%	296	19%
Age at end of year							
<13	5.8	8	<1%	7	<1%	1	<1%
13-14	*	1	<1%	1	<1%	-	-
15-19	48.7	26	1%	22	1%	4	<1%
20-24	246.1	130	4%	109	7%	21	1%
25-29	528.8	347	11%	250	15%	97	6%
30-34	657.5	390	12%	242	14%	148	10%
35-39	552.8	291	9%	162	10%	129	8%
40-44	619.8	276	9%	143	9%	133	9%
45-49	675.3	320	10%	147	9%	173	11%
50-54	934.9	469	15%	183	11%	286	19%
55-64	681.1	738	23%	316	19%	422	27%
65 or older	173.3	217	7%	88	5%	129	8%
Race/Ethnicity ^b							
American Indian/Alaska native	*	1	<1%	-	-	1	<1%
Asian/Pacific Islander	100.8	24	1%	14	1%	10	1%
Black/African American	879.1	1,882	59%	959	57%	923	60%
Hispanic/Latinx	344.3	97	3%	46	3%	51	3%
White	205.6	1,091	34%	585	35%	506	33%
Multi-race	585.8	110	3%	58	3%	52	3%
Unknown	*	8	<1%	8	<1%	-	-
Race/Ethnicity ^b and sex at birth							
American Indian/Alaska native males	*	1	<1%	-	-	1	<1%
American Indian/Alaska native females	*	-	-	-	-	-	-
Asian/Pacific Islander males	170.5	20	1%	13	1%	7	<1%
Asian/Pacific Islander females	*	4	<1%	1	<1%	3	<1%
Black/African American males	1,421.5	1,405	44%	688	41%	717	46%
Black/African American females	413.9	477	15%	271	16%	206	13%
Hispanic/Latino males	553.3	80	2%	36	2%	44	3%
Hispanic/Latina females	123.9	17	1%	10	1%	7	<1%
White males	349.9	909	28%	472	28%	437	28%
White females	67.2	182	6%	113	7%	69	4%
Multi-race males	954.8	87	3%	46	3%	41	3%
Multi-race females	237.9	23	1%	12	1%	11	1%
Unknown	*	8	<1%	8	<1%	-	-
Total	393.4	3,213		1,670		1,543	

Notes:

Living with diagnosed HIV infection represents all persons ever diagnosed and reported with HIV and/or AIDS who have not been reported as having died as of Dec. 31, 2018. Persons living with diagnosed HIV infection represent persons living in Ohio as of Dec. 31, 2018, regardless of whether the person was a resident of Ohio at time of initial HIV and/or AIDS diagnosis.

Asterisk (*) indicates rate not calculated for case count <5 due to unstable rates. Dash (-) indicates no cases were reported for the given category.

^a The rate is the number of persons living with diagnosed HIV infection per 100,000 population calculated using U.S. Census estimates for that year.

^b Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



Table 28: Reported persons living with diagnosed HIV infection by current disease status and transmission category, Hamilton County, 2018

Transmission Category ^a	Living with diagnosed HIV infection in 2018		Current Disease Status			
	No.	%	HIV (not AIDS)		AIDS	
			No.	%	No.	%
Male adult or adolescent						
Male-to-male sexual contact	1,736	70%	858	68%	878	71%
Injection drug use (IDU)	115	5%	62	5%	53	4%
Male-to-male sexual contact and IDU	112	4%	44	4%	68	5%
Heterosexual contact	118	5%	46	4%	72	6%
Other/unknown	415	17%	246	20%	169	14%
Subtotal	2,496	100%	1,256	100%	1,240	100%
Female adult or adolescent						
Injection drug use	88	13%	51	13%	37	13%
Heterosexual contact	552	80%	306	77%	246	85%
Other/unknown	47	7%	41	10%	6	2%
Subtotal	687	100%	398	100%	289	100%
Child (<13 yrs. at diagnosis)						
Perinatal	26	87%	14	88%	12	86%
Other/unknown	4	13%	2	13%	2	14%
Subtotal	30	100%	16	100%	14	100%
Total	3,213		1,670		1,543	

Notes:

Living with diagnosed HIV infection represents all persons ever diagnosed and reported with HIV and/or AIDS who have not been reported as having died as of Dec. 31, 2018. Persons living with diagnosed HIV infection represent persons living in Ohio as of Dec. 31, 2018, regardless of whether the person was a resident of Ohio at time of initial HIV and/or AIDS diagnosis.

Dash (-) indicates no cases were reported for the given category.

^a Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



Table 29: Reported persons living with diagnosed HIV infection by current disease status and exposure category, Hamilton County, 2018

Exposure Category ^a	Living with diagnosed HIV infection in 2018		Current Disease Status			
	No.	%	HIV (not AIDS)		AIDS	
			No.	%	No.	%
Male-to-male sexual contact	1,642	51%	816	49%	826	54%
Injection drug use (IDU)	101	3%	56	3%	45	3%
Heterosexual contact	670	21%	352	21%	318	21%
Male-to-male sexual contact and IDU	92	3%	40	2%	52	3%
IDU and heterosexual contact	102	3%	57	3%	45	3%
Male-to-male sexual contact and heterosexual contact	94	3%	42	3%	52	3%
Male-to-male sexual contact and IDU and heterosexual contact	20	1%	4	<1%	16	1%
Perinatal exposure	27	1%	15	1%	12	1%
Other/unknown	465	14%	288	17%	177	11%
Total	3,213		1,670		1,543	

Notes:

Living with diagnosed HIV infection represents all persons ever diagnosed and reported with HIV and/or AIDS who have not been reported as having died as of Dec. 31, 2018. Persons living with diagnosed HIV infection represent persons living in Ohio as of Dec. 31, 2018, regardless of whether the person was a resident of Ohio at time of initial HIV and/or AIDS diagnosis.

Dash (-) indicates no cases were reported for the given category.

^a Exposure categories are mutually exclusive risk categories. All possible combinations of risks are represented among exposure categories. A person with multiple risks is represented in the exposure category identifying all the reported ways in which that person may have been exposed to HIV.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



Table 30: Reported persons living with diagnosed HIV infection by race/ethnicity and transmission category, Hamilton County, 2018

	American Indian/ Alaska Native		Asian/ Pacific Islander		Black/ African American		Hispanic/ Latinx ^a		White		Multi-race		Unknown	
Transmission Category ^a	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male adult or adolescent														
Male-to-male sexual contact	1	100%	15	75%	909	65%	55	69%	691	76%	65	75%	-	-
Injection drug use (IDU)	-	-	-	-	45	3%	6	8%	58	6%	6	7%	-	-
Male-to-male sexual contact and IDU	-	-	1	5%	48	3%	2	3%	59	7%	2	2%	-	-
Heterosexual contact	-	-	1	5%	105	8%	6	8%	5	1%	1	1%	-	-
Other/Unknown	-	-	3	15%	287	21%	11	14%	94	10%	13	15%	7	100%
Subtotal	1	100%	20	100%	1,394	100%	80	100%	907	100%	87	100%	7	100%
Female adult or adolescent														
Injection drug use	-	-	-	-	28	6%	2	12%	54	30%	4	18%	-	-
Heterosexual contact	-	-	3	75%	411	88%	12	71%	108	61%	18	82%	-	-
Other/unknown	-	-	1	25%	26	6%	3	18%	16	9%	-	-	1	100%
Subtotal	-	-	4	100%	465	100%	17	100%	178	100%	22	100%	1	100%
Child (<13 yrs. at diagnosis)														
Perinatal	-	-	-	-	21	91%	-	-	4	67%	1	100%	-	-
Other/unknown	-	-	-	-	2	9%	-	-	2	33%	-	-	-	-
Subtotal	-	-	-	-	23	100%	-	-	6	100%	1	100%	-	-
Total	1		24		1,882		97		1,091		110		8	

Notes:

Dash (-) indicates no cases were reported for the given category.

^a Hispanics/Latinx may be of any race. Persons with a race of American Indian/Alaska native, Asian/Pacific Islander, Black/African American, white, or multi-race are not Hispanic. Asian/Pacific Islander includes native Hawaiians.

^b Transmission categories are mutually exclusive, hierarchical risk categories determined by the CDC and system-calculated using sex at birth and risk factor history to determine mode of transmission. A person with multiple risks is only represented in the highest category based on the CDC hierarchical algorithm. Thus, transgender women are included in the male-to-male sexual contact transmission category if assigned male at birth and risk factor history indicates sex with males. Please note this is for the categorization of HIV transmission categories only and not to describe sexual orientation.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.



Ohio AIDS Drug Assistance Program (ADAP) utilization

The Ohio AIDS Drug Assistance Program helps people living with HIV and AIDS have access to medications needed to stay healthy. In 2018, the Ohio ADAP program enrolled 737 people living with HIV in Hamilton County. Of those clients, 50% were virally suppressed at their most recent lab test date (i.e., viral load <200 copies/mL). The Ryan White Part B program uses the following definitions to calculate viral suppression.

Numerator: Viral load \leq 200 copies/mL.

Denominator: Number of clients who had at least one HIV medical visit during the measurement period. HIV medical visit is defined as having a CVS medication dispense, a payment by ADAP for a medical appointment (indicated by various service codes), or a case management funded medical care service (indicated by various service codes).

Table 31: Ohio AIDS Drug Assistance Program utilization by race/ethnicity, Hamilton County, 2018

Ohio ADAP Clients Enrolled from Jan. 1, 2018 to Dec. 31, 2018

Race/ethnicity	% (N)	Virally Suppressed, % (N)
Black	60% (446)	46% (204)
White	34% (250)	54% (135)
Hispanic	3% (21)	71% (15)
Other	3% (20)	60% (12)
Total	737	50% (366)

Notes:

Viral suppression includes missing/incomplete data. Of those with a viral load reported (n=759), 91% were virally suppressed.

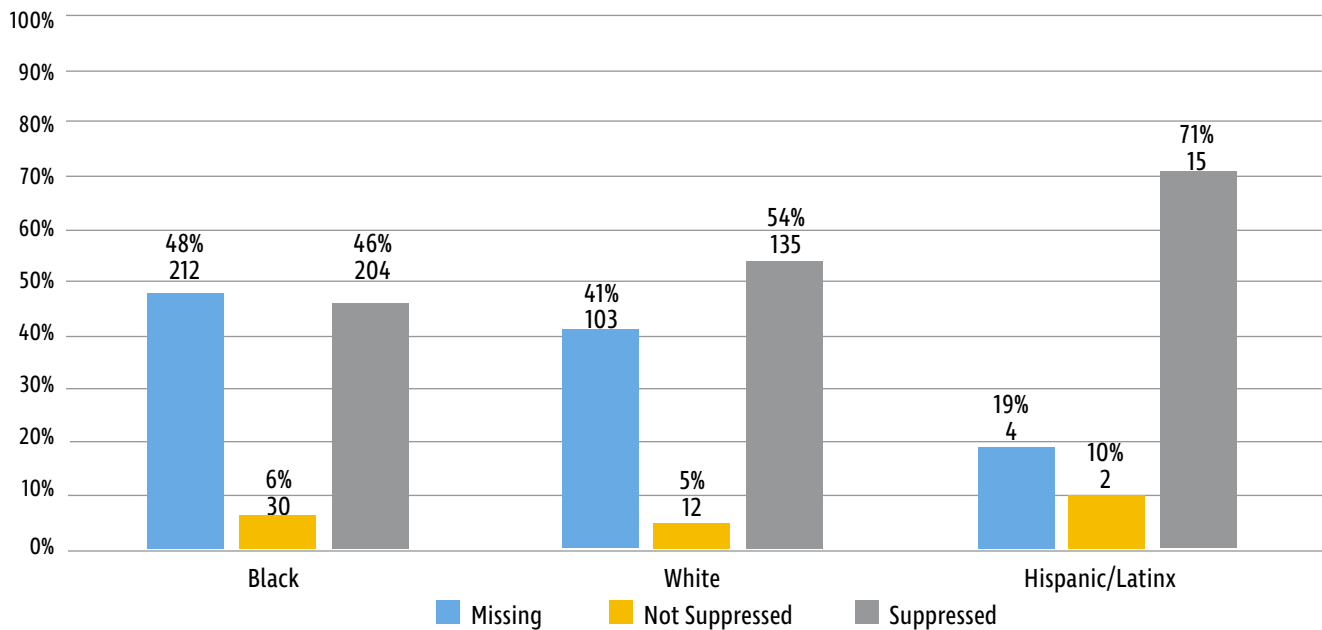
Clients enrolled in the Ryan White Part B Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).

Source: Ryan White Application Database. Data reported through Nov. 14, 2019.

Among Black/African American clients enrolled in the Ohio ADAP program in 2018, 46% were virally suppressed. Among white clients enrolled in the Ohio ADAP program in 2018, 54% were virally suppressed. Among Hispanic/Latinx clients enrolled in the Ohio ADAP program in 2018, 71% were virally suppressed.



Figure 24: Viral suppression among clients enrolled in Ohio AIDS Drug Assistance Program by race/ethnicity, Hamilton County, 2018



Note: Clients enrolled in the Ryan White Part B Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).

Source: Ryan White Application Database. Data reported through Nov. 14, 2019.

Community Linkage Coordination

In 2018, there were 62 clients enrolled in the Ryan White Community Linkage Coordination (CLC) program in Hamilton County prior to their release from incarceration in a state prison. Clients are referred to a Ryan White-funded case management agency, have an appointment scheduled with a medical provider, and are given a 30-day supply of HIV medications upon release. There were 62 clients referred to Caracole, of which 80% were virally suppressed. Additionally, the Ohio Department of Medicaid Pre-Release Enrollment Program allows low-income justice-involved individuals to receive Medicaid services immediately upon release from state prison. It is possible that some or all of the people who declined enrollment in the CLC program are eligible for and enrolled in Medicaid.



Linkage to Care and Continuum of Care

To calculate a care continuum and other related measurements for persons in Hamilton County diagnosed with HIV infection, HIV Surveillance data are used, including information on CD4s and Viral Load (VL) lab results. CDC uses reported CD4s and VL lab results as a proxy measure to assess whether or not a person with HIV was in care. The following data presented on the Hamilton County HIV Continuum of Care are based on calculations made using CDC definitions, are population based, and are gathered from information reported to HIV Surveillance, which includes data from the Ohio Disease Reporting System and the Ryan White Application Database.

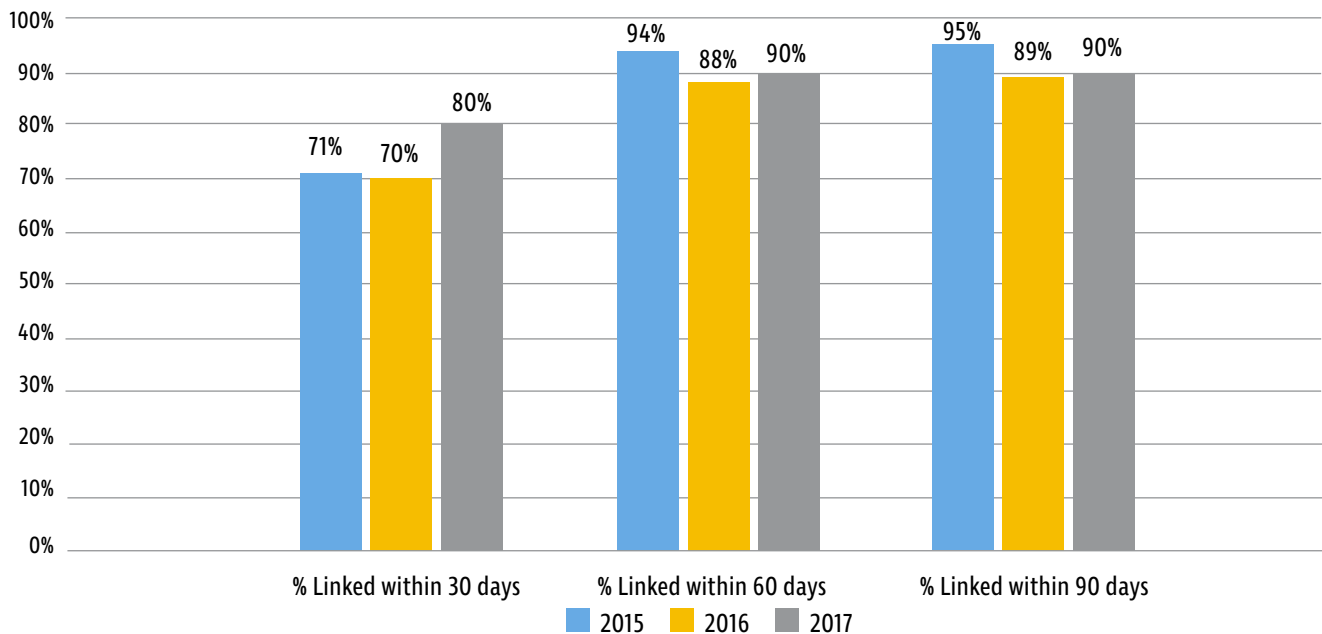
Linkage to Care

Numerator: The number of people in the denominator who had at least one CD4 and/or VL lab test within 30, 60, and 90 days of the date of HIV diagnosis.

Denominator: The number of new diagnoses of HIV infection in Hamilton County among persons 13 and older in each year. For example, the denominator for 2017 is the number of new diagnoses of HIV infection in Hamilton County in 2017 among persons aged 13 years and older (i.e., adults/adolescents).

The objective is for 85% of new diagnoses of HIV to be linked to care within 30 days. Eighty percent of adults/adolescents diagnosed with HIV infection in Hamilton County in 2017 were linked to care within 30 days. This is an increase from 2015, when 71% of persons diagnosed with HIV were linked to care within 30 days.

Figure 25: Linkage to care, Hamilton County, 2015-2017

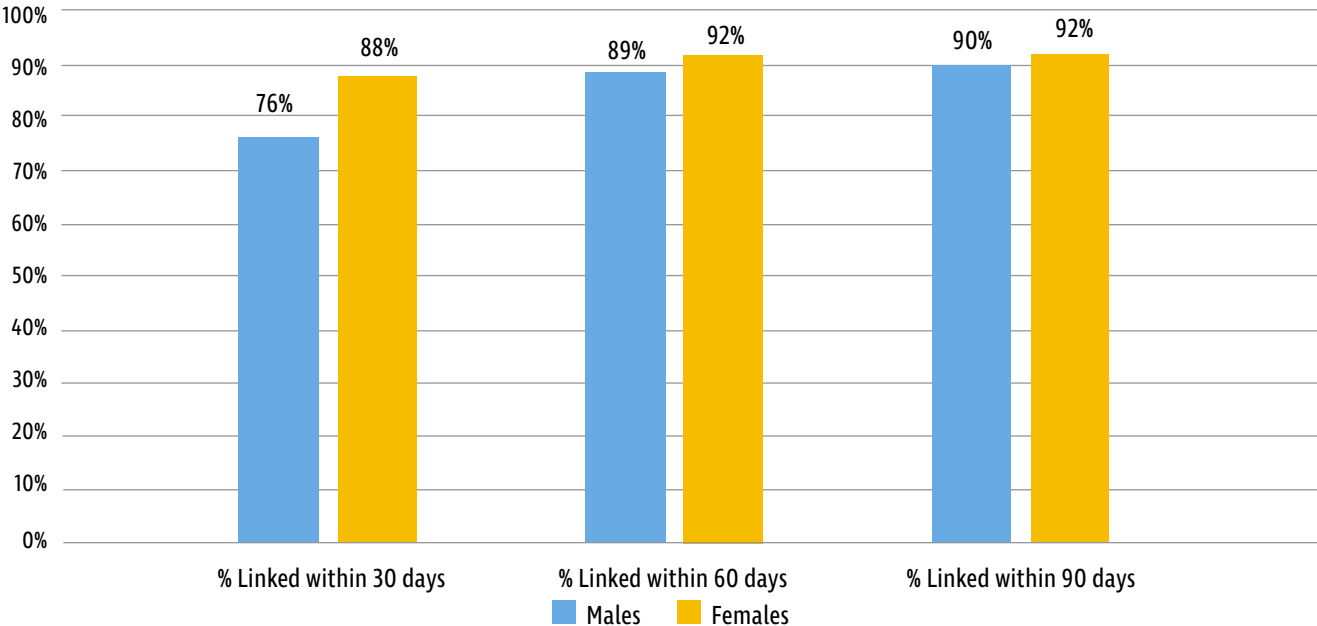


Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.



Sex at birth: Seventy-six percent of adult/adolescent males and 88% of adult/adolescent females diagnosed with HIV in Hamilton County in 2017 were linked to care within 30 days of diagnosis.

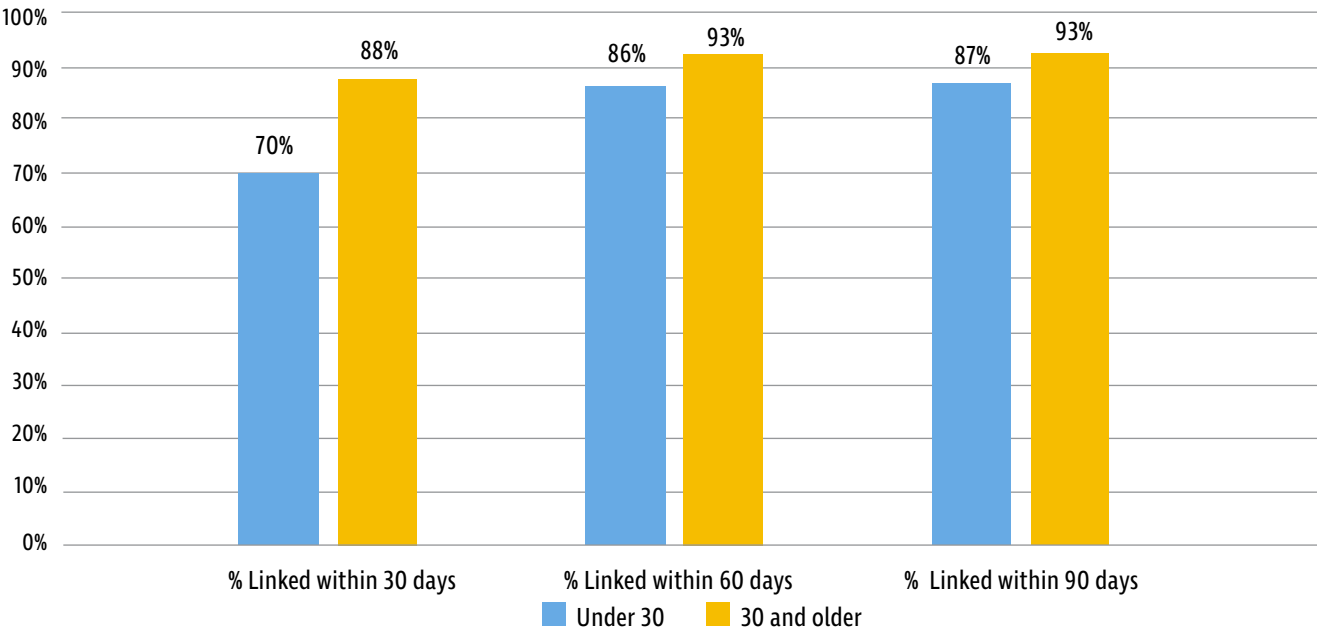
Figure 26: Linkage to care by sex at birth, Hamilton County, 2017



Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.

Age at diagnosis: Seventy percent of persons aged 13 to 29 years and 88% of persons aged 30 and older were linked to care within 30 days of being diagnosed with HIV in Hamilton County in 2017.

Figure 27: Linkage to care by age at diagnosis, Hamilton County, 2017

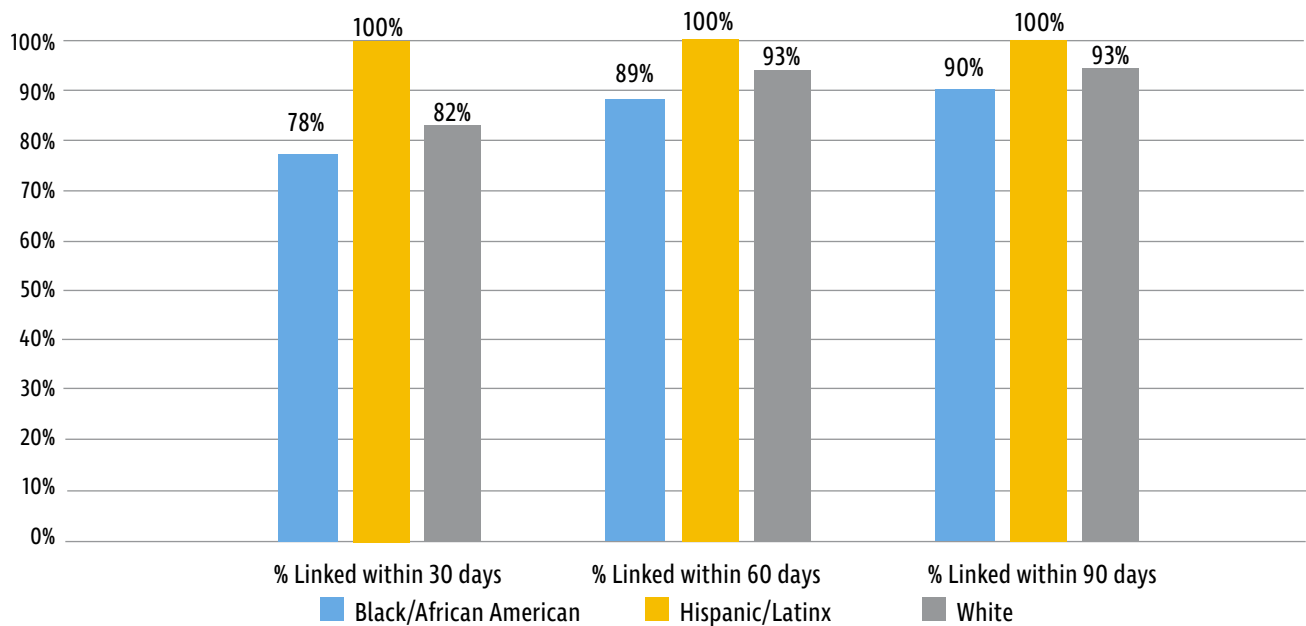


Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.



Race/ethnicity: Seventy-eight percent of Black/African Americans, 100% of Hispanics/Latinx, and 82% of whites diagnosed with HIV in Hamilton County in 2017 were linked to care within 30 days of diagnosis.

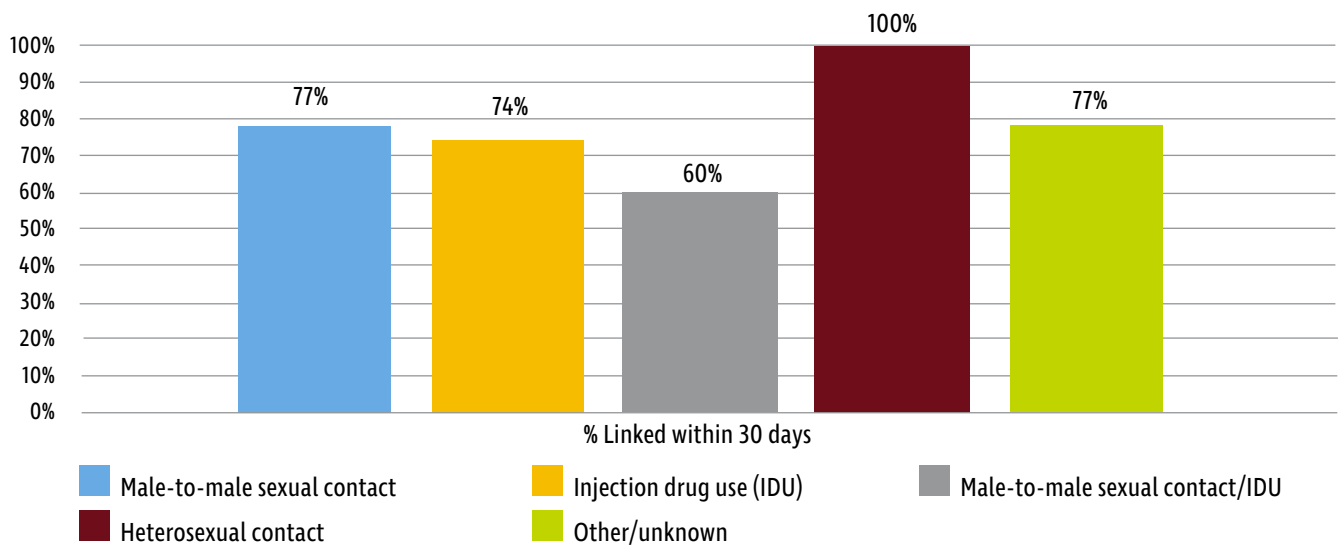
Figure 28: Linkage to care by selected race/ethnicity, Hamilton County, 2017



Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.

Transmission category: Seventy-seven percent of males with a transmission category of male-to-male sexual contact and 74% of males with a transmission category of IDU were linked to care within 30 days of diagnosis. Sixty percent of males with a transmission category of male-to-male sexual contact/IDU were linked to care within 30 days of diagnosis. One hundred percent of heterosexual males diagnosed with HIV in Hamilton County in 2017 were linked to care within 30 days of diagnosis.

Figure 29: Linkage to care by transmission category, males, Hamilton County, 2017

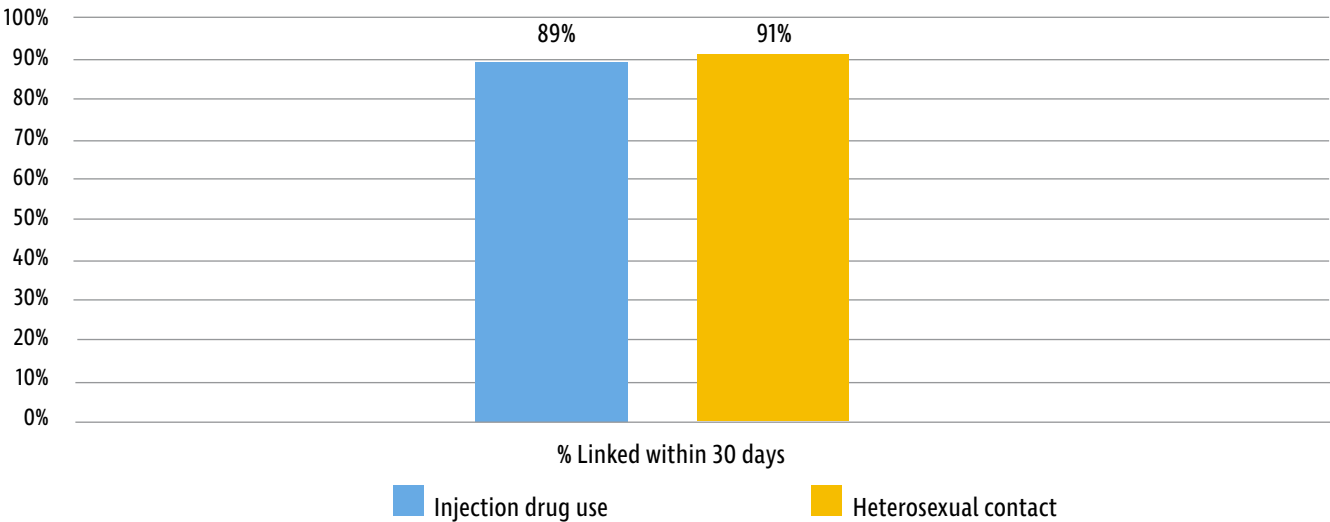


Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.



Eighty-nine percent of females with a transmission category of IDU and 91% of females with a transmission category of heterosexual contact were linked to care within 30 days of HIV diagnosis in Hamilton County in 2017.

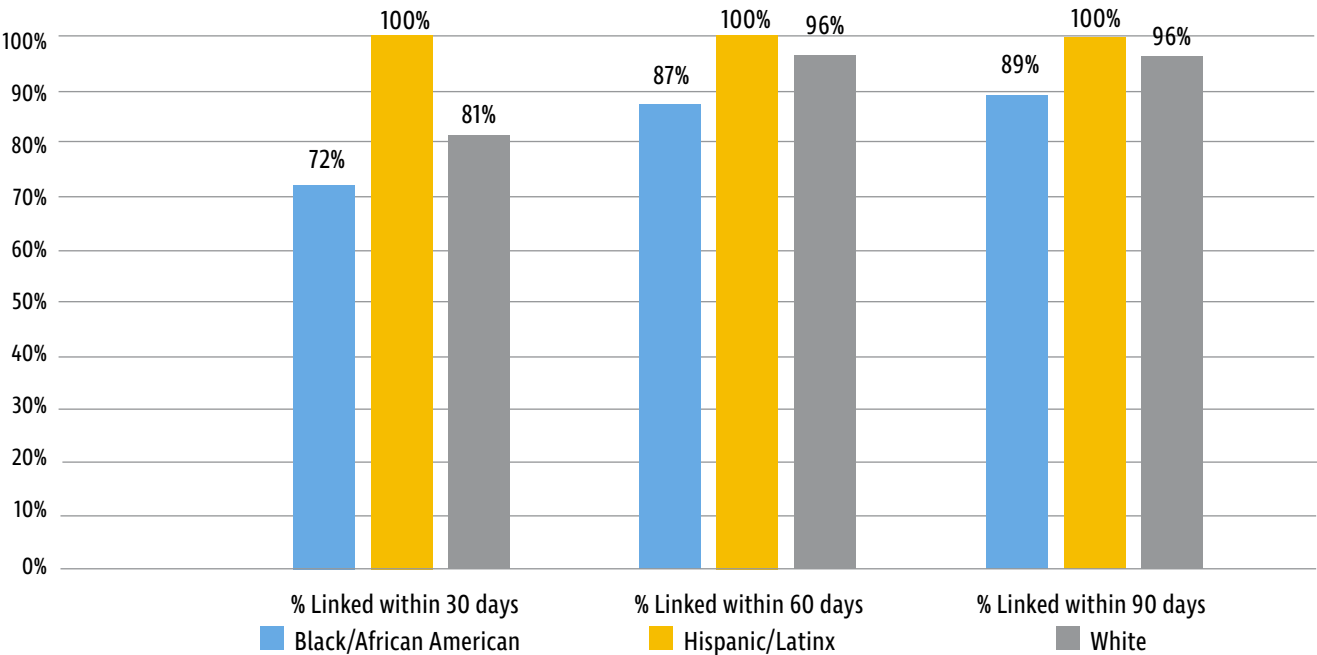
Figure 30: Linkage to care by transmission category, females, Hamilton County, 2017



Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.

Special populations: Seventy-two percent of Black/African American MSM, 100% of Hispanic/Latinx MSM, and 81% of white MSM diagnosed with HIV in Hamilton County in 2017 were linked to care within 30 days of diagnosis. Here, the term MSM is defined as persons who were assigned male at birth, and who have a transmission category of ‘male-to-male sexual contact’ or ‘male-to-male sexual contact/IDU.’

Figure 31: Linkage to care among MSM by race/ethnicity, Hamilton County, 2017

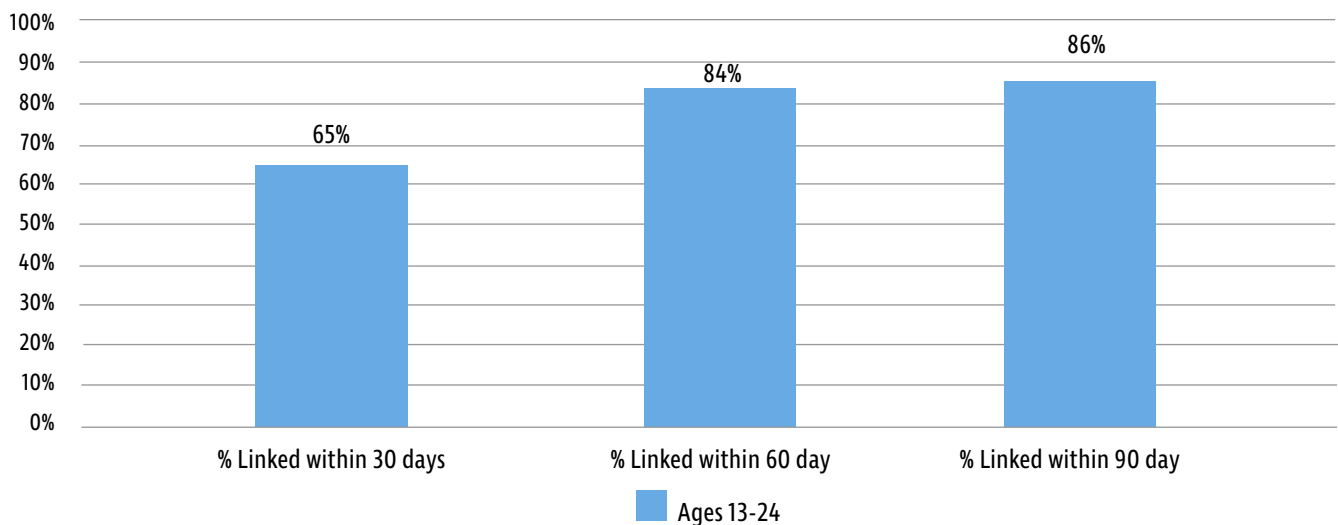


Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.



Sixty-five percent of youth aged 13 to 24 years diagnosed with HIV in Hamilton County in 2017 were linked to care within 30 days of diagnosis.

Figure 32: Linkage to care among youth, Hamilton County, 2017



Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.

Continuum of Care

The measures for Receipt of Care, Retained in Care, and Virally Suppressed are calculated using the same denominator, but each measure uses a different numerator.

Receipt of Care Numerator: The number of persons in the denominator who had at least one CD4 and/or VL lab test through the end of the following year (e.g., living with HIV as of Dec. 31, 2017, and having a CD4 and/or VL in 2018).

Retained in Care Numerator: The number of persons in the denominator who had at least two CD4 and/or VL lab tests at least three months apart through the end of the following year (e.g., living with HIV as of Dec. 31, 2017, and having at least two tests three months apart in 2018).

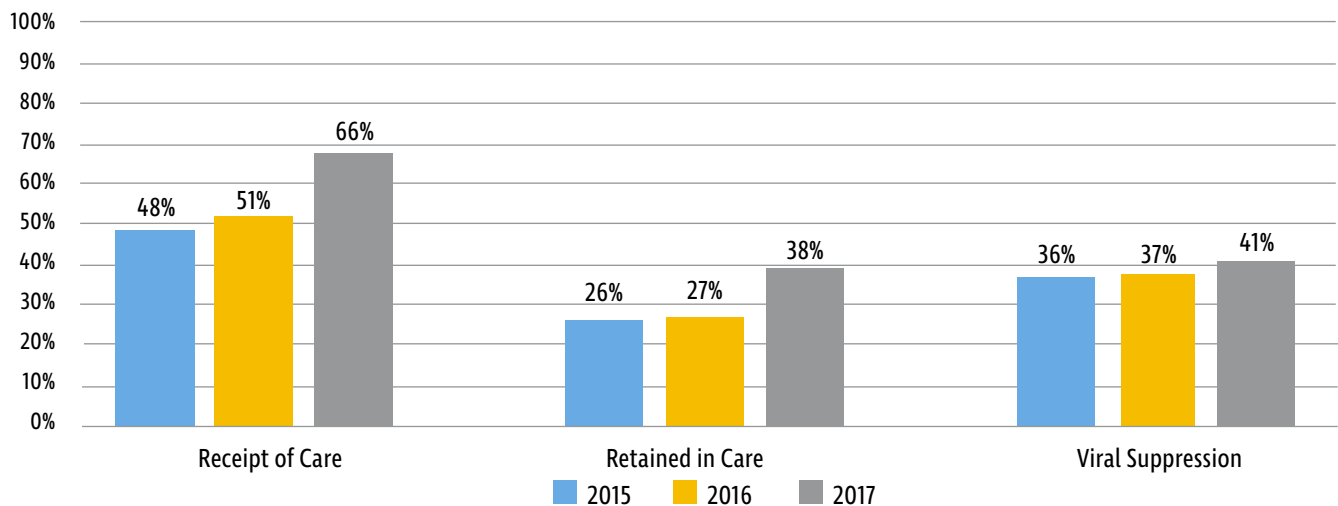
Virally Suppressed Numerator : The number of persons in the denominator whose most recent VL test in the following year was ≤ 200 copies/mL (e.g., living with HIV as of Dec. 31, 2017, and the most recent test in 2018 was ≤ 200 copies/mL).

Denominator: The number of adults/adolescents living with HIV infection through the end of each year, and still living in Hamilton County at the end of the next year (e.g., living with HIV as of Dec. 31, 2017, and still living in Hamilton County as of Dec. 31, 2018). Each of these measures uses the same denominator and thus the percentage for viral suppression may be higher than the percentage for retained in care (i.e., a person may be counted in the numerator for viral suppression because their most recent VL test was ≤ 200 , but not counted in the numerator for retained in care because they did not have at least two tests three months apart).

Of the persons living with diagnosed HIV in Hamilton County at the end of 2017, 66% were in receipt of care, 38% were retained in care, and 41% were virally suppressed. However, of persons who were in receipt of care, 86% were virally suppressed. Thirty-four percent of the persons living with HIV infection in Hamilton County at the end of 2017, and still living in Hamilton County at the end of 2018, did not have a CD4 or VL in 2017. These persons are considered to be 'out of care,' or to have an 'unmet need.' The percentage of persons living with diagnosed HIV who received care, were retained in care, and were virally suppressed increased from 2015 to 2017.

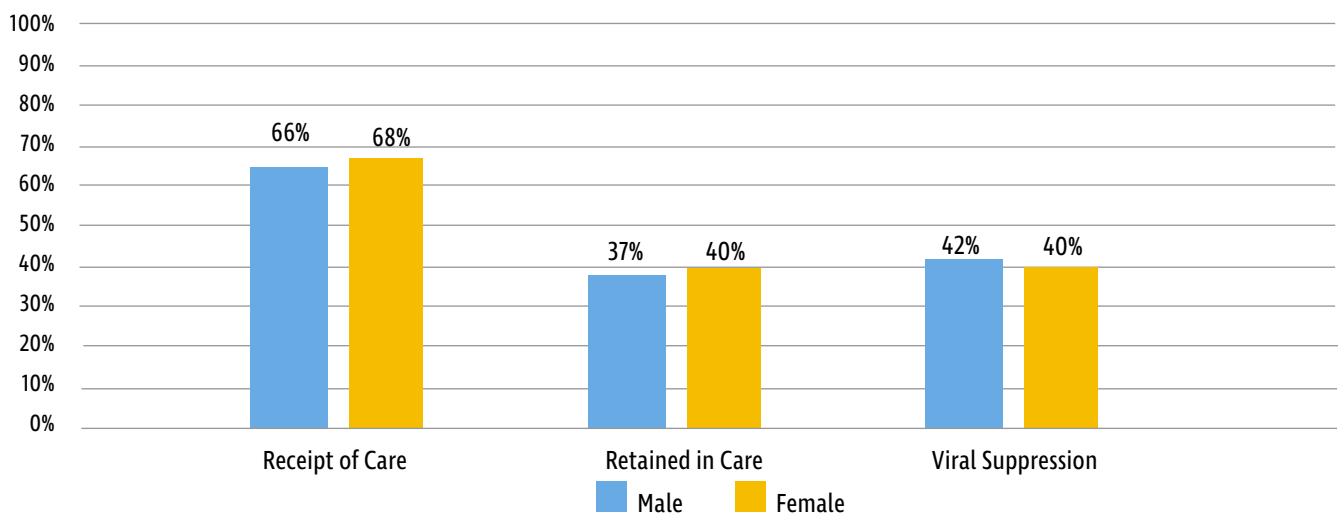


Figure 33: Continuum of care among persons living with diagnosed HIV infection, Hamilton County, 2015-2017



Sex at birth: Of males living with diagnosed HIV in Hamilton County at the end of 2017, 66% were in receipt of care, 37% were retained in care, and 42% were virally suppressed. Of females living with diagnosed HIV in Hamilton County at the end of 2017, 68% were in receipt of care, 40% were retained in care, and 40% were virally suppressed.

Figure 34: Continuum of care among persons living with diagnosed HIV infection by sex at birth, Hamilton County, 2017

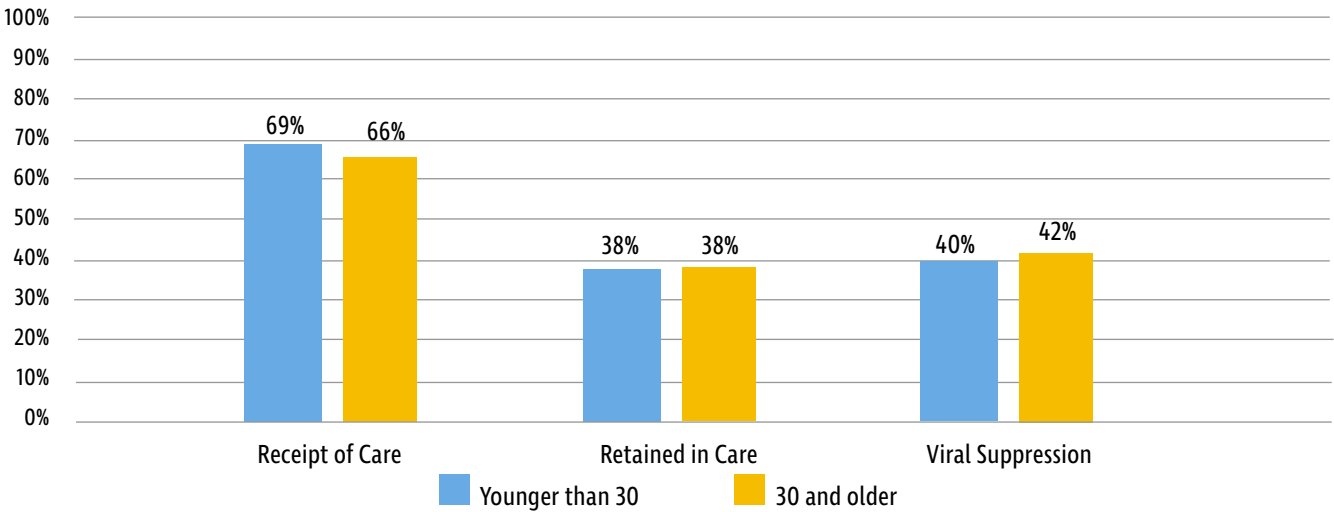


Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.



Current age: Of persons ages 13 to 29 years living with diagnosed HIV in Hamilton County at the end of 2017, 69% were in receipt of care, 38% were retained in care, and 40% were virally suppressed. Of persons aged 30 and older living with diagnosed HIV in Hamilton County at the end of 2017, 66% were in receipt of care, 38% were retained in care, and 42% were virally suppressed.

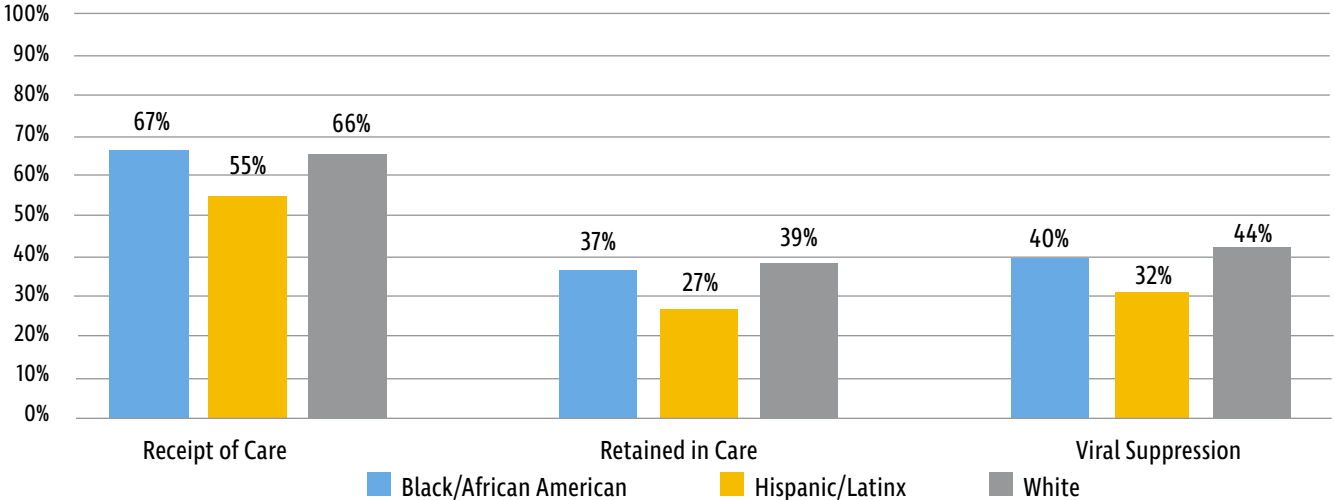
Figure 35: Continuum of care among persons living with diagnosed HIV infection by current age, Hamilton County, 2017



Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.

Race/ethnicity: Of Blacks/African Americans living with diagnosed HIV in Hamilton County at the end of 2017, 67% were in receipt of care, 37% were retained in care, and 40% were virally suppressed. Of Hispanics/Latinx living with diagnosed HIV in Hamilton County at the end of 2017, 55% were in receipt of care, 27% were retained in care, and 32% were virally suppressed. Of whites living with diagnosed HIV in Hamilton County at the end of 2017, 66% were in receipt of care, 39% were retained in care, and 44% were virally suppressed.

Figure 36: Continuum of care among persons living with diagnosed HIV infection by selected race/ethnicity, Hamilton County, 2017

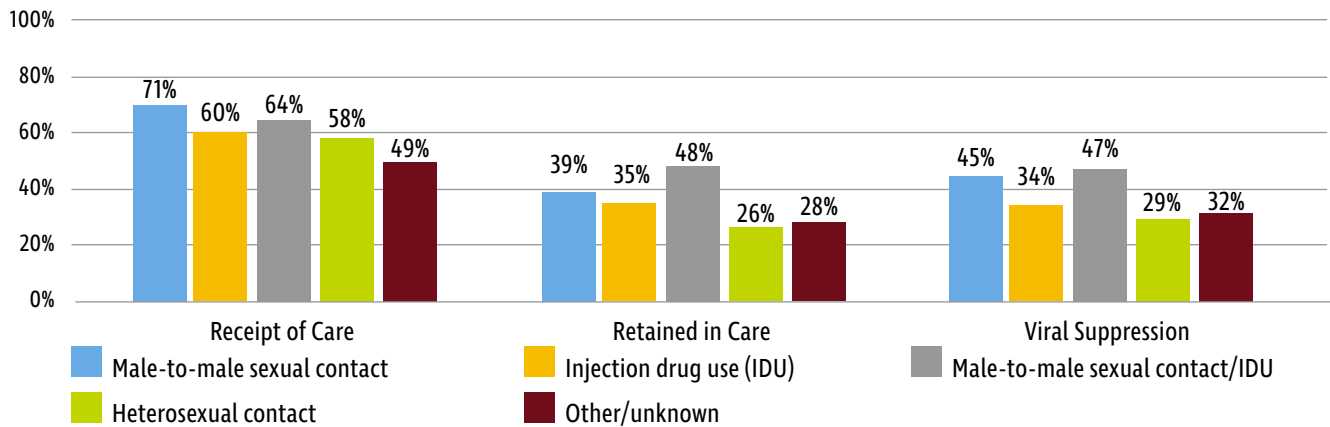


Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.



Transmission category: Of males living with diagnosed HIV in Hamilton County at the end of 2017 with a transmission category of male-to-male sexual contact, 71% were in receipt of care, 39% were retained in care, and 45% were virally suppressed. Of males with a transmission category of IDU, 60% were in receipt of care, 35% were retained in care, and 34% were virally suppressed. Of males with a transmission category of male-to-male sexual contact/IDU, 64% were in receipt of care, 48% were retained in care, and 47% were virally suppressed. Of males with a transmission category of heterosexual contact, 58% were in receipt of care, 26% were retained in care, and 29% were virally suppressed. Of males with a transmission category of heterosexual contact, 58% were in receipt of care, 26% were retained in care, and 29% were virally suppressed.

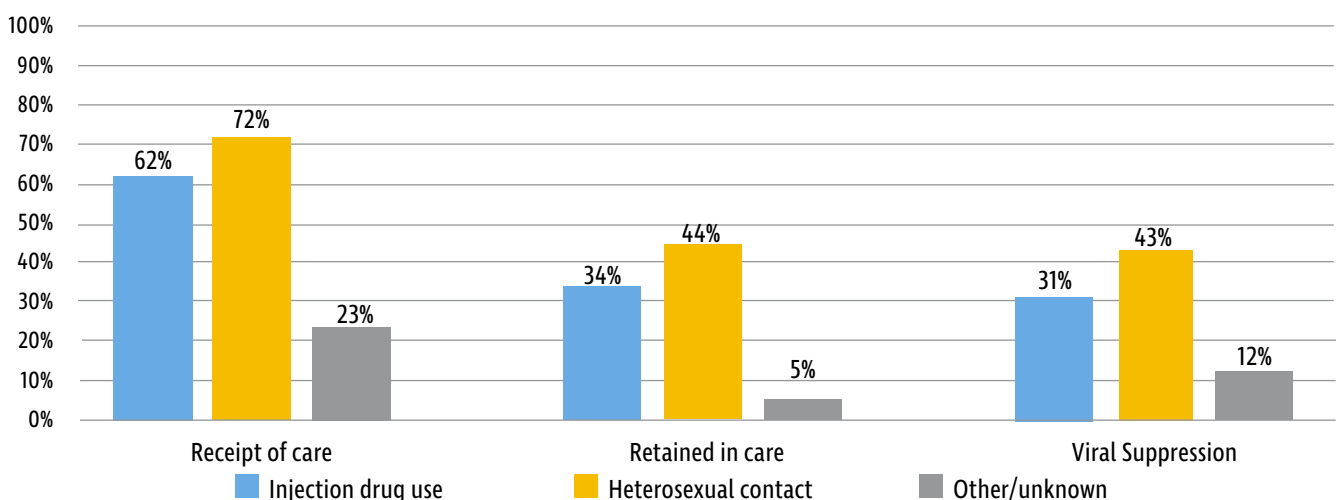
Figure 37: Continuum of care among males living with diagnosed HIV infection by transmission category, Hamilton County, 2017



Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.

Of females living with diagnosed HIV in Hamilton County at the end of 2017 with a transmission category of IDU, 62% were in receipt of care, 34% were retained in care, and 31% were virally suppressed. Of females with a transmission category of heterosexual contact, 72% were in receipt of care, 44% were retained in care, and 43% were virally suppressed.

Figure 38: Continuum of care among females living with diagnosed HIV infection by transmission category, Hamilton County, 2017

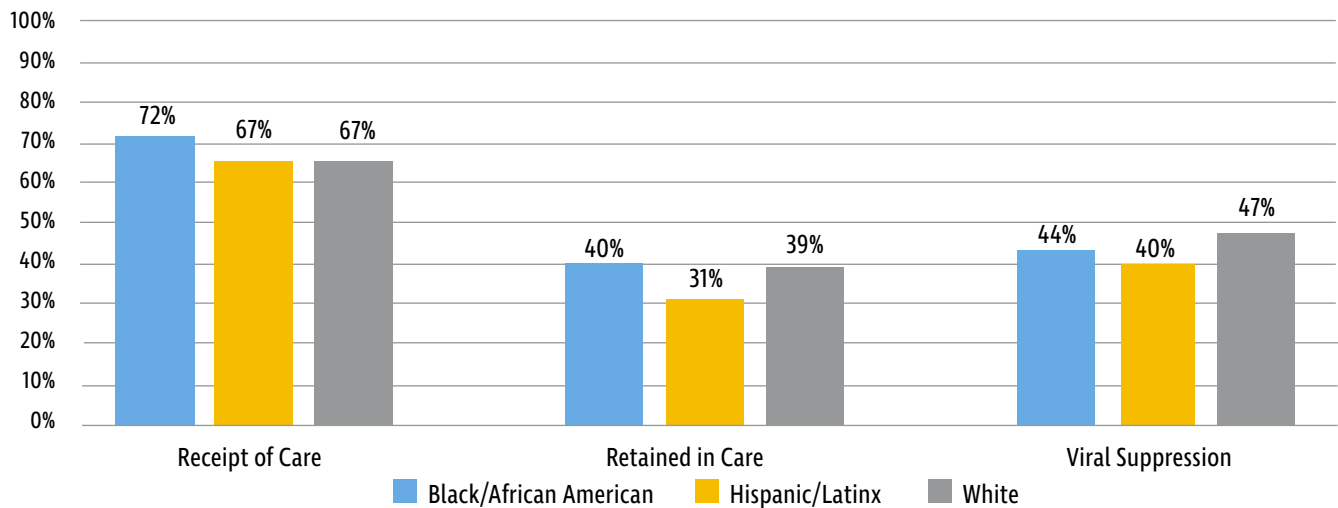


Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.



Special Populations: Of Black/African American MSM living with diagnosed HIV in Hamilton County at the end of 2017, 72% were in receipt of care, 40% were retained in care, and 44% were virally suppressed. Of Hispanic/Latinx MSM, 67% were in receipt of care, 31% were retained in care, and 40% were virally suppressed. Of white MSM, 67% were in receipt of care, 39% were retained in care, and 47% were virally suppressed. Here, the term MSM is defined as persons who were assigned male at birth, and who have a transmission category of 'male-to-male sexual contact' or 'male-to-male sexual contact/IDU.'

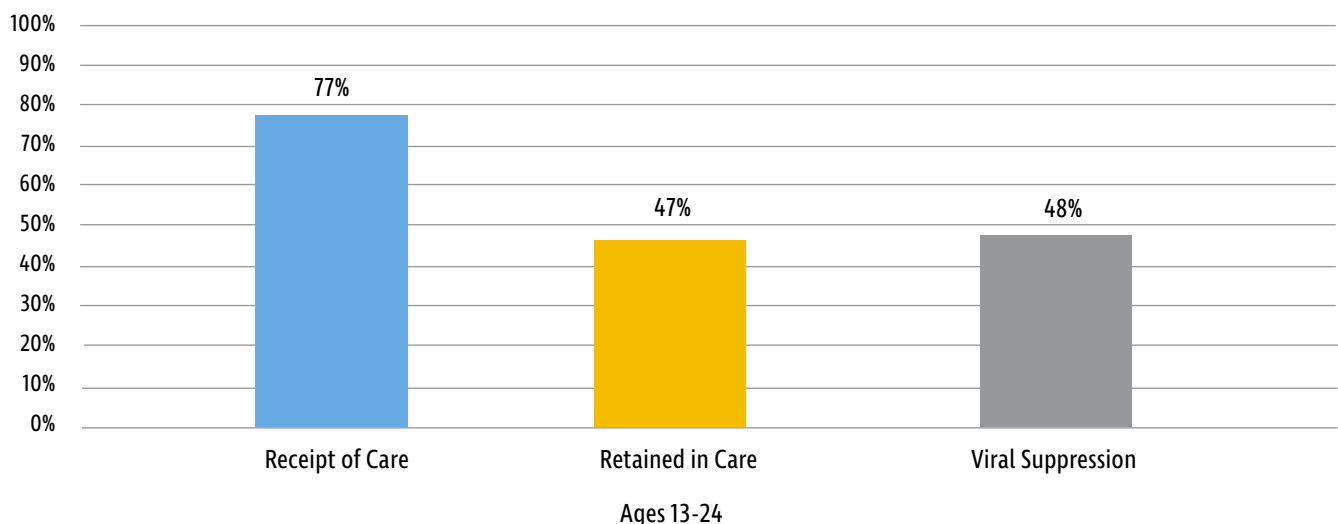
Figure 39: Continuum of care among MSM living with diagnosed HIV infection by selected race/ethnicity, Hamilton County, 2017



Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.

Of youth ages 13 to 24 years living with diagnosed HIV in Hamilton County at the end of 2017, 77% were in receipt of care, 47% were retained in care, and 48% were virally suppressed.

Figure 40: Continuum of care among youth living with diagnosed HIV infection, Hamilton County, 2017



Source: Ohio Department of Health, HIV Surveillance Program. Data reported as of April 25, 2019.

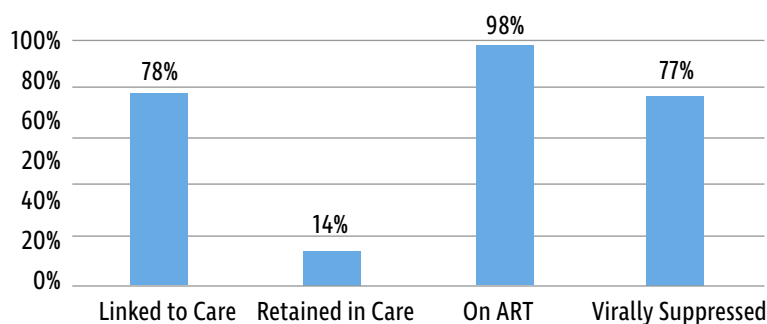


Ryan White All-Parts: These data include all clients who had a service provided by one of the Ohio Ryan White Parts A, B, C, or D in 2018. This data excludes clients who received only medication services through the Ohio AIDS Drug Assistance Program and no other Ryan White service.

Table 32: Continuum of care measures as defined by Health Resources and Services Administration (HRSA)

Denominator	Denominator	Denominator
Linked to Care	Clients with first service date within 90 days of their HIV diagnosis date.	Clients diagnosed with HIV in 2018 and who received a service paid for by an Ohio Ryan White Part grantee in 2018.
Retained in Care	Clients who received at least two services in 2018, at least 90 days apart.	Clients with a service in 2018 paid by an Ohio Ryan White Part Grantee.
On ART (antiretroviral therapy)	Clients prescribed ART (as indicated by a current ART medication identified in CAREWare).	Clients with a service in 2018 paid by an Ohio Ryan White Part Grantee.
Virally Suppressed	Clients whose most recent viral load test is ≤ 200 copies per ml in the service year.	Clients with a service in 2018 paid by an Ohio Ryan White Part Grantee.

Figure 41: Continuum of care among Ryan White clients, All-Parts, Hamilton County, 2018



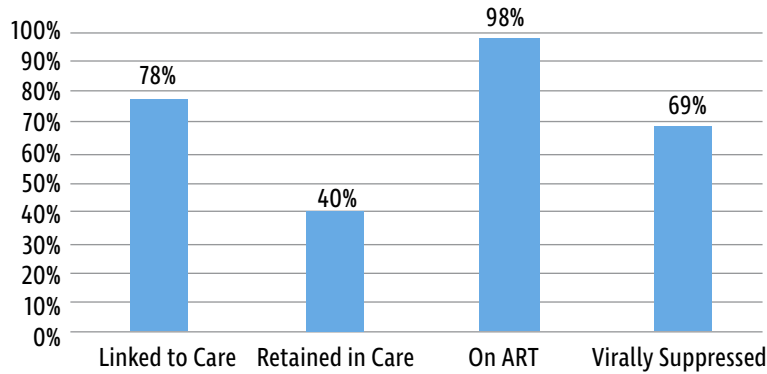
	# of Clients
Total new diagnosed in 2018	90
Linked to care	70
Retained in care	232
On ART	1,666
Virally suppressed*	1,318
Total who received a service in 2018	1,701

*Of clients with a viral load reported in 2018 ($n=1,546$), 85% were virally suppressed.

Source: CAREWare, All-Parts. Data reported through Nov. 14, 2019.



Figure 42: Continuum of care among Ryan White clients aged 13-24 years, All-Parts, Hamilton County, 2018

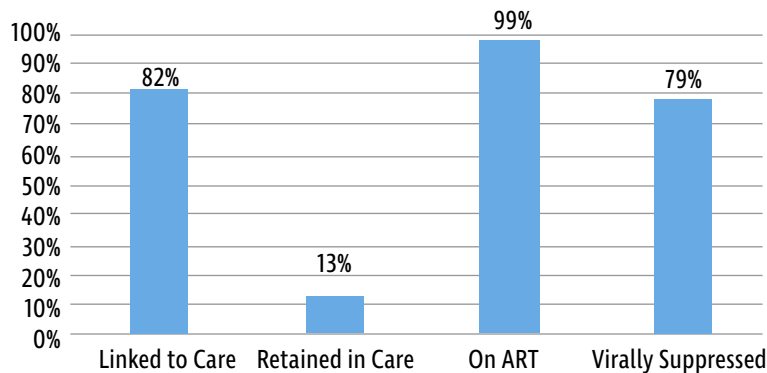


Source: CAREWare, All-Parts. Data reported through Nov. 14, 2019.

	# of Clients
Total new diagnosed in 2018	27
Linked to care	21
Retained in care	42
On ART	102
Virally suppressed*	72
Total who received a service in 2018	104

*Of clients with a viral load reported in 2018 (n=98), 73% were virally suppressed.

Figure 43: Continuum of care among Ryan White MSM, All-Parts, Hamilton County, 2018



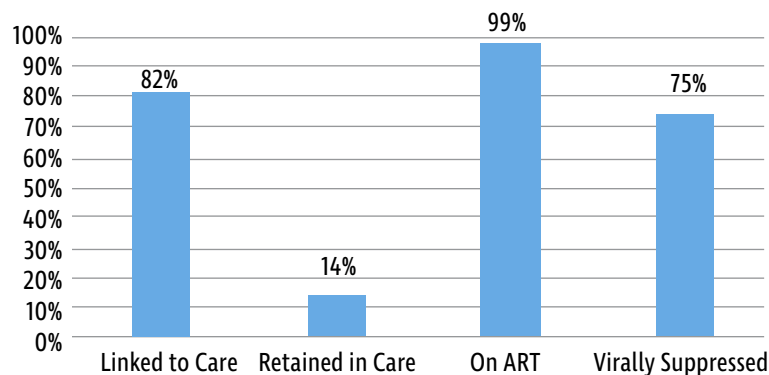
Source: CAREWare, All-Parts. Data reported through Nov. 14, 2019.

	# of Clients
Total new diagnosed in 2018	39
Linked to care	32
Retained in care	128
On ART	985
Virally suppressed*	786
Total who received a service in 2018	998

*Of clients with a viral load reported in 2018 (n=903), 87% were virally suppressed.

Here, the term MSM is defined as persons who were assigned male at birth and who have a risk factor of 'male-to-male sexual contact.'

Figure 44: Continuum of care among Ryan White minority MSM, All-Parts, Hamilton County, 2018



Source: CAREWare, All-Parts. Data reported through Nov. 14, 2019.

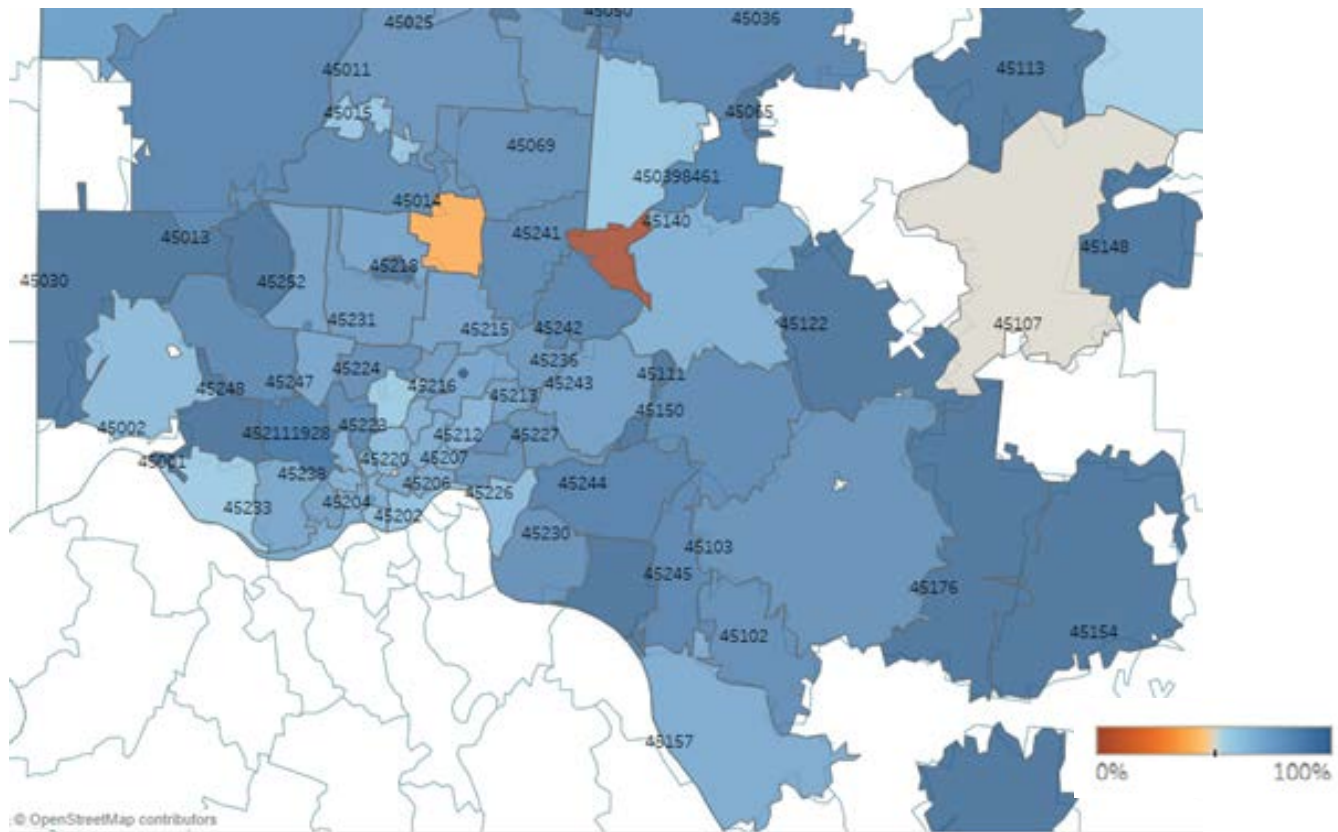
	# of Clients
Total new diagnosed in 2018	28
Linked to care	23
Retained in care	76
On ART	537
Virally suppressed*	408
Total who received a service in 2018	545

*Of clients with a viral load reported in 2018 (n=496), 75% were virally suppressed.



Here, the term MSM is defined as persons who were assigned male at birth and who have a risk factor of 'male-to-male sexual contact,' and minority is defined as Black/African American or Hispanic/Latinx.

Figure 45: Viral suppression among Ryan White clients (All-Parts) by ZIP code, Hamilton County, 2018



Note: Clients who had a Ryan White-funded service in 2018 are included, but not clients who only received ADAP services.

Source: CAREWare, All-Parts. Data reported through Nov. 14, 2019.

Ryan White Part B: There were a total of 986 clients enrolled in the Ryan White Part B program in Hamilton County in 2018. There were a total of 61 clients aged 13 to 24 years enrolled in 2018, a total of 559 MSM clients enrolled in 2018, and a total of 322 minority MSM clients enrolled in 2018.

Table 33: Continuum of care measures as defined by the Ryan White Part B Program

Measure	Denominator
Receipt of Care	Number of Ryan White Part B clients (including clients enrolled in ADAP) who had a least one medical visit (i.e., medical care appointment, prescription co-payment, or medication dispense).
Measure	Numerator
Retained in Care	Number of clients who had at least two medical visits.
Received Anti-Retroviral Therapy (ART)	Number of clients who received ART, as evidenced by a CVS medication dispense.
Virally Suppressed	Number of clients whose most recent documented viral load ≤ 200 copies/mL.



Table 34: Continuum of care among Ryan White Part B clients, Hamilton County, 2018

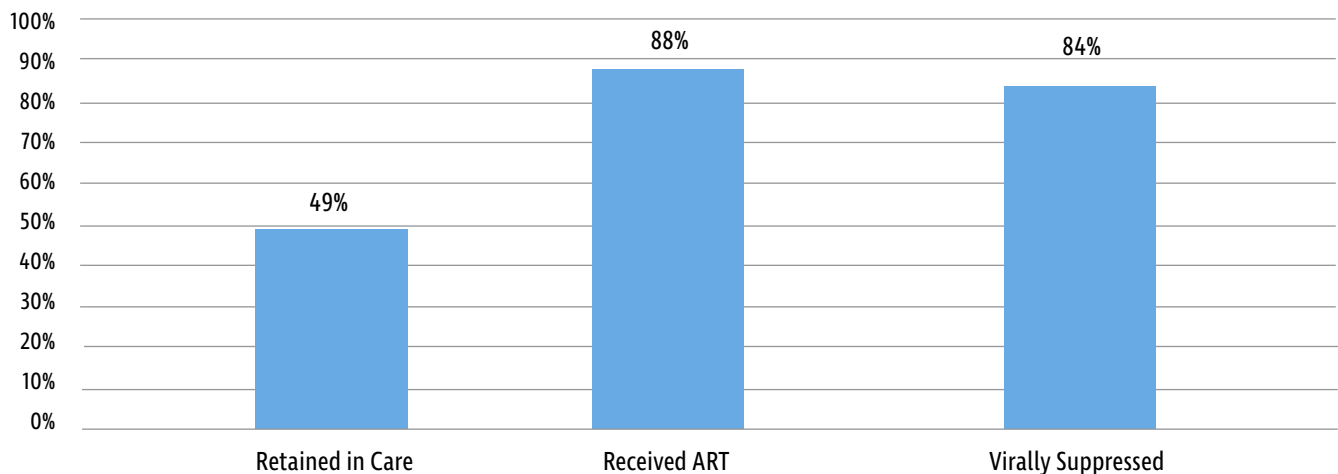
	Total	Youth (aged 13-24 years)	MSM	Minority MSM
Enrolled in Ryan White Part B	986	61	559	322
Receipt of Care	464	33	304	165
Retained in Care	228	14	153	70
Received ART	409	30	263	148
Virally Suppressed	391	28	256	135

*Note: Clients enrolled in the Ryan White Part B Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).
Source: Ryan White Application Database. Data reported through Nov. 14, 2019.*

Here, the term MSM is defined as persons who were assigned male at birth and who have a risk factor of 'male-to-male sexual contact,' and minority is defined as Black/African American or Hispanic/Latinx.

Of Ryan White Part B clients in 2018, 49% were retained in care, 88% received ART, and 84% were virally suppressed.

Figure 46: Continuum of care among Ryan White Part B clients, Hamilton County, 2018

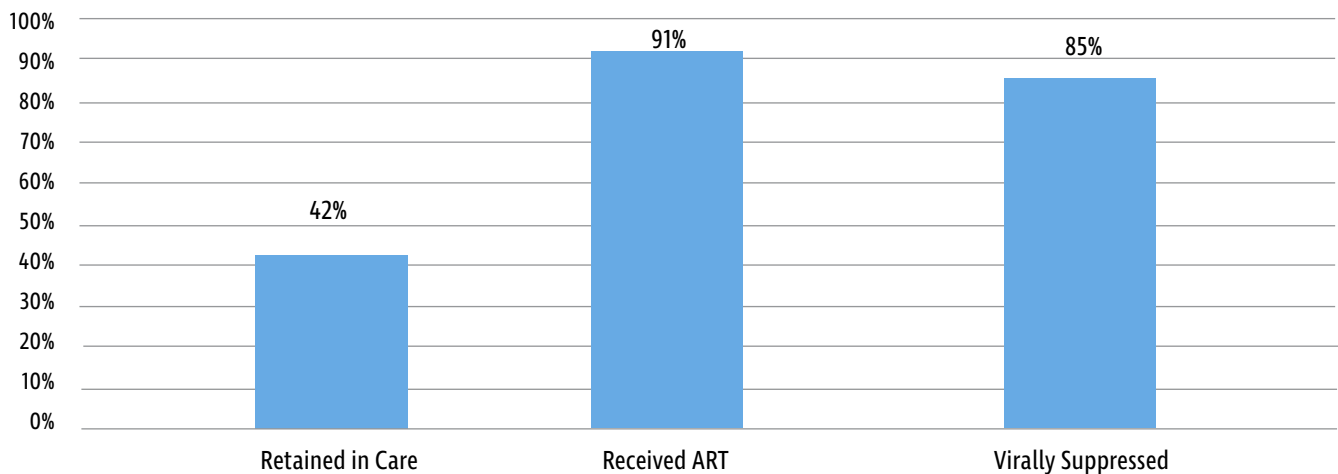


*Note: Clients enrolled in the Ryan White Part B Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).
Source: Ryan White Application Database. Data reported through Nov. 14, 2019.*



Of Ryan White Part B youth clients in 2018, 42% were retained in care, 91% received ART, and 85% were virally suppressed.

Figure 47: Continuum of care among Ryan White Part B youth clients, Hamilton County, 2018

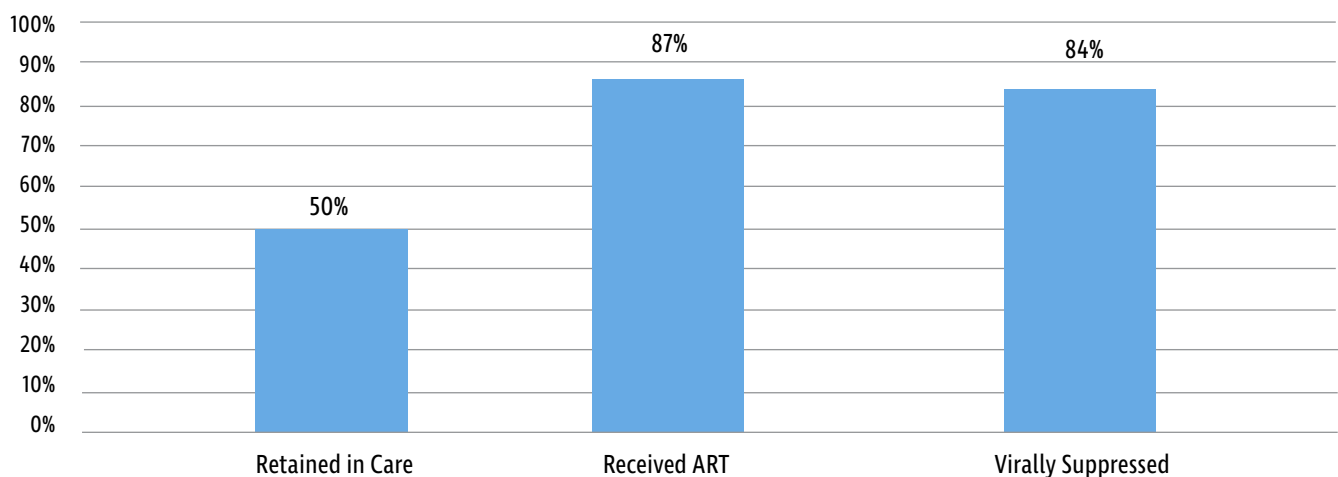


Note: Clients enrolled in the Ryan White Part B Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).

Source: Ryan White Application Database. Data reported through Nov. 14, 2019.

Of Ryan White Part B Minority MSM clients in 2018, 50% were retained in care, 87% received ART, and 84% were virally suppressed.

Figure 48: Continuum of care among MSM Ryan White Part B clients, Hamilton County, 2018



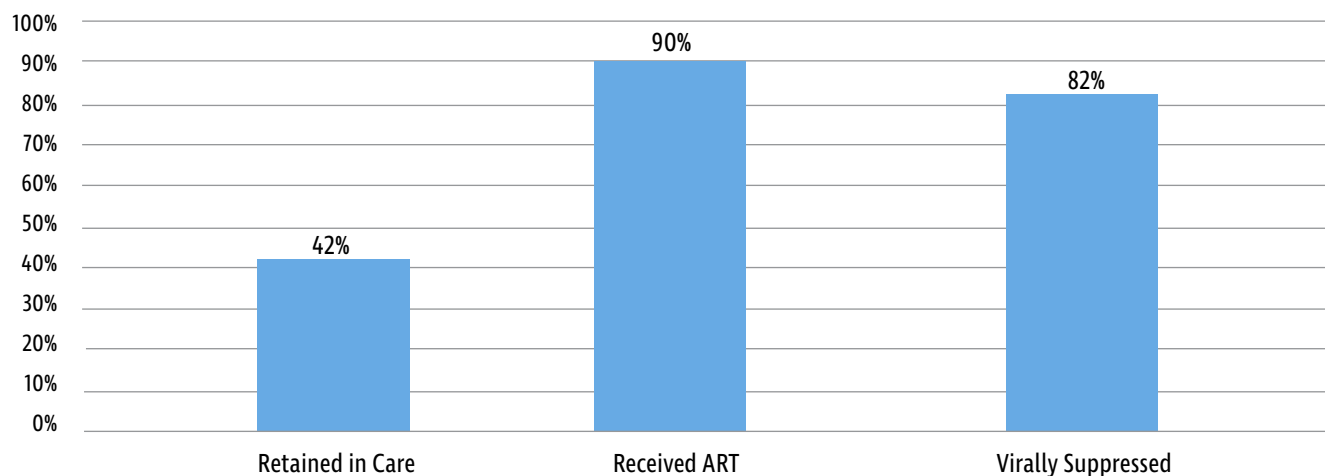
Note: Clients enrolled in the Ryan White Part B Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).

Source: Ryan White Application Database. Data reported through Nov. 14, 2019.



Of Ryan White Part B Minority MSM clients in 2018, 42% were retained in care, 90% received ART, and 82% were virally suppressed.

Figure 49: Continuum of care among minority MSM Ryan White Part B clients, Hamilton County, 2018



Note: Clients enrolled in the Ryan White Part B Program may also receive services from other pay sources (e.g., other Ryan White Parts, Medicaid).

Source: Ryan White Application Database. Data reported through Nov. 14, 2019.

Table 35: Viral suppression among Ryan White Part B clients, Hamilton County, 2018

Agency	Suppressed	Not Suppressed	Missing Viral Load Data
Caracole	79.9%	12.0%	8.1%

Note: These numbers include only case management clients and do not include those clients who receive ADAP services only.

Source: Ryan White Application Database. Data reported through Nov. 14, 2019.

PREVENT: Prevent new HIV transmissions by using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe services programs



Pre-Exposure Prophylaxis (PrEP)

PrEP is a drug taken by individuals who are at high risk of acquiring HIV to prevent disease transmission. In 2018, the PrEP utilization rate in Ohio was 50, while the PrEP utilization rate in Hamilton County in 2016 was 30. Nationally, the PrEP utilization rate was 47.9 in 2018.

Table 36: PrEP utilization, Ohio, 2018 and Hamilton County, 2016

PrEP Utilization	Ohio, 2018		Hamilton County, 2016	
	Users	Rate/100,000	Users	Rate/100,000
Total	4,878	50	199	30
Males	4,559	96	187	59
Females	319	6	12	3
<24	715	39	18	14
25-34	2,105	138	102	89
35-44	1,116	81	44	47
45-54	667	44	24	22
55 and older	333	9	12	6

Note: There is currently no single data source that includes data on all unique users of PrEP across the U.S. Source Healthcare Analytics (SHA) collects data from over 54,000 pharmacies, 1,500 hospitals, 800 outpatient facilities, and 80,000 physician practices across the U.S. SHA's dataset is an open sample of commercially available data, which excludes entities that do not make their data available, such as closed healthcare systems and entities that choose not to share their data with SHA.

Source: AIDSvu. Emory University, Rollins School of Public Health. Atlanta, GA.

PAPI (Prevention Assistance Program Interventions) is a program for HIV-negative Ohioans who have or are seeking a PrEP prescription. PAPI pays for PrEP-related medical costs, including office and medical copays, copays associated with required laboratory work, prescription copays that are not covered by a patient assistance program, and medical services for people who are not eligible for insurance. There is one facility in the Hamilton County region that offer these services (Caracole). However, it is important to note that PAPI only captures information on clients who are accessing payment assistance, but the PrEP help navigators at these facilities provide navigation services to anyone seeking or referred to PrEP services.

Table 37: PAPI clients, Hamilton County Region

PAPI Clients	Ohio		Hamilton County Region	
	No.	%	No.	%
Concerns regarding privacy	12	3%	-	-
Chlamydia diagnosis within one year	40	11%	-	-
Gonorrhea diagnosis within one year	37	10%	-	-
Syphilis diagnosis within one year	28	8%	-	-
Sex without a condom within one year	200	56%	3	19%
Been prescribed PEP* within one year	25	7%	1	6%
Total	358		16	

Source: Ohio Department of Health, HIV Prevention Program. Data reported as of Jan. 9, 2020.

**Post-exposure prophylaxis.*



Syringe Services Programs and Other Substance Use-related Data

Hamilton County Public Health operates an SSP with multiple locations, and an additional health department program is operated by Caracole. In 2019, Hamilton County Public Health exchanged 281,068 syringes, from January through February in 2020, Hamilton County Public Health distributed 65,178 syringes. Participants may also access naloxone, be tested for HIV, hepatitis C, and pregnancy; receive hepatitis A and hepatitis B vaccines and fentanyl test strips; and be referred for treatments. In 2019, 89% of clients were white, 53% were male, 42% were female, and 1% were transgender. Eight percent were between the ages of 18 and 24 years, 43% were between the ages of 25 and 34, 38% were between the ages of 35 and 49, 9% were between the ages of 50 and 64, and 1% were 65 or older. The ZIP codes in Hamilton County having the highest number of clients in 2019 (based on client residence) were 45211, 45205, 45238, and 45223.

Table 38: Number of clients by ZIP code of residence, Hamilton County Public Health SSP, 2018-2019

ZIP Code	2018	2018 %	2019	2019%
45002	10	1%	88	2%
45030	32	2%	136	3%
45052	3	0%	26	1%
45202	31	2%	245	5%
45203	6	0%	12	0%
45204	18	1%	133	3%
45205	90	7%	486	9%
45206	41	3%	111	2%
45207	2	0%	11	0%
45208	6	0%	13	0%
45209	9	1%	15	0%
45211	219	16%	592	12%
45212	69	5%	245	5%
45213	29	2%	79	2%
45214	52	4%	170	3%
45215	16	1%	59	1%
45216	31	2%	108	2%
45217	4	0%	57	1%
45219	65	5%	209	4%
45220	14	1%	91	2%
45223	79	6%	248	5%
45224	10	1%	48	1%
45225	28	2%	145	3%
45226	17	1%	37	1%

ZIP Code	2018	2018 %	2019	2019%
45227	7	1%	24	0%
45229	18	1%	70	1%
45230	16	1%	73	1%
45231	26	2%	117	2%
45232	17	1%	37	1%
45233	13	1%	102	2%
45236	24	2%	104	2%
45237	20	1%	28	1%
45238	56	4%	416	8%
45239	71	5%	196	4%
45240	2	0%	13	0%
45241	17	1%	33	1%
45242	21	2%	67	1%
45243	13	1%	27	1%
45244	33	2%	72	1%
45246	13	1%	74	1%
45247	33	2%	78	2%
45248	11	1%	101	2%
45249	15	1%	19	0%
45251	11	1%	39	1%
45252	6	0%	5	0%
45255	21	2%	73	1%
Total	1,345		5,132	

Source: Hamilton County Public Health, Harm Reduction Program. Data reported as of Dec. 18, 2019.

The ZIP codes in Hamilton County having the highest number of emergency room visits due to unintentional overdoses from 2016 to 2019 (based on patient residence) were, 45212, 45238, and 45211.



Table 39: Emergency room visits due to unintentional overdoses by ZIP code, Hamilton County, 2016-2019

ZIP Code	Total 2016-2019)	ZIP Code	Total 2016-2019)
45002	151	45226	86
45030	200	45227	131
45052	41	45229	215
45202	360	45230	281
45203	63	45231	332
45204	153	45232	64
45205	479	45233	120
45206	214	45236	231
45207	64	45237	152
45208	45	45238	548
45209	88	45239	281
45211	482	45240	191
45212	562	45241	173
45213	78	45242	114
45214	221	45243	59
45215	353	45244	246
45216	196	45246	124
45217	67	45247	107
45218	27	45248	138
45219	373	45249	103
45220	64	45251	221
45223	150	45252	14
45224	116	45255	209
45225	161	Total	8,848

Source: Ohio Department of Health, EpiCenter. Data reported as of Dec. 18, 2019.



RESPOND: Respond quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them

Hamilton County Cluster Response: In 2016, there were 16 new reported diagnoses of HIV in Hamilton County attributable to IDU. In 2017, there were 42 new reported diagnoses of HIV attributable to IDU, there were 64 in 2018, and there were 54 in 2019. From 2017 through February 2020, 81% of the new diagnoses among PWID were among whites, while 12% were among Blacks/African Americans. In response to the increase in diagnoses of HIV in PWID in Hamilton County and the Northern Kentucky region, a request was made to CDC for an Epi-Aid, which is an investigation of an urgent public health problem. For several weeks in 2018, CDC was on site in Hamilton County to provide technical assistance to Hamilton County Public Health, Northern Kentucky Health Department, ODH, and the Kentucky Department for Public Health. Objectives of the Epi-Aid included:

- Analyzing epidemiologic data of PWID with newly diagnosed HIV infection in the five-county region of Hamilton (OH), Boone, Campbell, Grant, and Kenton (KY).
- Conducting interviews and rapid survey assessments with key informants to identify factors that increase risk of HIV infection among people who inject drugs.
- Conducting case reviews to assess testing behaviors, case follow-up, and contact tracing.

The main goal of these objectives was to better understand the progress and effectiveness of the ongoing investigation and response, and to identify additional prevention and control measures for reaching the at-risk population. CDC continues to provide technical assistance, and ODH continues to collaborate with Hamilton County Public Health, Northern Kentucky Health Department, and the Kentucky Department for Public Health, implementing recommendations from the Epi-Aid to slow the progression of disease transmission.

Additionally, molecular sequencing of HIV strains among individuals identified as part of this increase were analyzed to determine potential clusters. These analyses confirmed five different clusters among PWID diagnosed with HIV in Hamilton County and the Northern Kentucky Region from 2017 to 2020. A molecular cluster is a group of persons with diagnosed HIV infection who have genetically similar HIV strains. Analyzing these strains allows for rapid detection of clusters and identification of the specific populations affected. Thus, targeted prevention activities can be tailored to stop the spread of infection, link the infected persons into HIV care, and make appropriate referrals for other needed resources. Molecular sequence analysis can suggest a link between the cases, but this link may be indirect. Molecular sequence analysis DOES NOT suggest the direction of infection (who transmitted HIV to whom). The molecular sequencing can be used to determine drug resistance so treatment regimens can be adapted to ensure viral suppression. Viral suppression is a critical step in helping to stop the transmission of the virus, thus decreasing new infections.

HCPH works closely with Caracole for rapid referrals for treatment and other essential services for individuals identified as part of a cluster. HCPH and Caracole have worked together to obtain information by utilizing an enhanced interview for individuals identified as part of this cluster. This information helps to further target and prioritize outreach and service referrals for this population, with the goal of linking the individuals to care, retaining them in care, and referring to any services necessary to achieve and maintain viral suppression. Additionally, the information helps tailor messaging and implement programs to prevent further disease transmission among the risk network. HCPH also works closely with the University of Cincinnati (UC), the primary provider of HIV care for Ryan White clients and medical care for inmates incarcerated in the Hamilton County Jail.



Time-Space analysis: ODH performs monthly time-space cluster analyses. The following criteria are considered when determining if time-space clusters require further investigation: size of the transmission cluster, evidence of ongoing risk behavior (e.g., injection drug use), late diagnoses, pregnant women, local epidemiology, and resource availability. Time-space reports are routinely and consistently monitored for potential outbreaks.

Table 40: Time-space alerts, Ohio and Hamilton County, 2018

Residence at HIV diagnosis	Overall Alert	Overall # diagnoses 2018	IDU/MSM-IDU Alert	IDU/MSM-IDU # diagnoses 2018	IDU Alert	IDU # diagnoses 2018	IDU-IDU Alert	MSM-IDU # diagnoses 2018
Hamilton County	N	186	Y	64	Y	60	N	4
Ohio	N	986	N	150	N	115	Y	35

Report produced using CDC SAS program and does NOT account for cases diagnosed in correctional facilities (i.e., cases diagnosed in correctional facilities are included in the counts for the county where prison is located).

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2019.

Table 41: New reported diagnoses of HIV infection identifying IDU as the mode of transmission and new reported diagnoses of HIV infection, Hamilton County, 2017-2019

	2017		2018		2019	
	IDU	Total HIV	IDU	Total HIV	IDU	Total HIV
Hamilton County	42	186	64	185	54	164
Ohio	128	979	150	983	134	906

Notes: Includes HIV transmission categories injection drug use (IDU) and male-to-male sexual contact/IDU. IDU and male-to-male sexual contact/IDU are mutually exclusive mode of transmission categories.

County reflects county of residence at time of earliest diagnosis. Cases diagnosed while in a state or federal correctional facility or whose county is unknown are included in No County.

Source: Ohio Department of Health, HIV Surveillance Program. Data reported through Feb. 3, 2020.



Table 42: Newly diagnosed cases of HIV in the Ohio Disease Reporting System (ODRS), Hamilton County, 2018-2019

	Male		Female		Total	
	2018	2019	2018	2019	2018	2019
Hamilton County	141	119	47	57	188	176
Ohio	819	782	180	190	999	972

Notes:

Newly diagnosed HIV is derived from partner services data in the Ohio Disease Reporting System.

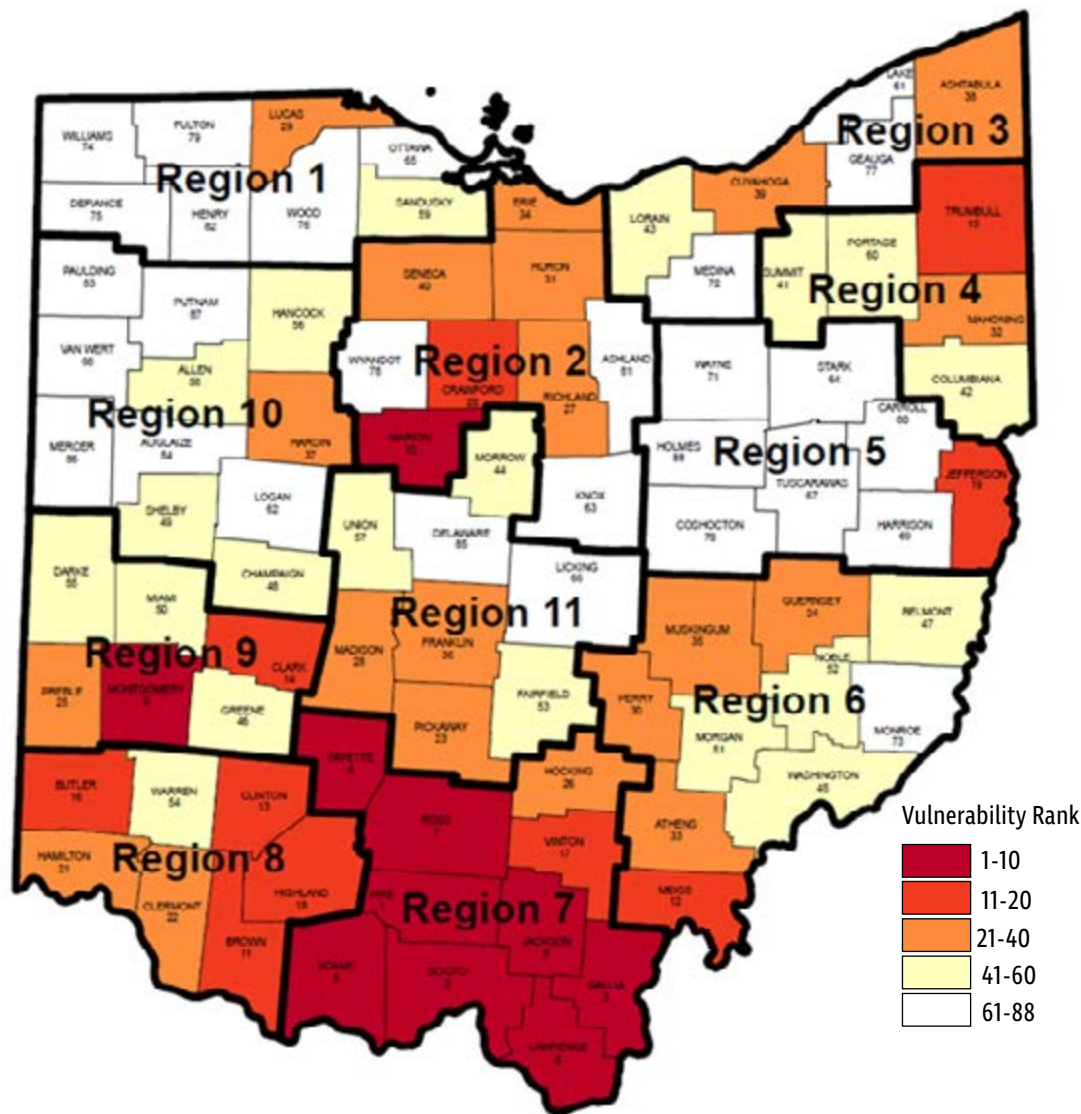
Small numbers are unstable and should be interpreted with caution.

Provisional data. Numbers subject to change when additional information is gained.

Source: Ohio Department of Health, STI Surveillance Program. Data reported as of Feb. 2, 2020.

Vulnerable county assessment: ODH conducted a vulnerable county assessment to determine areas at high risk for 1) opioid overdoses, and 2) bloodborne infections (i.e., HIV, hepatitis C, hepatitis B associated with non-sterile drug injection). This vulnerable county assessment was used to develop plans that strategically allocate prevention and intervention services and distribute findings to key stakeholders. Data was obtained from multiple sources to reflect indicators plausibly associated with opioid overdoses or injection-related HIV and/or hepatitis C infections. Indicators were selected based on stakeholder input regarding the recent burden of the opioid-related epidemic in Ohio and in consultation with internal and external partners. An overall rate average was calculated for each county using six indicators, and counties were then ranked by severity, with one being the most vulnerable and 88 being the least vulnerable. It was determined that Pike, Scioto, Gallia, Fayette, Adams, Lawrence, Ross, Jackson, Montgomery, and Marion counties were the most vulnerable to an injection-related HIV and/or hepatitis C outbreak.

Figure 50: Ohio counties potentially at increased risk of an HIV cluster/hepatitis C outbreak associated with non-sterile injection of opioids, 2019



Notes:

An overall rate average was calculated for each county using six indicators. Counties were then ranked by severity, with 1 indicating highest risk and 88 lowest risk.

Sources:

Opioid doses dispensed per capita (2017). Ohio Automated RX Reporting System 2017 Annual Report.

Overdoses Per Capita by County (per 10,000 Population) (2017). Ohio Hospital Association Opioid Data Dashboard.

Age-adjusted unintentional drug overdose death rates per 100,000 population, by county, 2017. 2017 Ohio Drug Overdose Data: General Findings.

Total (acute and chronic) hepatitis C virus (HCV) 3-year average rates (2015-2017). Ohio Department of Health, Hepatitis Surveillance Program. Data reported through Nov. 26, 2018.

Reported new diagnoses of HIV infection 3-year average rates (2015-2017). Ohio Department of Health, HIV Surveillance Program. Data reported through June 30, 2018.

5-Year Average Percentage of Population Below 100% Federal Poverty Level (FPL) (2012-2016). American Community Survey (ACS) 5-year Estimates.



Additional Sources

- 1) Grey JA, Bernstein KT, Sullivan PS, Purcell DW, Chesson HW, Gift TL, Rosenberg ES. Estimating the Population Sizes of Men Who Have Sex With Men in US States and Counties Using Data From the American Community Survey. *JMIR Public Health Surveill* 2016;2(1):e14. Updated 2019.





End the HIV Epidemic Epidemiologic Profile

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